

FINAL

**SACRAMENTO RIVER BANK PROTECTION PROJECT
PHASE II SUPPLEMENTAL AUTHORIZATION
ENVIRONMENTAL IMPACT STATEMENT/
ENVIRONMENTAL IMPACT REPORT**

**VOLUME II: COMMENTS AND RESPONSES TO
COMMENTS**

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**US Army Corps
of Engineers®**



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7

EIS/EIR 4-1

1 Acronyms and Abbreviations

BANS-TAC	Bank Swallow Technical Advisory Committee
CEQA	California Environmental Quality Act
CNDDDB	California Natural Diversity Database
CO	carbon monoxide
Corps	U.S. Army Corps of Engineers
CRAM	California Rapid Assessment Method
CVFPB	Central Valley Flood Protection Board
CWA	Clean Water Act
DFW	California Department of Fish and Wildlife
DSC	Delta Stewardship Council
DWR	California Department of Water Resources
EIS/EIR	Environmental Impact Statement/Environmental Impact Report
FSRP	Flood System Repair Project
LF	linear feet
LMAs	local maintaining agencies
LURMP	Land Use and Resource Management Plan
NBHCP	Natomas Basin Habitat Conservation Plan
NEPA	National Environmental Policy Act
NOA	Notice of Availability
NOC	Notice of Completion
OPR	Office of Planning and Research
RBA	risk-based analysis
SPFC	State Plan of Flood Control
SRBPP	Sacramento River Bank Protection Project
SRFCP	Sacramento River Flood Control Project
SWAMP	Surface Water Ambient Monitoring Program
USFWS	U.S. Fish and Wildlife Service
VFZ	Vegetation Free Zone
WDRs	Waste Discharge Requirements

2

Chapter 1

Introduction

The Sacramento River Bank Protection Project (SRBPP) Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR) was circulated for public review in December 2014 for a public comment period of 66 days, from December 24, 2014 to February 27, 2015. To initiate the public comment period, the U.S. Army Corps of Engineers (Corps) and the Central Valley Flood Protection Board (CVFPB) circulated a Notice of Availability (NOA) to federal and state agencies, including Responsible and Trustee Agencies as defined under the California Environmental Quality Act (CEQA), involved Federal Agencies, and parties previously requesting information on the proposed project. The NOA was published in the *Federal Register* in compliance with the National Environmental Policy Act (NEPA) on January 2, 2015 and a Notice of Completion (NOC) was provided to the California Governor's Office of Planning and Research (OPR) on December 24, 2014.

To expand public involvement, the Corps and CVFPB mailed condensed, two-page summaries of the NOA to stakeholders to make them aware of the availability of the Draft EIS/EIR for review in both hard copy and online formats and to encourage attendance at public workshops conducted during the comment period. The Corps and CVFPB hosted four public workshops: one in West Sacramento on January 14, 2015, one in Colusa on January 21, 2015, one in Walnut Grove on January 28, 2015, and one in Chico on February 4, 2015. Hard copies of the Draft EIS/EIR were available for viewing at libraries in Chico, Colusa, Isleton, Marysville, Rio Vista, Sacramento, Walnut Grove, West Sacramento, Willows, and Yuba City.

Legal notice was also published in The Sacramento Bee on January 11, 2015, describing the document's availability and the schedule and location of the planned meetings.

In response to this outreach effort, 18 comment letters were submitted on the Draft EIS/EIR, including those from the following commenters.

- Two federal agencies.
- Six state agencies.
- Three local agencies.
- Three tribes.
- Three non-governmental organizations (NGOs).
- One business.

The majority of comments received related to the following topic areas:

- Requests for SRBPP bank repairs to obtain variances from the Corps' levee vegetation policy.
- The importance of preserving and restoring active river processes.
- Concern that the environmentally superior alternative was not selected as the preferred alternative.
- Requests for more erosion sites to be repaired with setback levees than are currently identified in the preferred alternative.

- How and when the Corps and CVFBP will coordinate with other local, regional, and state agencies as bank repairs are selected and designed.

The comment letters are subdivided by type of organization. Each comment within the letter has also been assigned a unique code, and each comment within the letter has also been assigned a unique code, noted in the right margin. For example, the code “F2-1” indicates the first distinct comment (indicated by the “1”) in the letter from the U.S. Environmental Protection Agency, which was the second letter (indicated by the “2”) recorded from a federal agency (indicated by the “F”). The comment letters are organized into three chapters:

- Chapter 2, Federal and State Agency Comments and Responses
- Chapter 3, Local Agency and Tribal Comments and Responses
- Chapter 4, Non-Governmental Organization and Business Comments and Responses

The chapters are organized by presentation of each comment letter immediately followed by the responses to that letter. Table 1-1 summarizes the commenting party, comment letter signatory, and organization type.

Table 1-1. List of Comment Letters

Letter #	Commenter	Organization Type
Chapter 2, Federal and State Agency Comments and Responses		
F1	Patricia Sanderson Port, U.S. Department of the Interior	Federal
F2	Kathleen Martyn Goforth, U.S. Environmental Protection Agency	Federal
S1	Trevor Cleak, Central Valley Regional Water Quality Control Board	State
S2	Tina Bartlett, California Department of Fish and Wildlife	State
S3	Susan Zanchi, California Department of Transportation	State
S4	Cliff Harvey, California State Water Resources Control Board	State
S5	Erik Vink, Delta Protection Commission	State
S6	Cindy Messer, Delta Stewardship Council	State
Chapter 3, Local Agency and Tribal Comments and Responses		
L1	Karen Huss, Sacramento Metropolitan Air Quality Management District	Local
L2	Kamal Atwal, Sacramento County Department of Transportation	Local
L3	Stephen Arakawa, Metropolitan Water District of Southern California	Local
T1	Marcos Guerrero, United Auburn Indian Community of the Auburn Rancheria	Tribe
T2	Oscar Serrano, Colusa Indian Community Council	Tribe
T3	James Sarmento, Tewe Kewe Cultural Center	Tribe
Chapter 4, Non-Governmental Organization and Business Comments and Responses		
N1	Lucas R. RossMerz, Sacramento River Preservation Trust	NGO
N2	Helen Swagerty, River Partners	NGO
N3	Ryan Luster, The Nature Conservancy	NGO
B1	Nicole S. Suard, Snug Harbor Resorts, LLC	Business

Each comment in the following chapters has been considered and responded to individually. If a comment resulted in a change to the text of Volume I of the Final EIS/EIR, it is noted within the comment’s response. Changes to the text in Volume I are shown by ~~striketrough~~ of text that has

- 1 been deleted and underlining of new text that has been inserted. The text revisions do not result in
- 2 substantive changes to either the analyses or conclusions presented in Volume I of the Final EIS/EIR.

Federal and State Agency Comments and Responses

This chapter contains the comments received on the Draft EIS/EIR from federal and state agencies. Each comment letter has been assigned a unique code, and each comment within the letter has also been assigned a unique code, noted in the right margin. For example, the code “F2-1” indicates the first distinct comment (indicated by the “1”) in the letter from the U.S. Environmental Protection Agency, which was the second letter (indicated by the “2”) recorded from a federal agency (indicated by the “F”). The chapter presents each comment letter immediately followed by the responses to that letter. Table 2-1 summarizes the commenting party and comment letter signatory.

Table 2-1. Federal and State Agencies Commenting on the Draft EIS/EIR

Letter Number	Commenter	Date
Federal Agencies		
F1	Patricia Sanderson Port, U.S. Department of the Interior	February 27, 2015
F2	Kathleen Martyn Goforth, U.S. Environmental Protection Agency	February 27, 2015
State Agencies		
S1	Trevor Cleak, Central Valley Regional Water Quality Control Board	February 4, 2015
S2	Tina Bartlett, California Department of Fish and Wildlife	February 26, 2015
S3	Susan Zanchi, California Department of Transportation	February 27, 2015
S4	Cliff Harvey, California State Water Resources Control Board	February 27, 2015
S5	Erik Vink, Delta Protection Commission	February 27, 2015
S6	Cindy Messer, Delta Stewardship Council	February 27, 2015

2.1 Federal Agencies

2.1.1 Letter F1—U.S. Department of the Interior, Office of Environmental Policy and Compliance, Patricia Sanderson Port, February 27, 2015

Letter F1

United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
Pacific Southwest Region
333 Bush Street, Suite 515
San Francisco, CA 94104

IN REPLY REFER TO:
(ER 15/0040)

Filed Electronically

27 February 2015

U.S. Army Corps of Engineers,
Sacramento District
Sacramento River Bank Protection Project
1325 J Street, Rm 1513
Sacramento, CA 95814

Subject: Review of the Draft Environmental Impact Statement (DEIS) for the Sacramento River Bank Protection Project, CA

To Whom It May Concern:

The Department of the Interior has received and reviewed the subject document and has no comments to offer.

F1-1

Thank you for the opportunity to review this project.

Sincerely,



Patricia Sanderson Port
Regional Environmental Officer

cc:

OEPC Staff Contact: Loretta B. Sutton, (202) 208-7565; Loretta_Sutton@ios.doi.gov

- 1 **2.1.1.1 Response to Letter F1**
- 2 **Response to Comment F1-1**
- 3 Comment noted. Thank you for reviewing the document.

2.1.2 Letter F2—U.S. Environmental Protection Agency, Region IX, Kathleen Martyn Goforth, February 27, 2015

Letter F2



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

February 27, 2015

Alicia E. Kirchner
U.S. Army Engineer District, Sacramento
Corps of Engineers
1325 J Street
Sacramento, California 95814-2922

Subject: Sacramento River Bank Protection Project Draft Environmental Impact Statement (EIS)/
Environmental Impact Report, California [CEQ #20140380]

Dear Ms. Kirchner:

The U.S. Environmental Protection Agency (EPA) has reviewed the above referenced document. Our review and comments are provided pursuant to the National Environmental Policy Act (NEPA), the Council on Environmental Quality's (CEQ) NEPA Implementation Regulations at 40 CFR 1500 - 1508, and our review authority under Section 309 of the Clean Air Act.

The Draft EIS evaluates five programmatic alternatives -- with several subalternatives -- for a Sacramento River bank protection plan. EPA agrees with the Corps' determination that Alternative 3 "Maximum Meander Zone" is the environmentally preferable alternative. We are concerned that the Corps' Preferred Alternative -- Alternative 4B "Habitat Replacement within Economically Justified Basins" -- may overlook levee repairs that may be needed to ensure water supply protection. We also believe that selection of Alternative 4B, as currently proposed, would result in a missed opportunity to advance programs to further increase floodwater storage capacity, restore hydro-geomorphic functions and ecosystem processes, improve re-creation and management of riparian forests, and ensure protection of water supplies in the program area.

F2-1

EPA has rated Alternative 4B and the Draft EIS as EC-2 -- Environmental Concerns-Insufficient Information" (see Enclosure 1: "Summary of EPA Rating Definitions"). We recommend that the Final Environmental Impact Statement include additional information regarding the costs associated with the potential impacts of levee failure on water supply. We also recommend that the Final EIS discuss the implications of the President's January 30, 2015 Executive Order on flood risk management (EO 13690) on projects that would be tiered to this EIS. Please see the enclosed detailed comments (Enclosure 2) for additional concerns and recommendations.

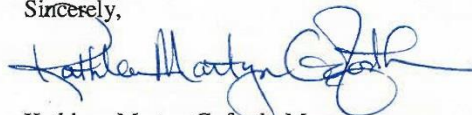
F2-2

We appreciate the opportunity to review this Draft EIS. Please send a hard copy of the Final EIS to this office (mailcode ENF-4-2) when it is officially filed with EPA's *e-NEPA*. If you have any questions,

1

please call me at (415) 972-3521 or contact Jeanne Geselbracht, our lead NEPA reviewer for this project, at geselbracht.jeanne@epa.gov or (415) 972-3853.

Sincerely,

A handwritten signature in blue ink, appearing to read "Kathleen Martyn Goforth".

Kathleen Martyn Goforth, Manager
Environmental Review Section

Enclosures: (1) Summary of EPA Rating Definitions
(2) EPA's detailed comments on the Sacramento River Bank Protection Project Draft EIS

cc: Kip Young, Central Valley Flood Protection Board

SUMMARY OF EPA RATING DEFINITIONS

This rating system was developed as a means to summarize EPA's level of concern with a proposed action. The ratings are a combination of alphabetical categories for evaluation of the environmental impacts of the proposal and numerical categories for evaluation of the adequacy of the EIS.

ENVIRONMENTAL IMPACT OF THE ACTION

"LO" (Lack of Objections)

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

"EC" (Environmental Concerns)

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

"EO" (Environmental Objections)

The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

"EU" (Environmentally Unsatisfactory)

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

ADEQUACY OF THE IMPACT STATEMENT

Category 1" (Adequate)

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

"Category 2" (Insufficient Information)

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analysed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

"Category 3" (Inadequate)

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analysed in the draft EIS, which should be analysed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640, "Policy and Procedures for the Review of Federal Actions Impacting the Environment"

**U.S. EPA DETAILED COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE
SACRAMENTO RIVER BANK PROTECTION PROJECT, CALIFORNIA – FEBRUARY 2015**Alternatives

The Preferred Alternative -- Alternative 4B "Habitat Replacement within Economically Justified Basins" -- uses the approach taken over the last decade, which primarily focuses on the re-creation of streambank habitats through the use of constructed benches with riparian vegetation, but adds the use of setback and adjacent levees in a few areas. This Alternative would create replacement riparian habitat, over time, at many levee repair sites to offset the losses of habitat removed as prescribed in Engineering Technical Letter 1110-2-583 (Vegetation ETL). While EPA supports the replacement of habitat at sites where it has been removed, we agree with the Draft Environmental Impact Statement finding that Alternative 3 "Maximize Meander Zone" is the environmentally preferable alternative because of its greater inclusion of setback levees and adjacent levees. Alternative 3 would remove less riparian vegetation than Alternative 4. It would also be more effective in widening the floodwater management basins and helping promote the broader objectives of increasing floodwater storage capacity, restoring hydro-geomorphic functions and ecosystem processes, and improving re-creation and management of riparian forests along the Sacramento River and its tributaries, while increasing security for the farms and settlements beyond the levees.

F2-3

Recommendation: We encourage the U.S. Army Corps of Engineers and the Central Valley Flood Protection Board (CVFPB) to use this planning opportunity to further advance programs that meet the above objectives. Specifically, we recommend that the Corps modify its Preferred Alternative to include setback levees wherever feasible. Describe in the Final Environmental Impact Statement specific efforts (e.g., purchase of flood easements on farmland, other real estate transactions, etc.) that the Corps and the CVFPB can make with other Federal, State, local, and private partners to develop setback levees at the identified repair sites to widen the floodwater management basin. Where setback levees would not be constructed, explain the reasons for that decision, and the implications with respect to hydrology, ecological function, and flood protection.

Cost Analysis

The Draft EIS (p. ES-12) identifies seven "economically justified basins" in which economic flood damages would be a priority consideration in site selection, and states that flood damage reduction in certain less-developed regions that are primarily agricultural with fewer damageable structures are not likely to meet the economic benefit-cost criterion to justify bank protection. Each alternative analyzed in the Draft EIS includes a sub-alternative that covers bank protection measures in only these seven economically justified basins. It is unclear, however, whether the benefit-cost analysis accounted for the costs associated with water supply disruption that could result from levee failure. Such failures could have catastrophic effects on water supply, the costs of which could far outweigh property damage.

F2-4

If the benefit-cost analysis has not accounted for potential water supply disruptions from levee failures, EPA would be concerned that limiting the project to the seven economically justified basins could exclude important levee work needed elsewhere in the project area. The Draft EIS indicates that the economically justified basins that are included in the Preferred Alternative may change as subsequent economic analysis is conducted.

Recommendation: Identify in the Final EIS all of the locations in the project area where levee failure could adversely affect water supply, and discuss whether the benefit-cost analysis accounts for these costs. If it does not, we recommend that the economic analysis be revised to account for such costs, that the findings be discussed in the Final EIS, and that any adjustments to economically justified repair sites be identified.

F2-4
cont'd

Executive Orders 11988 and 13690

The Draft EIS (pp. 1-5 to 1-13) describes the Central Valley Flood Protection Plan (CVFPP) approach for continuing to protect lands in the Central Valley from flooding, including achieving a new 200-year flood protection standard for urban areas by 2025, and identifies several current levee improvement programs intended to achieve the CVFPP goals. The Draft EIS also describes Mitigation Measure FCGEOM-MM-1 to avoid significant effects associated with changes in local hydraulics and shear stress based on the 100-year flood event. Furthermore, the Draft EIS (p. 22-14) states that global climate change could result in more rainfall runoff and flood flows in the Sacramento River, but cites the Corps' determination "that because of the uncertainty in the science of calculating appropriate future flows they would not be quantified. Rather, the future condition hydrology is considered equal to existing condition hydrology. Thus there are no changes in design in response to a new future condition hydrology."

On January 30, President Obama issued Executive Order 13690 – Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input, which amends Executive Order 11988 – Floodplain Management. Section 2(a) of EO 11988 requires agencies to "consider alternatives to avoid adverse effects and incompatible development in the floodplains." Section 6(c) of amended EO 11988 requires that, rather than basing the floodplain on the area subject to a one percent or greater chance of flooding in any given year, the floodplain be established using one of the following approaches:

F2-5

- (1) Unless an exception is made under paragraph (2), the floodplain shall be:
 - (i) the elevation and flood hazard area that result from using a climate-informed science approach that uses the best-available, actionable hydrologic and hydraulic data and methods that integrate current and future changes in flooding based on climate science. This approach will also include an emphasis on whether the action is a critical action as one of the factors to be considered when conducting the analysis;
 - (ii) the elevation and flood hazard area that result from using the freeboard value, reached by adding an additional 2 feet to the base flood elevation for non-critical actions and by adding an additional 3 feet to the base flood elevation for critical actions;
 - (iii) the area subject to flooding by the 0.2 percent annual chance flood; or
 - (iv) the elevation and flood hazard area that result from using any other method identified in an update to the Federal Flood Risk Management Standards.

We recognize that EO 13690 was signed after the Draft EIS was published, and that implementation guidelines may not be finalized until after the Final EIS is published or Record of Decision is signed. The Draft EIS, therefore, does not take the new standards into account or discuss their potential applicability to various bank protection measures such as setback levees or adjacent levees. It is unclear whether or how implementation of the forthcoming guidelines may influence future tiered projects to be different from those reflected in the Draft EIS alternatives. It is also unclear how the costs and benefits of the proposed project could change based on the new floodplain criteria.

Recommendations: Address EO 13690 in the Final EIS, and discuss its potential implications for future tiered projects, including how project costs and benefit-cost analyses could be affected.

F2-5
cont'd

Water Quality

The Draft EIS (pp. 5-2 to 5-7) discusses water quality impairment and identifies pollutants in the Sacramento River and its tributaries in the program area based on California's 2006 Clean Water Act Section 303(d) list. It appears that some pollutants are missing from the discussion. The current (2008-2010) 303(d) list can be found at

http://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2010.shtml.

F2-6

Recommendation: Include an updated discussion of impaired waters in the program area in the Final EIS.

The Draft EIS (p. 10-35) indicates that small, isolated infestations of invasive plant species could be treated with eradication methods that have been approved by or developed in conjunction with the appropriate county agricultural commissioner. It is unclear, however, whether these methods would, potentially, be used for large infestations, and whether eradication methods would include chemical treatment.

Recommendation: Clarify in the Final EIS whether large infestations could be treated with the same eradication methods as those used for small infestations and discuss whether pesticides might be used for small or large invasive plant infestations. If pesticides would, potentially, be used, the tiered, project-specific National Environmental Policy Act (NEPA) analyses should identify the pesticides and state the provisions for their use. This discussion should include actions needed to comply with California's general National Pollutant Discharge Elimination System permits for pesticide applications. Note that the California permits may require advance submission of a pesticide application plan, in some cases 90 days in advance. More information is available at http://www.swrcb.ca.gov/water_issues/programs/npdes/aquatic.shtml

F2-7

Air Quality

The Draft EIS states that, because the level of activity, scheduling, and locations of potential construction activities along 80,000 linear feet of river bank are currently unknown, a quantified analysis of potential construction emissions is not feasible (pp. 8-18), and that additional project-level environmental documentation, tiering from this programmatic analysis, will be conducted to address erosion sites that will be repaired (p. 8-26). The Draft EIS indicates that, for tiered projects with volatile organic compounds, carbon monoxide (CO), and particulate matter (PM) emissions exceeding the *de minimis* thresholds after the implementation of Mitigation Measure AQ-MM-1a, there would be no other applicable measures to further reduce or offset the emissions; therefore, the effect would be significant and unavoidable under NEPA (Draft EIS, p. 8-26). If project-specific analyses indicate that *de minimis* thresholds would be exceeded, however, the Corps would need to ensure that the project conforms to the State Implementation Plan (SIP) before approving the tiered project.

F2-8

Elsewhere, the Draft EIS (p. 8-21) states, "According to Table 8-6, a general conformity determination must be made for ozone, CO, and PM2.5 in Butte County; ozone, CO, and PM2.5 in Placer County; ozone, CO, PM10, and PM2.5 in Sacramento County; ozone, CO, and PM2.5 in Solano County; ozone and PM2.5 in Sutter County; ozone, CO, and PM2.5 in Yolo County; and PM2.5 in Yuba County."

Based on the discussion above, however, it is unclear that this would be the case because the project-specific emissions, and whether they exceed the *de minimis* thresholds, are unknown at this time.

F2-8
cont'd

Recommendation: Rectify this statement in the Final EIS, and commit to providing information in tiered project-specific NEPA documents that demonstrates project conformity (e.g., conformity determinations, if applicable).

Table 8-2 of the Draft EIS identifies the annual PM_{2.5} National Ambient Air Quality Standard (NAAQS) as 15 µg/m³; however, the appropriate NAAQS is 12 µg/m³.

F2-9

Recommendation: Include the appropriate PM_{2.5} NAAQS in the Final EIS.

Climate Change

The Draft EIS (p. 8-30) indicates that the greenhouse gas emissions associated with the proposed project would be significant and unavoidable, even with the mitigation measures identified as AQ-MM-6. Please note that, on December 18, 2014, the Council on Environmental Quality (CEQ) released revised draft guidance for public comment, which describes how Federal departments and agencies should consider the effects of greenhouse gas emissions and climate change in their NEPA reviews.

F2-10

Recommendation: The project-level NEPA analyses tiered to this programmatic document should, consistent with the revised draft guidance, estimate the greenhouse gas emissions associated with each project, and discuss the potential impacts of climate change on the project. We also recommend that these documents identify specific measures to ensure the projects are resilient to anticipated climate change, such as more rainfall runoff and flood flows in the watershed.

2.1.2.1 Responses to Letter F2

Response to Comment F2-1

SRBPP erosion repairs are currently limited to economically justified basins by U.S. Army Corps of Engineers (Corps) policy. The economic analysis that determines which basins are economically justified is updated every 5 years. This allows the SRBPP to regularly incorporate new or revised policies and to potentially identify additional basins in which erosion protection work would be economically justified. If additional economically justified basins are identified, erosion sites in those basins would be included in the Site Selection and Implementation Process.

The Post Authorization Change Report for the SRBPP (USACE 2014) recommends that the state construct erosion protection features within the basins that are not currently economically justified. The California Department of Water Resources (DWR) has a program, implemented through the Flood System Repair Project (FSRP), to repair State Plan of Flood Control facilities. FSRP includes critically identified levee erosion repairs in nonurban parts of the Sacramento and San Joaquin River Systems. FSRP is a cost-share program as agreed upon by DWR and the local maintaining agencies (LMAs). The Public Law 84-99 Rehabilitation and Inspection Program will still be available for the Corps to undertake activities including advance measures, emergency operations, and rehabilitation of flood control works threatened or destroyed by floods for eligible local agencies.

This comment also expressed concern that “selection of Alternative 4B, as currently proposed, would result in a missed opportunity to advance programs to further increase floodwater storage capacity, restore hydro-geomorphic functions and ecosystem processes, improve recreation and management of riparian forests, and ensure protection of water supplies in the program area.” The SRBPP is authorized only to repair individual erosion sites to maintain the integrity and existing functionality of the Sacramento River Flood Control Project (SRFCP). It would be beyond the scope and authorization of the SRBPP to address system-wide issues such as those raised in the comment. The Central Valley Flood Protection Board (CVFPB) is tackling those issues through the Central Valley Flood Protection Plan.

Response to Comment F2-2

The SRBPP benefit analysis does not account for “water supply disruptions” or “water quality” of levee failure because those issues are beyond the scope of the SRBPP authorization and very difficult to properly quantify. The economic analysis to date has focused on flood risk reduction to urban and agricultural areas, which is the primary mission of the SRBPP authorization. The risk to water supply and water quality is considered low and there have not been any recorded historical hydrological events that have impacted the two major California water conveyance facilities, the California Aqueduct and Delta-Mendota Canal. Regarding Executive Order 13690, it was revoked on August 15, 2017. However, the SRBPP is in accordance with Executive Order 11988 as amended by Executive Order 13690; it is not inducing development because the erosion repairs would be constructed to the existing level of protection of the levee segment. The purpose of the SRBPP is to repair erosion sites to maintain the existing functionality of the flood risk management system.

Response to Comment F2-3

This programmatic EIS/EIR analyzes implementation of 80,000 linear feet (LF) of erosion repair. Although the EIS/EIR analysis uses the 106 sites to represent what implementation might look like,

the Corps uses a site selection process to determine the specific design for each erosion site. The site selection process includes evaluation of opportunities and constraints for each site along with hydraulic evaluation and other survey information to determine the most appropriate design that also fits within program authorization and policy guidelines. For each site, a full suite of design measures is considered, and the potential results and effects are analyzed in coordination with resource agencies and sponsors/districts. Typically, setback designs are always considered, but often not selected for several reasons. The SRBPP authorization requires erosion repair, and options are typically limited by economic considerations. However, there are other factors that can prevent a setback levee design from further consideration for a site. Erosion sites identified for repair are typically small (ranging from a few hundred feet to several thousand feet long), which can limit the effectiveness of a setback design in meeting project objectives and environmental objectives. A setback of this scale may also alter hydraulics and affect erosional processes. Although Alternative 3A (and Sub-Alternative 3B), "Minimize Habitat Impacts," was not selected as the preferred alternative, the Corps will continue to consider setback designs and to seek opportunities to implement setbacks.

Response to Comment F2-4

Please see the response to Comment F2-2.

Response to Comment F2-5

Please see the response to Comment F2-2; although Executive Order 13690 was revoked on August 15, 2017, the SRBPP is in accordance with its requirements.

Response to Comment F2-6

The Section 5.2.1.1, Surface Water Quality, in Chapter 5 has been updated based on California's 2014-2016 Clean Water Act Section 303(d) list as Table 5-2, Clean Water Act Section 303(d) Listed Pollutants and Sources for Surface Waters in the Program Area.

Response to Comment F2-7

Mitigation Measure VEG-MM-12 has been revised to remove the "small, isolated" terminology. All invasive plants within SRBPP footprints will be removed during construction, and treatment and removal of invasive plant infestations in areas disturbed by the SRBPP will continue until all revegetation plans have been implemented and the new vegetation is established. SRBPP limits eradication methods to hand weeding and pulling.

Once the mitigation monitoring is complete, the Corps will turn the repair sites over to the LMAs for maintenance. Site turnover marks the completion of SRBPP involvement and responsibility. Maintenance activities by the LMAs are directed by the SRFCP Standard Operations and Maintenance Manual. Supplemental language for any mitigation plantings are included in the manual as amendments to the "Environmental Protection" section. The LMA will maintain the repair site and mitigation plantings, but vegetation management, including invasive plant removal, is at the discretion of the LMAs and how they follow applicable local, state, and federal regulations.

Response to Comment F2-8

The analysis in Chapter 8 has been revised to clarify that offsets can only be used for emissions of reactive organic gases, nitrogen oxides, and particulate matter no more than 10 microns in diameter. A statement has also been added to the discussion of Effect AQ-1 regarding Section 93.158(a)(3) and use of offsets for carbon monoxide (CO), and the need for future project-level analyses to include dispersion modeling or require other acceptable means to satisfy general conformity requirements if construction-related CO emissions would exceed the *de minimis* threshold.

Response to Comment F2-9

Table 8-2 has been revised to reflect current ambient air quality standards.

Response to Comment F2-10

Subsequent project-level environmental analyses will estimate greenhouse gas emissions and will address the effects of climate change individual erosion sites. Climate change effects on runoff and flood flows within the SRFCP are addressed in the cumulative effects discussions in Chapter 22, Section 22.2.3.1, Flood Risk Management and Geomorphic Conditions, and Section 22.2.3.5, Air Quality and Climate Change.

Regarding the recommendation to include specific measures to ensure the projects are resilient to anticipated climate change, it is unlikely that feasible measures could be developed. The SRBPP maintains the integrity of the SRFCP by repairing individual erosion sites. Most of these sites are too small to affect resilience in this manner. The SRBPP does not provide system-wide improvement to the overall SRFCP or to the State Plan of Flood Control.

2.2 State Agencies

2.2.1 Comment Letter S1—Central Valley Regional Water Quality Control Board, Trevor Cleak, February 4, 2015



Central Valley Regional Water Quality Control Board

Letter S1

4 February 2015

Kip Young
Central Valley Flood Protection Board
3310 El Camino Avenue, Room 140
Sacramento, CA 95824

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7014 2120 0001 3978 4467

COMMENTS TO REQUEST FOR REVIEW FOR THE DRAFT ENVIRONMENTAL IMPACT REPORT, SACRAMENTO RIVER BANK PROTECTION PROJECT PHASE II SUPPLEMENTAL AUTHORITY PROJECT, SCH# 2009012081, SACRAMENTO COUNTY

Pursuant to the State Clearinghouse's 24 December 2014 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Request for Review for the Draft Environment Impact Report* for the Sacramento River Bank Protection Project Phase II Supplemental Authority Project, located in Sacramento County.

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore our comments will address concerns surrounding those issues.

Construction Storm Water General Permit

Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction Activities (Construction General Permit), Construction General Permit Order No. 2009-009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP).

For more information on the Construction General Permit, visit the State Water Resources Control Board website at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml.

S1-1

KARL E. LONGLEY ScD, P.E., CHAIR | PAMELA C. CREEDON P.E., BCEE, EXECUTIVE OFFICER
11020 Sun Center Drive #200, Rancho Cordova, CA 95670 | www.waterboards.ca.gov/centralvalley



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Phase II Supplemental Authority
Sacramento County

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4 February 2015

Phase I and II Municipal Separate Storm Sewer System (MS4) Permits¹

The Phase I and II MS4 permits require the Permittees reduce pollutants and runoff flows from new development and redevelopment using Best Management Practices (BMPs) to the maximum extent practicable (MEP). MS4 Permittees have their own development standards, also known as Low Impact Development (LID)/post-construction standards that include a hydromodification component. The MS4 permits also require specific design concepts for LID/post-construction BMPs in the early stages of a project during the entitlement and CEQA process and the development plan review process.

For more information on which Phase I MS4 Permit this project applies to, visit the Central Valley Water Board website at:

http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/municipal_permits/.

For more information on the Phase II MS4 permit and who it applies to, visit the State Water Resources Control Board at:

http://www.waterboards.ca.gov/water_issues/programs/stormwater/phase_ii_municipal.shtml

Industrial Storm Water General Permit

Storm water discharges associated with industrial sites must comply with the regulations contained in the Industrial Storm Water General Permit Order No. 97-03-DWQ.

For more information on the Industrial Storm Water General Permit, visit the Central Valley Water Board website at:

http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/industrial_general_permits/index.shtml.

Clean Water Act Section 404 Permit

If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed from the United States Army Corps of Engineers (USACOE). If a Section 404 permit is required by the USACOE, the Central Valley Water Board will review the permit application to ensure that discharge will not violate water quality standards. If the project requires surface water drainage realignment, the applicant is advised to contact the Department of Fish and Game for information on Streambed Alteration Permit requirements.

If you have any questions regarding the Clean Water Act Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACOE at (916) 557-5250.

S1-1
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¹ Municipal Permits = The Phase I Municipal Separate Storm Water System (MS4) Permit covers medium sized Municipalities (serving between 100,000 and 250,000 people) and large sized municipalities (serving over 250,000 people). The Phase II MS4 provides coverage for small municipalities, including non-traditional Small MS4s, which include military bases, public campuses, prisons and hospitals.

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Clean Water Act Section 401 Permit – Water Quality Certification

If an USACOE permit (e.g., Non-Reporting Nationwide Permit, Nationwide Permit, Letter of Permission, Individual Permit, Regional General Permit, Programmatic General Permit), or any other federal permit (e.g., Section 9 from the United States Coast Guard), is required for this project due to the disturbance of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications.

Waste Discharge Requirements

If USACOE determines that only non-jurisdictional waters of the State (i.e., “non-federal” waters of the State) are present in the proposed project area, the proposed project will require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation.

For more information on the Water Quality Certification and WDR processes, visit the Central Valley Water Board website at:

http://www.waterboards.ca.gov/centralvalley/help/business_help/permit2.shtml.

Regulatory Compliance for Commercially Irrigated Agriculture

If the property will be used for commercial irrigated agricultural, the discharger will be required to obtain regulatory coverage under the Irrigated Lands Regulatory Program.

There are two options to comply:

1. **Obtain Coverage Under a Coalition Group.** Join the local Coalition Group that supports land owners with the implementation of the Irrigated Lands Regulatory Program. The Coalition Group conducts water quality monitoring and reporting to the Central Valley Water Board on behalf of its growers. The Coalition Groups charge an annual membership fee, which varies by Coalition Group. To find the Coalition Group in your area, visit the Central Valley Water Board's website at: http://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_lands/app_approval/index.shtml; or contact water board staff at (916) 464-4611 or via email at IrrLands@waterboards.ca.gov.
2. **Obtain Coverage Under the General Waste Discharge Requirements for Individual Growers, General Order R5-2013-0100.** Dischargers not participating in a third-party group (Coalition) are regulated individually. Depending on the specific site conditions, growers may be required to monitor runoff from their property, install monitoring wells, and submit a notice of intent, farm plan, and other action plans regarding their actions to comply with their General Order. Yearly costs would include State administrative fees (for example, annual fees for farm sizes from 10-100 acres are currently \$1,084 + \$6.70/Acre); the cost to prepare annual monitoring reports; and water quality monitoring costs. To enroll as an Individual Discharger under the Irrigated Lands Regulatory

S1-1
cont'd

Sacramento River Bank Protection Project
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Program, call the Central Valley Water Board phone line at (916) 464-4611 or e-mail board staff at IrrLands@waterboards.ca.gov.

Low or Limited Threat General NPDES Permit

If the proposed project includes construction dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Dewatering discharges are typically considered a low or limited threat to water quality and may be covered under the General Order for *Dewatering and Other Low Threat Discharges to Surface Waters* (Low Threat General Order) or the General Order for *Limited Threat Discharges of Treated/Untreated Groundwater from Cleanup Sites, Wastewater from Superchlorination Projects, and Other Limited Threat Wastewaters to Surface Water* (Limited Threat General Order). A complete application must be submitted to the Central Valley Water Board to obtain coverage under these General NPDES permits.

For more information regarding the Low Threat General Order and the application process, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2013-0074.pdf

For more information regarding the Limited Threat General Order and the application process, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2013-0073.pdf

If you have questions regarding these comments, please contact me at (916) 464-4684 or tcleak@waterboards.ca.gov.



Trevor Cleak
Environmental Scientist

cc: State Clearinghouse unit, Governor's Office of Planning and Research, Sacramento

S1-1
cont'd

1 **2.2.1.1 Response to Letter S1**

2 **Response to Comment S1-1**

3 Comment noted. Appropriate permits will be obtained on a site-by-site basis.

2.2.2 Comment Letter S2—California Department of Fish and Wildlife, Region 2, Tina Bartlett, February 26, 2015



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EDMUND G. BROWN JR., Governor
CHARLTON H. BONHAM, Director



Letter S2

February 26, 2015

Kip Young
Central Valley Flood Protection Board
3310 El Camino Ave, Room 140
Sacramento, CA 95821

Subject: Comments on the Draft Environmental Impact Statement/ Environmental Impact Report for the Sacramento River Bank Protection Project, SCH # 2009012081

Dear Mr. Young:

The California Department of Fish and Wildlife (Department) has reviewed the Sacramento River Bank Protection Project (SRBPP) Draft Environmental Impact Statement/ Environmental Impact Report (EIS/EIR). Pursuant to Section 15082(b) of the California Environmental Quality Act (CEQA) Guidelines, the Department offers the following comments on the EIS/EIR in our roles both as a trustee agency and as a responsible agency. As trustee for the State's fish and wildlife resources, the Department has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and the habitat necessary for biologically sustainable populations of such species. The Department may also be a responsible agency for a project affecting biological resources where we will exercise our discretion after the lead agency to approve or carry out a proposed project or some facet thereof.

The SRBPP is located along the Sacramento River and its tributaries, and spans Butte, Colusa, Glenn, Placer, Sacramento, Solano, Sutter, Tehama, Yolo and Yuba Counties. The program area extends south-to-north along the Sacramento River from the town of Collinsville at river mile (RM) 3 to Chico at RM 194, and includes reaches of lower Elder and Deer Creeks. The program area also includes Cache Creek, the lower reaches of the American River (RM 0-23), Feather River (RM 0-61), Yuba River (RM 0-11), and Bear River (RM 0-17), as well as portions of Threemile, Steamboat, Sutter, Miner, Georgiana, and Cache Sloughs. Sutter and Yolo bypass levees are also located in the program area.

The SRBPP is a multi-year program to repair erosion problems affecting levees that are part of the Sacramento River Flood Control Project (SRFCP) and would implement up to 80,000 linear feet (LF) of additional bank protection. The EIS/EIR considers 106 selected erosion sites along the SRFCP for the supplemental 80,000 LF analysis. The number and extent of erosion sites would change from year to year because erosion is episodic and new erosion sites can appear each year. The analysis in the EIS/EIR is programmatic in nature, analyzing the 80,000 LF in its entirety. Additional site-specific environmental documentation tiering from this programmatic analysis will be conducted to address sites proposed to be repaired. This EIS/EIR analyzes environmental impacts of constructing 80,000 LF of bank protection on SRFCP levees and increasing the existing SRBPP Phase II authorization from 405,000 to 485,000 LF. The EIS/EIR analyzes six project alternatives, of which Alternative 4A (and Sub-Alternative 4B) was chosen as the preferred Alternative. Alternative 4A applies a combination of site-specific bank protection measures (Bank Protection Measures 1-5), and utilizes the bank protection measures recommended in the Final Alternatives Report to the extent that they comply with the Vegetation

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ETL (The Vegetation ETL are guidelines for landscape planting and vegetation management at floodwalls, levees, embankment dams, and appurtenant structures). This alternative utilizes the approach taken over the last decade, which primarily focused on the re-creation of streambank habitats through the use of constructed benches with riparian vegetation, but makes adjustments to account for implementation of the Vegetation ETL. The adjustments result in an increased use of setback and adjacent levees. Sub-Alternative 4B applies a combination of site-specific bank protection measures to 18 sites within the seven economically justified basins.

The Department is primarily concerned with the preferred Alternative's impacts to special status species, including bank swallow (*Riparia riparia*), Swainson's hawk (*Buteo swainsoni*), Western burrowing owl (*Athene cunicularia*), tricolored blackbird (*Agelaius tricolor*), Western yellow-billed cuckoo (*Coccyzus americanus*), and giant garter snake (*Thamnophis gigas*), the potential loss of high quality riparian habitat and natural river processes, as well as the cumulative impacts in conjunction with similar projects within the area.

The comments provided herein are based on the information provided in the EIS/EIR, the Department's knowledge of sensitive and declining vegetative communities and wildlife species in the area, and are limited to the likely impacts to biological resources from the SRBPP.

California Endangered Species Act

Throughout the EIS/EIR there is incorrect information regarding the Department's authority as it relates to the California Endangered Species Act (CESA) (Fish and Game Code Section 2050). For example, page 24-11 incorrectly states that "CESA prohibits the "take" of plant and wildlife species state-listed as endangered or threatened. DFW may authorize take if there is an approved habitat management plan or management agreement that avoids or compensates for impacts on listed species." Pursuant to Fish and Game Code (FGC), §2081 et seq., the Department may authorize, by permit, the take of endangered species, threatened species, and candidate species if the take is incidental to an otherwise lawful activity, the impacts of the authorized take of the species are minimized and fully mitigated, and adequate funding has been ensured to implement all minimization and mitigation measures. Additionally, the Department may only issue a permit if the Department determines that issuance of the permit does not jeopardize the continued existence of the species. The Department will make this determination based on the best scientific information available, and shall include consideration of the species' capability to survive and reproduce, including the species known population trends and known threats to the species.

S2-1

A CESA permit should be obtained if the proposed project has the potential to result in take of State-listed plants or wildlife over the life of the proposed project, including long-term management and operations. Issuance of a CESA permit is subject to CEQA; therefore the environmental document must clearly identify: potential direct, indirect, temporary and permanent impacts; avoidance, minimizations and mitigation measures; and a mitigation, monitoring and reporting program. If the proposed project may have the potential to "take" a CESA listed species, early consultation is encouraged, as significant modification to the proposed project and mitigation measures may be required in order to obtain a CESA permit. Issuance of a CESA permit may take up to 180 days from receipt of an application from the applicant.

S2-2

The EIS/EIR misidentifies the status of several species protected under CESA, the Federal Endangered Species Act and FGC Section 3511 (fully protected birds). The Department recommends the EIS/EIR be revised to update the following information:

S2-3

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- California tiger salamander (*Ambystoma californiense*) is federally and State-listed as Threatened;
- Greater sandhill crane (*Grus canadensis*) is State-listed as Threatened and a State-fully protected bird species;
- Tricolored black bird was emergency listed as Endangered under CESA on December 3, 2014;
- Western yellow-billed cuckoo was federally listed as Threatened in October of 2014 and is State-listed as Endangered.

S2-3
cont'd

Mitigation measure WILD-MM-3 requires coordination "with Resources Agencies and Develop Appropriate Wildlife Compensation Plans for Species Listed under ESA and/or CEQA." Wildlife Compensation Plans for listed species is an unfamiliar term. The specific compensatory mitigation required for these species would be analyzed as part of a CESA permit and the requirement to obtain a CESA permit should be referenced here. The Department recommends changing WILD-MM-3 to read: "Coordinate with Resource Agencies to Obtain Incidental Take Permits and Develop Compensatory Mitigation Plans for Species Listed under ESA and/or CESA."

S2-4

The California Natural Diversity Database (CNDDDB) 2009 is referenced throughout the document. Please update the data and reference as CNDDDB is continuously being updated with new or modified occurrence data.

S2-5

The Department would also like to advise that although agricultural activities may not be subject to ESA (page 12-27, line 19-20), they are not exempt from CESA.

S2-6

Rare Plants

On page 10-29, VEG-MM-3, states that "If special-status plants can be avoided by redesigning proposed projects consistent with this mitigation measure, it shall be implemented in combination with Mitigation Measures VEG-MM-4, VEG-MM-5, and VEG-MM-6 to ensure avoidance of significant effects on special-status plants. Avoidance, minimization, and compensation measures for riparian habitat, wetlands, and protected trees are discussed separately under their respective effects (Effects VEG-3, VEG-4, and VEG-5). If direct impacts cannot be avoided, the plants (including their root balls or rhizomes) will be transplanted to an appropriate location under the supervision of a qualified biologist or landscape architect. The qualified biologist or landscape architect will coordinate with the DFW regarding transplantation techniques and locations prior to implementation of transplantation efforts." Please be aware that as of January 1, 2015, the Office of Administrative Law has approved regulations that will allow the Department to permit the take of State-listed rare plants under the Native Plant Protection Act. These regulations will allow the Department to authorize the take of State-listed rare plants using the same procedures and under the same conditions as incidental take permits, voluntary local programs, natural community conservation plans, safe harbor agreements, and scientific/educational/management permits. The transplantation of State-listed rare plant species would require authorization from the Department.

S2-7

Giant Garter Snake

In the species description for the giant garter snake (page 12-27) it states that giant garter snake use burrows as refuge from extreme heat during their active period. While this statement is true, giant garter snakes also use burrows as refuge from predators, to shed, and to give birth, thus they can spend a substantial amount of time in burrows even during the "active" period (USGS, unpublished data). The Department recommends that additional analysis is

S2-8

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included in the EIS/EIR discussing the potential project impacts to giant garter snakes during the "active" period.

S2-8
cont'd

Bank Swallow

Both the Bank Swallow recovery plan (CDFG 1992) and the Bank Swallow Conservation Strategy for the Sacramento River Watershed (Bank Swallow Technical Advisory Committee (BANS-TAC) 2013) identify bank protection projects as the "single greatest threat to Bank Swallow populations," especially along the Sacramento River and its tributaries. The recovery plan also states that, "the core of the State's Bank Swallow population, and therefore the most important habitat for long-term maintenance and recovery of the species, is found along the Sacramento River and its major tributaries" (CDFG 1992). Both of these documents emphasize the importance of preserving and restoring natural river processes, which create and maintain suitable nesting habitat, through alternatives to revetment such as setback levees to increase the river meander potential. They also state that the only true in-kind mitigation for rock placement is rock removal to restore suitable habitat. The draft Fish and Wildlife Coordination Act Report (CAR) (Appendix I of the EIS/EIR) upholds this point, saying "the only form of mitigation for the loss of nesting habitat is rock removal in areas that would not compromise public safety but would allow for natural river processes and provide bank swallow nesting habitat."

S2-9

Decades of bank protection projects have removed many miles of available habitat from the system with no commensurate mitigation to offset impacts. This cannot continue if the bank swallow is to have a chance at recovery in California. Projects must mitigate their impacts by removing rock and restoring natural river processes. The Department's five-year bank swallow status report stated that, "If alternatives to rip-rapping and effective mitigation techniques to replace lost habitat are not found, then the prospect for the long-term survival and eventual recovery of the bank swallow on the Sacramento River system, and perhaps the remainder of the State, is very poor" (CDFG 1995).

S2-10

The Department recommends reviewing the BANS-TAC Conservation Strategy and proposing avoidance, minimization and mitigation measures consistent with it. The BANS-TAC Conservation Strategy should also be added to the references section of the document, Appendix J and any other appendices where bank swallow is discussed.

The Department is encouraged by the discussion of revetment removal as a mitigation approach in Appendix J. Rock removal must be a component of mitigation for rock placement. Protection of existing habitat through conservation easements or land acquisition alone is not enough to compensate for loss of habitat. The Department recommends that impacts to bank swallow habitat be estimated (as they are for riparian habitat) and the extent to which appropriate mitigation will be needed be discussed in Appendix J as mitigation may be required regardless of the presence of birds at the time of site selection and surveys.

S2-11

The preferred alternative (4A) in the EIS/EIR relies partially on planted benches to offset biological impacts, but this design feature still removes bank swallow habitat and the river processes necessary to create and maintain bank swallow habitat. Therefore, bank swallow habitat should be added to the list of biological impacts identified as being "significant and unavoidable" in Chapter 12.

S2-12

Bank swallow surveys are very different from typical nesting bird surveys and should be separated into their own mitigation measure. They may need to be performed multiple times throughout the season and may likely involve a survey from the water (via boat). The Department recommends removing bank swallow language currently in mitigation measure WILD-MM-4: Avoid or Minimize Construction-Related Effects on Nesting Birds and creating a

S2-13

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new mitigation measure for Avoid or Minimize Construction-Related Effects on Bank Swallow Colonies and Habitat. This new mitigation measure should also reference the 2013 BANS-TAC Conservation Strategy and discuss appropriate mitigation (rock removal to compensate for rock placement). The Department can provide assistance in developing this mitigation measure.

S2-13
cont'd

The data presented in Table 12-3 are several years out of date. Bank swallow burrow counts for colonies on the Sacramento and Feather Rivers through 2014 are available from the Department or the BANS-TAC and all have recently gone through QA/QC (including historic data on the Sacramento River from 1986 until present). This document should be updated with recent data. The Department recommends updating Table 12-3 to include more recent bank swallow burrow counts and since bank swallow habitat is ephemeral, creating a more comprehensive table showing any representative erosion sites that occur on, near, or adjacent to a bank swallow colony from any year as all may impact suitable or potential habitat. Please contact the Department to obtain the most recent and/or historic bank swallow colony data.

S2-14

Swainson's Hawk

The species description for Swainson's hawk (page 12-28) states "Since 1980, based on nesting records alone, populations in California appear relatively stable." The Department requests an explanation of the nesting data analyzed to determine that populations in California are stable and recommends that a citation is included with this statement.

S2-15

The species description for Swainson's hawk states that "Preferred foraging habitats for Swainson's hawk include alfalfa fields, fallow fields, low-growing row or field crops, rice fields during the nonflooded period, and cereal grain crops." Although Swainson's hawk may use all of these agricultural fields for foraging, they are not all "preferred," and the use of specific crop types by foraging Swainson hawk can change seasonally. The Department recommends reviewing the study completed by Jim Estep in 2009 (included in references) and including a discussion of Swainson's hawks temporal preferences of foraging habitat.

S2-16

The species description for Swainson's hawk states that "Swainson's hawks usually nest in large native trees such as valley oak, cottonwood, and willows, although nonnative trees such as eucalyptus (*Eucalyptus* spp.) are occasionally used". Swainson's hawk nest trees vary widely and may be more correlated with proximity to foraging habitat than the size of tree. Swainson's hawk have been found nesting in relatively small trees and in natives and non-natives. As long as all trees within the project boundary and buffer are included in nesting surveys, this may be addressed, however, the Department recommends the following change for clarification: "Swainson's hawks usually nest in large native trees such as valley oak, cottonwood, and willows, although nonnative trees such as eucalyptus (*Eucalyptus* spp.) and smaller trees within close proximity to foraging habitat may also be used."

S2-17

Western Yellow-Billed Cuckoo

Several recent journal articles by Steven Greco along with his "Request for Peer Review of the August 15, 2014, Proposed Rule to designate critical habitat for the western distinct population segment of the yellow-billed cuckoo (*Coccyzus americanus*)" have described the importance of river processes to maintain foraging and nesting habitat for Western yellow-billed cuckoo. The EIS/EIR, is missing a discussion of river process from this species description, as well as the impact and mitigation sections as they relate to Western yellow-billed cuckoo. The Department recommends that the importance of geomorphic river processes (river meander) to maintaining the habitat of this species is discussed in these sections of the EIS/EIR.

S2-18

Furthermore, due to the very secretive nature of Western yellow-billed cuckoos, the Department recommends that protocol level surveys be conducted for this species. The CNDDDB

S2-19

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occurrences referenced in the EIS/EIR only indicate possible presence of the species and cannot be used to verify nesting sites or population size in the project area. Similar to bank swallows, Western yellow-billed cuckoo surveys are very different from typical nesting bird surveys and should be separated into their own mitigation measure. They may need to be performed multiple times throughout the season and may likely involve a survey from the water (via boat). The Department recommends that the EIS/EIR includes a mitigation measure to avoid or minimize project impacts to Western yellow-billed cuckoos.

S2-19
cont'd

Nesting Migratory Birds and Raptors

The EIS/EIR states that only one Bald eagle (*Haliaeetus leucocephalus*) nest is known to occur in the project vicinity and that there is limited suitable habitat for this species in Regions 2 and 3 (Table 12-2). The Department has documented at least 7 active Bald eagle nests along the Sacramento River between Red Bluff and Colusa. Raptors and other migratory birds are protected under the Migratory Bird Treaty Act and FGC §3503.5; therefore, potential impacts would be considered potentially significant. Additionally, bald eagles are protected under the Bald Eagle Protection Act of 1940 which provides for the protection of the Bald eagle and the Golden eagle (*Aquila chrysaetos*) by prohibiting, except under certain specified conditions, the taking, possession and commerce of such birds. It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird (FGC §3503). The Department recommends that Table 12-2 is changed to reflect that these CDFW Regions contain highly suitable nesting habitat.

S2-20

Mitigation measure WILD-MM-4 states that if "the survey area does not contain active nests, construction activities, including tree removal, can commence without any further mitigation..." Active nests may include those that have been active in previous years but are not currently occupied and may require mitigation. The Department recommends that this section of the EIS/EIR includes a discussion of mitigation for "active nests" not currently occupied.

S2-21

Mitigation measure VEG-MM-10 discusses mitigation for loss of protected trees under a tree ordinance. Please note that large trees may be identified or potential nesting trees for State-listed species, such as Swainson's hawk. The Department recommends that the impact and mitigation regarding loss of protected trees should include language regarding loss of identified or potential nesting habitat for State-listed species and other birds protected under the Migratory Bird Treaty Act.

S2-22

Bats

Mitigation measure WILD-MM-5 requires a preconstruction survey for roosting bats in tree cavities and consist of nighttime emergence survey for evidence of use by bats. Bats are also known to use bridges and other structures for roosting. The Department recommends that surveys include inspection of bridges and any other structures that could support bat roosts in preconstruction surveys. Furthermore, it may be easier to identify habitat and evidence of use in the daylight. The Department recommends that a daytime survey of suitable trees and structures for evidence and habitat assessment is conducted and followed up with nighttime emergence surveys to detect presence.

S2-23

Aquatic Species

The EIS/EIR includes a discussion of the fishery resources found in each river system under the Existing Conditions in Chapter 11 and in Table 11-3. Although discussed in the summaries, the Department recommends the following missing information is included in Table 11-3:

- Central Valley spring-run Chinook salmon (*Oncorhynchus tshawytscha*) are found in the Yuba River, in addition to the Sacramento and Feather Rivers;
- Green sturgeon (*Acipenser medirostris*) are found in the Feather River, in addition to the Sacramento, Klamath and Trinity Rivers;

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- Sacramento Splittail (*Pogonichthys macrolepidotus*) are found in the Sutter Bypass, in addition to the listed water courses (Ward 2004); and
- River Lamprey (*Lampetra ayresii*) are found in tributaries to the Sacramento River.

S2-24
cont'd

Seesholtz et. al (2014) have documented Green sturgeon spawning in the Feather River, this is a more current study of Green sturgeon presence on the Feather River than Adams et. al (2002). The Department recommends the EIS/EIR considers this information in the analysis of impacts to Green sturgeon and develops additional mitigation measures to reduce impacts to this species.

S2-25

The EIS/EIR states that the location and extent of rearing in the lower and middle reaches of the Sacramento River are unknown (page 11-13, line 20). However, the location and extent of winter-run Chinook salmon rearing in the lower and middle reaches of the Sacramento are not completely unknown. Paul Maslin, California State University of Chico, Department of Biological Sciences, studied and documented intermittent streams as rearing habitat for all races of Sacramento River Chinook salmon (1994, 1996, 1996b, 1997, 1998). Table 11-5 of the EIS/EIR indicates that spring-run Chinook salmon spawning occurs from July through October in the Upper Sacramento River and its tributaries, however spring-run Chinook salmon spawning in these areas should not include July. Also in Table 11-5, Juvenile movement for spring-run Chinook salmon should include April through June in addition to Nov through March. The Department recommends that Chapter 11 of the EIS/EIR is updated to include this information.

S2-26

Mitigation measure FISH-MM-1 limits the construction activity to occur from July 1st through November 30th to minimize effects on fish; however, by early November winter-run Chinook salmon outmigration is at its peak downstream of River Mile 194 and could be impacted by construction activities. The Department recommends that the construction activity is not conducted in areas with active spawning and is limited to the period from July 1st to October 31st.

S2-27

Natural River Process

The Department is concerned with the project's impacts to riparian habitat and natural river processes. Among many things, the preferred project alternative does not address the need to restore natural river processes. Restoration of river processes through setback levees would restore ecosystem function, can invigorate groundwater basins helping farmers throughout the Central Valley, would provide better flood protection with greatly reduced maintenance costs, as well as enhancing sediment deposition in the flood plain, carbon capture, and recreational and wildlife values. Most of the bank protection measures still include rock revetment as a main component, which is burdensome to continually maintain and/or replace and has contributed to the loss of habitat and river processes over the past several decades. Especially in areas on alluvial streams and rivers, the Department encourages methods that allow for natural river processes, restoring meander and reconnecting to floodplain habitat currently separated from the river by levees. The Department encourages the use of setback and to a lesser extent, adjacent levees, whenever possible as they provide the greatest flood and ecological benefits while adding resiliency to the system for future climate change.

S2-28

Furthermore, the EIS/EIR assumes that removal of riparian vegetation can be mitigated by incorporating riparian plantings into revetment. Some impacts to species caused by the loss of riparian habitat may be minimized or offset with planted rock (temperature and leaf litter, etc), but others, especially those that depend on natural recruitment and river processes cannot. Riparian planting in rock is not in-kind replacement for loss of riparian habitat on natural banks.

S2-29

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The Department recommends that the preferred alternative includes additional areas where setback levees are implemented.

S2-29
cont'd

The Department recommends that clarification is included in the Executive Summary regarding this sentence "Setback levees can be very effective, but real estate acquisition (including the need for willing sellers), existing land use, and technical issues limit opportunities for setback levees in the program area" (page ES-5, lines 2-4). It is not clear how areas will be evaluated to determine if constructing setback levees will be possible.

S2-30

Jurisdictional Riparian Habitat

The Department is concerned with the project's impacts to riparian habitat. The Department recommends that the analysis of impacts to woody riparian vegetation considers age class structure and species composition at each project location. Analysis to this degree will help determine the impact of the temporal loss of mature trees or gallery riparian habitat and the associated temporal loss of valuable habitat for special status species (including, but not limited to, Shaded Riverine Riparian, critical habitat for Western yellow-billed cuckoo, and nesting habitat for migratory birds and raptors). Ultimately, identifying the type and quantity of restored habitat needed to reduce impacts to a less-than-significant level. The Department recommends that permanent removal of riparian vegetation should be mitigated at a 3:1 ratio and restoration implemented on protected lands only, to ensure that long-term viability and ecological services will be assured.

S2-31

The EIS/EIR includes a discussion of Riparian Forest Habitat under the Existing Conditions section of Chapter 12 (page 12-4) and states that "Riparian forest communities are composed of a mature tree canopy dominated by valley oak (*Quercus lobata*) and Fremont cottonwood (*Populus fremontii*), and an understory consisting of a shrub layer of varying densities and an herbaceous ground layer." The Department would like to emphasize that Riparian Forest Habitat varies greatly throughout the project area. For example, Valley Oak Woodland habitat is not a dominant component of the riparian habitat between Colusa and Red Bluff along the Sacramento River. Very few small remnant stands of Valley Oak remain in this area, as most historical stands have been removed and replaced by commercial orchards. The Department recommends that the EIS/EIR consider regionally rare habitat types in its analysis and that setback levees are considered to prevent further loss.

S2-32

Information regarding project impacts to areas under the Department's jurisdiction is not clear in the EIS/EIR. The State Requirements section (page 24-10) does not include a discussion of FGC Section 1600 et seq. regarding Lake and Streambed Alteration Agreements; this discussion is also missing from Appendix C. In Chapter 12 of the EIS/EIR, FGC Section 1602 is listed under "future issued programmatic permits or approvals," but programmatic agreements are not described in FGC. The Department recommends that "programmatic permits or approvals" is changed to "program-level permits or agreements," or that the references to the FGC 1602 is removed from this section.

S2-33

Pursuant to FGC Section 1602, the Department recommends that a Notification of Lake or Streambed Alteration Agreement (LSA) be submitted to the Department for any proposed activity that may: (1) substantially divert or obstruct the natural flow of any river, stream or lake; (2) substantially change or use any material from the bed, channel, or bank of, any river, stream or lake; or (3) deposit or dispose of debris, waste, or other material containing crumbled, flaked or ground pavement where it may pass into any river, stream, or lake; and obtain if necessary a LSA Agreement. The LSA Agreement would include measures to minimize impacts to fish and wildlife resources within the project area, including the associated riparian habitat. As a responsible agency under CEQA, the Department must rely on the CEQA analysis for the

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proposed project when exercising our discretion after the lead agency to approve or carry out some facet of a project, such as the issuance of a LSA Agreement. Therefore, the EIS/EIR should include specific, enforceable measures to be carried out onsite or within the same stream system that will avoid, minimize and/or mitigate for project impacts to the natural resources. These measures may include, but are not limited to, the following:

1. Protection and maintenance of the riparian, wetland, stream or lake systems to ensure a "no-net-loss" of habitat value and acreage. **Vegetation removal should not exceed the minimum necessary to complete operations and all native vegetation removed should be replaced at a 3:1 ratio;**
2. Delineation of buffers along streams and wetlands to provided adequate protection to the aquatic resource. No grading or construction activities should be allowed within these buffers;
3. Placement of construction materials, spoils or fill, so that they cannot be washed into a stream or lake;
4. Prevention of downstream sedimentation and pollution. Provisions may include but not be limited to oil/grit separators, detention ponds, buffering filter strips, silt barriers, etc., to prevent downstream sedimentation and pollution; and
5. Restoration plans must include quantifiable performance standards and pertinent information such as the types of vegetation to be planted, the timing of implementation, and contingency plans if the replanting is not successful. Restoration of disturbed areas should utilize native vegetation.

S2-34
cont'd

The use of products with plastic monofilament or cross joints in the netting that are bound/stitched (such as found in straw wattles/fiber rolls, jute netting and some erosion control blankets) which may cause entrapment of wildlife, should not be used for erosion control. Additionally, any non-biodegradable materials used for erosion control, such as silt fencing, should be removed upon project completion.

S2-35

Elder Creek

Elder Creek is identified in the federal AFRP Final Restoration Plan (USFWS 2001) as an anadromous stream, supporting fall-run Chinook salmon and Central Valley steelhead (*O. mykiss*), which is also a federally-threatened species. The AFRP Final Restoration Plan identified the following Action for Elder Creek: Work with Tehama County to develop an erosion control ordinance to minimize sediment input into Elder Creek; and an Evaluation Target: Evaluate the feasibility of constructing a fish passage. At a minimum, the Department recommends the EIS/EIR more effectively evaluate the extent to which the project will affect fish passage in the area affected by the levee.

S2-36

The Department recommends the EIS/EIR evaluate how the project will affect the spread of non-native plant species, such as arrundo and tamarisk, in particular, on Elder Creek and should incorporate measures to avoid creating suitable conditions for these non-native invasive plant species, which prefer disturbed sites.

S2-37

The California Department of Water Resources (DWR) is currently undergoing an analysis of flood management along Elder Creek. The Department recommends coordination with DWR on the best solutions for flood management, while also addressing ecosystem values, along Elder Creek, if that coordination has not already happened.

S2-38

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After review of the various alternatives for the Elder Creek levee system maintained by the Army Corp of Engineers (ACOE), the Department recommends selection of the alternative that proposes a "Riparian Bank with Revegetation and Instream Woody Material above Summer/Fall Waterline." This alternative is deemed to be less of an impact to fish, wildlife, and botanical resources. In addition, the bank should be planted immediately to minimize establishment of non-native plant species.

S2-39

Deer Creek

The Department has provided \$1,519,000 via an Ecosystem Restoration Program grant to the Deer Creek Watershed Conservancy (DCWC) to conduct a feasibility study to develop a solution to flooding in the lower Deer Creek watershed after the area suffered impacts, in part caused by a Corps levee failure, in 1997. The proposed alternatives in the EIS/EIR do not incorporate any of the recommendations by the DCWC to solve the flooding issues in lower Deer Creek. Results of the feasibility study indicate that to improve flood protection and ecosystem function, the width of floodway should be increased through setback levees and conservation easements. Increasing the floodway width in lower Deer Creek will provide a number of ecological benefits, including increased area for channel migration, ability for natural sediment transport and deposition that improves channel complexity without damaging infrastructure, and increased area for riparian vegetation growth while maintaining flood conveyance; greater channel complexity and gravel size diversity via reduced water velocities and shear stress in the reach; more confined low flow channel to improve adult salmonid fish passage and juvenile rearing habitat; along with many others.

S2-40

Multiple agencies and other technical advisors provided extensive input on solutions to the lower Deer Creek levee via the floodplain feasibility study. Actions have already been taken to further encourage implementation, including agreement by landowners to allow a setback levee; an amendment to the Department's Conceptual Area Protection Plan to cover this area (which then creates the potential to obtain funding for easements from the Wildlife Protection Board); and additional studies in the area by the Department as part of a flow study.

Therefore, the Department does not believe any of the proposed current alternatives for Deer Creek are suitable. The Department recommends the alternative of setback levees to benefit lower Deer Creek; setback levees will provide a multitude of ecological benefits, including increasing the floodway width in lower Deer Creek and returning the channel to a more natural geomorphic condition.

Additionally, the EIS/EIR inadequately addresses the degree to which the proposed alternatives will affect listed anadromous salmonids within Deer Creek; at least one of the designs appears to be building into the watered side of the channel, which would further constrict the channel and potentially translate into worsening conditions downstream. The Department recommends that the EIS/EIR adequately address how the proposed alternatives will affect listed anadromous salmonids in Deer Creek.

S2-41

Consistency with the Central Valley Flood Protection Plan and Conservation Strategy

The Sacramento River Bank Protection Project is within the boundaries of the Central Valley Flood Protection Plan (CVFPP). The CVFPP was a requirement of the Central Valley Flood Protection Act of 2008 (Act) (California Water Code Section 9600-9603). The Act required DWR to develop a document that describes a sustainable, integrated flood management plan that proposes a long-term, system-wide investment approach in areas of the Central Valley currently receiving protection from facilities of the State Plan of Flood Control. The Central Valley Flood System Conservation Strategy (Conservation Strategy) was developed to support the CVFPP.

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The Conservation Strategy provides a comprehensive approach to implement the CVFPP and the environmental objectives of the Act to "(1) promote natural dynamic hydrologic and geomorphic processes, (2) increase and improve the quantity, diversity, and connectivity of riparian, wetland, floodplain, and shaded riverine aquatic habitats, including the agricultural and ecological values of these lands, and (3) promote the recovery and stability of native species populations and overall biotic community diversity." The extensive use of revetment proposed in the EIS/EIR is not consistent with these objectives. The Conservation Strategy identifies long-term measurable objectives that will be used to guide and inform the planning, funding and implementation of multi-benefit and strategic advance mitigation projects. Implementation of the preferred alternative will have significant and unavoidable impacts to natural river processes and does not support achievement of the Conservation Strategy's measurable objectives of floodplain inundation through levee relocation, natural bank through revetment removal, and river meander potential. It is crucial that the SRBPP not only be consistent with the CVFPP and Conservation Strategy, but also not preclude the ability to implement future multi-benefit projects, including setback levees. This was also reflected in agency recommendation #5 in Appendix A5 of the EIS/EIR.

S2-42
cont'd

Document Clarification

More specific comments and recommended changes or text edits in the EIS/EIR are included in Attachment A.

Summary

The proposed project will have an impact to fish and/or wildlife habitat and should be evaluated in such a manner to reduce its impacts to biological resources. Assessment of fees under Public Resources Code §21089 and as defined by FGC §711.4 is necessary. Fees are payable by the project applicant upon filing of the Notice of Determination by the lead agency.

Pursuant to Public Resources Code §21092 and §21092.2, the Department requests written notification of proposed actions and pending decisions regarding the proposed Project. Written notifications shall be directed to: California Department of Fish and Wildlife Region 2, 1701 Nimbus Road, Rancho Cordova, CA 95670.

S2-43

Thank you for considering our concerns for the proposed project. Department personnel are available for consultation regarding biological resources and strategies to minimize impacts. If you have questions please contact Tanya Sheya, Environmental Scientist, by e-mail at Tanya.Sheya@wildlife.ca.gov or by phone at (916) 358-2953.

Sincerely,


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Attachment A: Document Clarification

Comment #	Section #	Page #	Line #	Comment: Issue	Comment: Solution	
1	Overall			The EIS/EIR is very fish focused. SAM does little to evaluate impacts or mitigation benefits to terrestrial species.	Recommend supplementing the SAM with additional analyses that consider other habitat values (riparian vegetation beyond SPA, bank swallow nesting habitat, etc).	S2-44
2	Overall			Cumulative impact analysis (Recommendation #4 in Appendix A-5 to Conduct a robust cumulative impact analysis.	Conduct a robust cumulative impact analysis	S2-45
3	Overall			Even with mitigation measures implemented, the preferred alternative will have significant and unavoidable effects/impacts on Wildlife (Effect Wild-1 on Riparian habitat and Effect Wild-2 on Riparian dependent species and bank swallow) and will require a statement of overriding considerations. DFW requests to see this statement in draft form.	If possible, please provide DFW with a copy of the draft statement of overriding considerations for this program.	S2-46
4	Exc. Summary	ES-2	11	"compensating for significant effects to the degree feasible"	CEQA requires impacts are mitigated to a less than significant level unless a notice of overriding considerations is filed.	S2-47
5	Executive Summary	ES-3	24	PAC was not in the list of acronyms, nor spelled out in this section.	Please provide a definition of PAC, if this is the first time its used.	S2-48
6	Executive Summary	ES-5	6	Lists flood control benefits of setback levees, but left out reducing pressure on banks and levees downstream.	Please add to list of benefits.	S2-49
7	Exc. Summary	ES-5 and ES-9	15-16 and 13-14	"If there is a natural bank distinct from the levee that requires erosion protection, it would be treated with revegetation." Does this mean streambank outside of the levee prism would also be rocked? How would it be determined that a natural bank "requires erosion protection"? Erosion is a natural over process and should be allowed to occur in areas where it does not impact the levees or other public safety structures.	Please clarify in the document what is meant by "natural bank distinct from the levee" and how it would be determined if a natural bank "requires erosion protection."	S2-50
8	Exc. Summary	ES-5	17-19	"Measure 2 would be most applicable in areas where...existing habitat values are very limited." Installing revegetation on natural banks has a negative impact on natural river process even in areas where on-site habitat value is limited.	This measure should not be implemented simply because the site has limited habitat value.	S2-51
9	Exc. Summary	ES-5	19	The Executive Summary of the EIS/EIR, under Bank Protection Measure 2 states that Measure 2 would be most applicable in areas where there is inadequate space or substantial constraints, either landscape or waterside, where hydraulic concerns would make it difficult to implement the other measures or where existing habitat values are very limited." The department is concerned with the term "where existing habitat values are very limited" and it is unclear how habitat values will be determined. Isolated habitat patches are very valuable for Neotropical migrant birds. They are also help facilitate wildlife dispersal and contribute to wildlife movement corridors.	Recommend including a discussion of how habitat values will be determined. Additionally, the Department recommends that Bank Protection Measure 2 is used sparingly, if at all.	S2-52
10	Executive Summary	ES-10	10-11	It is unclear what is meant by "critical sites" or how sites are analyzed.	Please define "critical sites" and explain how they are determined.	S2-53
11	Executive Summary	ES-12	19	"Use of off-site/out-of-hand mitigation that contributes to listed species recovery." is listed as a potential implementation strategy. Mitigation typically does not contribute to listed species recovery as it (at best) offsets an impact to the species.	Recommend change to: "Use of off-site/out-of-hand mitigation that provides the greatest benefit to listed species."	S2-54
12	Executive Summary	Table ES-2		Effect VEG-7: Potential Opportunity for Habitat Restoration in Enlarged Floodplain following Program Construction is listed as having a beneficial effect for Alternative 3A through Sub-Alternative 6B. We support providing opportunities for future habitat restoration but the "beneficial" determination is based on something in the future that is not guaranteed to be completed.		S2-55
13	Executive Summary	ES-23	9	It is misleading to state that the document found to have less than significant effects AND significant and unavoidable effects to the same categories.	Suggest separating out those categories that are listed in both and describing them in a way that explains that some of the impacts in that category were less than significant and some were significant and unavoidable to avoid confusion from someone taking a quick glance at this list.	S2-56

California Department of Fish and Wildlife Comments on Draft EIS/EIR for the Sacramento River Bank Protection Project
Attachment A: Document Clarification

Comment #	Section #	Page #	Line #	Comment: Importance	Comment: Issue	Comment: Solution	
14	Executive Summary	ES-26	11-14		This section states that "Long term" refers to an indefinite period beyond the initial construction at the erosion sites and includes ongoing operation and maintenance of the sites as well as vegetation establishment and monitoring activities. Vegetation establishment and monitoring would be necessary to ensure that the mitigation vegetation is functioning as intended." Monitoring will be required for other types of mitigation beyond vegetation.	Recommend change to: "Vegetation establishment and monitoring would be necessary to ensure that the mitigation vegetation and species habitat is functioning and being managed as required by environmental permits."	S2-57
15	Ch 12			Moderate	The wildlife section primarily focuses on special status wildlife. Harvest species such as upland game birds, or big game animals such as deer should be mentioned. The preferred project alternative could have substantial economic impacts on agriculture and recreation.	At a minimum, the Department recommends that a list of wildlife species present throughout the project area and are considered harvest species is included in the EIS/EIR. The Department recommends that the EIS/EIR calculate economic impacts due to crop protection from deer (loss of fencing orchards throughout the project area), upland game bird populations and recreational/economic impacts. Habitat changes effects these key harvest species and should be analyzed in the document.	S2-58
16	Chapter 22	22-6	Table 22-1	Moderate	Table 22-1 missing a project that should be considered for cumulative assessment.	The Projects Considered for Cumulative Assessment, Table 22-1, should include the California Department of Water Resources Small Erosion Repair Program (SEEP), which is a collaborative interagency effort to develop a streamlined regulatory review and authorization process that will facilitate implementation of annual repairs of small erosion sites on levees within the Sacramento River Flood Control Project (SRFCP) area.	S2-59
17	Chapter 12	12-38	12-32	Moderate	This section titled "Effect Mechanisms" is confusing as some items labeled "direct effects" are actually activities that cause effects (clearing of vegetation, stockpiling) and some are effects/impacts (loss of erosional process).	Determining whether this section is discussing activities or effects and change language to be consistent.	S2-60
18	Chapter 12	12-38	24-25	Moderate	Sediment is a major impact to water quality and should be added here.	Recommend change to: "Degradation of water quality in drainages and wetlands, resulting from construction runoff containing petroleum products or sediment."	S2-61
19	Chapter 12	12-39	17	Minor	The DWR HCP is named "Feather River HCP".	Recommend change to: "DWR is also preparing the Feather River HCP for some of its flood program."	S2-62
20	Chapter 12	12-41	23-26	Major	This section states that identified mitigation measures would reduce effects, but they are "likely to still be significant because of the presence of habitats within the program area that are regionally important to special-status species, particularly listed species. The final determination would need to be made at a project level for individual sites in consultation with the applicable resource regulatory agency (USFWS and/or DFW)." This does not address the impacts on a cumulative scale.	This should be addressed here and in the cumulative impacts section.	S2-63
21	Chapter 12	12-42	2	Moderate	Mitigation Measure Wild MM-3 states that any adopted HCPs and NCCPs should be reviewed, but projects should consult with those developing HCPs and NCCPs, not just those that have been adopted.	Recommend change to: "HCPs and NCCPs (both adopted and developing)..."	S2-64
22	Appendix C	C-62	16	Moderate	Please explain how project would be not interfere with the NBHCP and the 1 mile riverine buffer established as a part of the plan.		S2-65
23	Chapter 12	12-45	34-35	Major	Here and elsewhere in the mitigation measures, the biologist needs to have the ability to stop work if construction activities are disturbing special-status species.	Recommend change to: "If the biologist determines that construction activities are disturbing the birds and nest failure is possible, construction shall immediately stop in the area of the nests and DFW shall be notified. Construction may not begin again until DFW and the biologist have determined that the nesting birds are no longer being disturbed."	S2-66
24	Exc. Summary	ES-10	7		Toe protection is mentioned as an additional measure that could be used at bank stabilization sites.	It is important to note that toe protection still negatively impacts natural river process and bank swallow habitat.	S2-67
25	Exc. Summary	Table ES-2			Effect FCGEOM-1: Decrease in Levee Erosion and Change in Sediment Recruitment is listed as less than significant for all the alternatives except no project. This should be significant as stabilizing eroding banks will significantly impact the level of erosion on the levees and for species that need erosion as part of their breeding cycle (bank swallow).	The Department recommends changing to significant or less than significant after measures are implemented (if appropriate).	S2-68

California Department of Fish and Wildlife Comments on Draft EIS/EIR for the Sacramento River Bank Protection Project
Attachment A: Document Clarification

Comment #	Section #	Page #	Line #	Comment: Importance	Comment: Issue	Comment: Solution	
26	Chapter 12	12-32	2-5		The Feather River was omitted from nesting areas.	Please add the Feather River in the list of nesting areas.	S2-69
27	Chapter 12	12-41	15		Not only currently eroding banks are habitat for bank swallow as their habitat may change as the river changes.	Recommend change to: "Loss of potential nesting habitat for bank swallows in the currently eroding banks or any suitable bank that could erode in the future."	S2-70
28	Chapter 12	12-42	17-21		Surveys outside of nesting season may not show habitat suitability or burrows from previous years in bank swallow habitat. Nesting surveys will almost always be necessary for bank swallow.	Habitat assessment may also be necessary from the water (via boat) as habitat suitability is not often accurately assessed from the bank. Species-focused surveys should always be done for bank swallow within the Sacramento and Feather Rivers.	S2-71
29	Chapter 12	12-45	20		If nesting bank swallow habitat is directly impacted, mitigation will include rock removal and (not or) land acquisition/conservation easement. Rock removal must be a component of mitigation for rock placement.	Recommend change to: "If nesting habitat is directly impacted, mitigation will include removal of existing rock at a former bank protection site, and acquisition of a permanent easement or participation in a conservation easement on an appropriate landform."	S2-72
30	Chapter 12	12-45	29		This section states that the "buffer zone shall be maintained until the young have fledged." This is not only a Migratory Bird Treaty Act issue, but a CEQA and CESA issue for bank swallow so the buffer zone shall be maintained until there is no longer potential to impact the individual birds, colony, or habitat.	Recommend change to: "The buffer zone shall be maintained until there is no longer potential to impact the individual birds, colony, or habitat (as determined by a qualified biologist in consultation with DFW)."	S2-73
31	App. C	C-30			Needs same rewrite of CESA section as Chapter 24.		S2-74
32	App. C	C-31			Needs rewrite to look more like Chapter 24, page 24-34. Sections pertaining to 1600 et. Seq. need rewrite.		S2-75
33	App. C	C-32	9-10		If projects are implemented by USACE, an LSA is not required. If implemented by the CVPFB or locals, LSA may be required.	Please see body of letter.	S2-76
34	App. J	8			CEQA and FOC sections need to be rewritten.	Please see body of letter	S2-77
35	App. J	18	Table 6	Major	This summary of mitigation needs does not present mitigation needed as stated. It presents the difference between vegetation impacts and plantable area created on-site. This assumes a 1:1 replacement ratio. Riparian mitigation will be higher than 1:1 ratio so more mitigation will be needed than is represented in this table.	Recommend changing this table title and column headings related to "mitigation needed" to avoid confusion and an understatement of mitigation that will be required.	S2-78
36	App. J	21		Moderate	Out of kind mitigation will not work for some species as they require very specific habitat or parameters/locations.		S2-79
37	App. J	22	Table 8		Self-mitigation is a confusing term and should be renamed "on-site mitigation".	Recommend change self-mitigation to on-site mitigation.	S2-80
38	App. J	25			First bullet under revegetation removal left out private landowners.	Recommend change to: "Revegetation is adjacent to public or conservation ownership land or a willing private landowner."	S2-81
39	App. J	28			Paragraph above Commercial Mitigation Banks says it may be desirable to consider supplementing the SAM with riparian-impact modeling or other riparian habitat impact mitigation processes. DFW encourages this and it is consistent with Agency recommendation #6 in Appendix A-5 (Conduct additional analyses beyond the SAM, as it doesn't fully account for all habitat values).	Recommend supplementing the SAM with additional analyses that consider other habitat values (riparian vegetation beyond SAM, bank swallow nesting habitat, etc).	S2-82
40	App. J	29			The Section on Coordinating with Related Habitat Enhancement Programs should be updated to discuss consistency with the CVPFB and Conservation Strategy.	Please see body of letter.	S2-83
41	App. J	30			2nd line says resource agencies would likely require an endowment to accompany fee title transfer or management responsibility. An adequate endowment must accompany any land, easement or management responsibility for DFW to consider it.	Recommend removing the word "likely".	S2-84

2.2.2.1 Responses to Letter S2**Response to Comment S2-1**

The description of California Department of Fish and Wildlife (DFW) authority has been revised in Section 24.2.2.2, California Endangered Species Act, in Chapter 24.

Response to Comment S2-2

Comment noted. Appropriate permits will be obtained on a site-by-site basis.

Response to Comment S2-3

Species status updates have been made. However, the tricolored blackbird is no longer emergency listed.

Response to Comment S2-4

Mitigation Measure WILD-MM-3 has been revised to include a discussion of incidental take authorization in relation to the compensation plan.

Response to Comment S2-5

The EIS/EIR was updated with data from the most current version of the California Natural Diversity Database (CNDDB) accessed on March 6, 2018. The U.S. Fish and Wildlife Service (USFWS) iPAC list and California Native Plant Society list have also been updated.

Response to Comment S2-6

The text in the “Giant Garter Snake” discussion of Section 12.2.1.3 in Chapter 12 has been revised to state that agricultural activities are not exempt from the California Endangered Species Act.

Response to Comment S2-7

Thank you. The Corps is aware that DFW now has the authority to permit the take of state-listed rare plants under the Native Plant Protection Act.

Response to Comment S2-8

The giant garter snake species account in Chapter 12, Wildlife, has been revised to provide updated information.

Response to Comment S2-9

The updated Site Selection and Implementation Process described in Chapter 2 recognizes the need to protect environmental resources. As a result, there are several steps that incorporate conservation of environmental resources into the process. These include Step 5, “Identify Opportunities and Constraints,” and Step 6, “Conceptual-Level Alternatives.” Step 6 in particular involves evaluation of the feasibility of implementing a setback or adjacent levee, either of which can allow natural river processes to continue. If avoidance and minimization are not feasible, Mitigation Measure WILD-MM-3 requires development of appropriate wildlife compensation plans for listed

species through coordination with appropriate resource agencies, and includes removing rock to create bank swallow habitat.

Response to Comment S2-10

The Corps and CVFPB reviewed the Bank Swallow Technical Advisory Committee (BANS-TAC) Conservation Strategy and coordinated with its authors to some extent during its preparation. As previously stated in response to comment S2-9, the updated Site Selection and Implementation Process and Mitigation Measure WILD-MM-3 are generally consistent with the approaches outlined in the BANS TAC report. Given the programmatic nature of this EIS/EIR, implementation details will need to be determined during site-specific documentation and construction.

Response to Comment S2-11

The Corps and CVFPB are committed to planning for effects on bank swallow and mitigating for those effects. However, given the large geographic extent of the study area, the programmatic nature of this analysis, and the amount of work necessary to determine suitable bank swallow habitat, a full quantification has not yet been conducted. That work would occur consistent with the Site Selection and Implementation Process laid out in Chapter 2. It should be noted that Table 12-3 does provide a list of known bank swallow nesting sites in close proximity to the representative erosion sites being evaluated, thereby giving an indication of the extent of likely impacts and the amount of effects requiring mitigation.

Response to Comment S2-12

Effect WILD-2, Potential Disturbance or Loss of Special-Status Wildlife Species and Their Habitats as a Result of Program Construction and O&M Activities, which includes effects on bank swallow, is identified as significant and unavoidable. The discussion notes that the finding could vary between sites during the site-specific analysis, depending on the resources present at any given site. However, the overall finding is significant and unavoidable.

Response to Comment S2-13

The existing mitigation measures, including WILD-MM-4, require that nesting bird surveys be conducted by a qualified biologist. However, in response to this comment, additional detail has been added to Mitigation Measure WILD-MM-4 specific to bank swallow. Mitigation Measure WILD-MM-3 includes rock removal as a method of mitigating for effects to bank swallow.

Response to Comment S2-14

Table 12-3 has been updated and includes the BANS-TAC annual survey data from 2008 – 2017.

Response to Comment S2-15

This paragraph has been removed.

Response to Comment S2-16

The Swainson's hawk species account in Chapter 12, Wildlife, has been updated to reflect the most current studies.

Response to Comment S2-17

Please see the response to Comment S2-16, above.

Response to Comment S2-18

A discussion of natural river process and other primary constituent elements identified for the western distinct population segment of the yellow-billed cuckoo has been added to the species account in Chapter 12, Wildlife. Loss of geomorphic river process has been added as an impact under Effect-WILD-2. Text describing the benefits of setback levees to the yellow-billed cuckoo has been added throughout Chapter 12, and a discussion of how potential mitigation for bank swallow would also benefit the cuckoo has also been added.

Response to Comment S2-19

Western yellow-billed cuckoo has been added to the list of species requiring protocol-level surveys under Mitigation Measure WILD-MM-1, and to the list of species requiring focused nesting surveys in Mitigation Measure WILD-MM-4.

Response to Comment S2-20

“Regions 2 and 3,” as referenced in Table 12-2, refer to the program regions of the SRBPP and are not referring to the DFW Regions. Figure 2-1 in the EIS/EIR shows which reaches of the SRFCP are in each SRBPP program region. The CNDDDB data for bald eagle nest occurrences were updated to reflect that there is one known nest site within 0.5 mile of Region 2 and within 0.5 mile of Region 3. Table 12-2 was updated, and the potential for occurrence in program Regions 2 and 3 was changed from “Low” potential to “Moderate” potential.

Response to Comment S2-21

In Mitigation Measure WILD-MM-4, the referenced language was changed from “active” to “occupied,” and a new paragraph was added to the mitigation measure discussing active nests. Language was also added to the discussion of Effect WILD-3 noting that implementation of Mitigation Measure VEG-MM-1 would compensate for the removal of woody riparian vegetation providing potential nesting habitat.

Response to Comment S2-22

The description of riparian forest in Section 12.2.1, Existing Conditions, notes that riparian trees provide suitable nesting and roosting habitat for Swainson’s hawk and other state-listed birds. Table 12-2 describes the habitat requirements for Swainson’s hawk (as well as other state-listed birds), and identifies oaks and cottonwoods in or near riparian habitats as nesting habitat. Effect WILD-2 evaluates the potential disturbance or loss of special-status wildlife species and their breeding, foraging, or refuge habitats as a result of program construction and O&M activities, and covers effects on Swainson’s hawk and on other state-listed birds. Several mitigation measures will be implemented to avoid and minimize effects on birds; in particular, Mitigation Measure WILD-MM-4 was developed specifically to avoid and minimize construction-related effects on nesting migratory birds and raptors.

Response to Comment S2-23

"Structures" were added to Effect WILD-3. Mitigation Measure WILD-MM-5 was revised to include a daytime survey.

Response to Comment S2-24

Table 11-3 has been updated with additional distribution information as requested in the comment.

Response to Comment S2-25

Section 11.2.2.4, which describes green sturgeon life history, has been updated with current research. However, no changes were made to the effects analysis because the results are based on the Standard Assessment Methodology, which assumes that sturgeon adults are insensitive to bank substrate size.

Response to Comment S2-26

The "Winter-Run" discussion in the Chinook salmon life history in Section 11.2.2.1 has been updated with recent rearing data, and Table 11-5 has been updated pursuant to the suggestions in the comment as well as pursuant to the updates made to the text.

Response to Comment S2-27

The "Winter-Run" discussion in the Chinook salmon life history in Section 11.2.2.1 has been revised to include the potential for peaks in downstream movement of winter-run juveniles during November and December. Sites with active spawning will be identified during the site selection process and appropriate work windows will be established on a site-specific basis in coordination with the resource agencies.

Response to Comment S2-28

The preferred alternative was selected based on a combination of factors, including its ability to meet the project purpose and objectives, engineering and economic feasibility, and mitigation of environmental effects. During the opportunities and constraints portion of the Site Selection and Implementation Process, each site and group of sites in a reach will be evaluated to identify appropriate designs. The SRBPP typically repairs erosion sites that are small (ranging from a few hundred to several thousand feet). There are economic as well as environmental challenges involved in attempting setback levees at this scale; however, the Corps will continue to consider setbacks among the various design options under the preferred alternative on a site-by-site basis.

Response to Comment S2-29

The SRBPP Programmatic Mitigation Strategy, presented in Appendix J, acknowledges that the bank protection measures sometimes result in net on-site deficits in habitat values, requiring off-site mitigation in order to fully mitigate effects. Mitigation for each individual site will be designed in coordination with the resource agencies during the Site Selection and Implementation Process. Regarding the comment's recommendation that the preferred alternative include additional areas where setback levees are implemented, please see the response to Comment S2-28.

Response to Comment S2-30

The discussion of the Site Selection and Implementation Process has been expanded and updated to include more information regarding which criteria are key factors in considering setback levees. These criteria are described in Step 6, “Conceptual-Level Alternatives,” of the Site Selection and Implementation Process discussion in Chapter 2 the of EIS/EIR.

Response to Comment S2-31

Impacts on riparian habitat will be evaluated during subsequent site-specific environmental analyses. The National Marine Fisheries Service (NMFS) and USFWS will be consulted, and during that process, and the mitigation needs of each site will be determined.

Response to Comment S2-32

Regionally rare habitat types will be analyzed in subsequent site-specific environmental analyses.

Response to Comment S2-33

The reference to California Fish and Game Code Section 1602 has been removed from the list of future issued programmatic permits or approvals in Chapter 12, Section 12.4.1, Assessment Methods.

Response to Comment S2-34

In 1996, CVFPB and DFW counsel agreed that federal actions are exempt from all requirements of Sections 1600, 1601, 1602, and 1603 of the Fish and Game Code of California. Projects for which the Corps acts as a construction agency are exempt. CVFPB’s role in these projects is limited to providing lands, easements, and right of way—activities which do not cause alterations to streambeds.

Response to Comment S2-35

The use of erosion control products with plastic monofilament or cross joints in the netting that are bound or stitched is not proposed as part of the program. Subsequent project-level activities will include the prohibition of these materials as part of their environmental permits, and project-level documents will include requirements for the removal of all non-biodegradable erosion control materials once construction is completed.

Response to Comment S2-36

SRBPP actions and activities are generally limited to the levee and do not cause significant increases to hydraulic velocities or water surface elevation changes to the channel. Erosion site repairs under the SRBPP should not increase impediments in channel that may cause fish passage issues.

Response to Comment S2-37

The discussion of Effect VEG-6 evaluates the potential for introduction or spread of invasive plants as a result of program construction. Mitigation measures are described that will be implemented at the project level to ensure that the proposed program would not have a substantial adverse effect on sensitive natural communities or special-status species from the introduction or spread of invasive

plants. Mitigation will include documenting any local invasive plant infestations, implementing best management practices to avoid and minimize the spread or introduction of invasive plant species, conducting follow-up weed surveys, and implementing eradication methods if new infestations are found during follow-up surveys. Long-term operation and maintenance of the levee system (including vegetation management) is conducted by the LMAs.

Response to Comment S2-38

Members of the SRBPP Project Development Team have been coordinating on flood management activities in the flood control portions of Elder Creek in Tehama County, which include channel maintenance and sediment removal activities. SRBPP will coordinate with the Tehama County Flood Control and Water Conservation District and DWR Flood Management Office for any future erosion repair activities on the leveed portion of Elder Creek during the site selection process.

Response to Comment S2-39

The bank protection measure recommended for selection in this comment is Bank Protection Measure 4a: Riparian Bench with Revegetation and Instream Woody Material above Summer/Fall Waterline. This is the proposed bank protection measure for both of the Elder Creek sites under the preferred alternative.

Response to Comment S2-40

The SRBPP is authorized only to address erosion on levee structures; it is not a levee improvement program. However, the measure proposed for the Deer Creek erosion site under the preferred alternative is only provided for programmatic analysis. If the Corps and CVFPB move forward with erosion repair at this site, it will be put through the site selection process to identify opportunities and constraints, to coordinate with agencies and groups involved in flood risk reduction for the watershed and ensure consistency with their efforts, and to prepare site-specific environmental analyses.

Response to Comment S2-41

Please see the response to Comment S2-40. The site selection process includes hydraulic analysis, and the Corps and CVFPB will consult with resource agencies on the site-specific design at that point to determine any potential effects on fish.

Response to Comment S2-42

The SRBPP is an existing flood risk management program intended to maintain the integrity of the SRFCP. Its original authorized purpose was as a long-range program for construction of bank erosion control works and setback levees where failures had occurred due to erosion. This EIS/EIR analyzes the increase in the program's authorized length by an additional 80,000 LF; no changes to the original purpose of the program were authorized as part of this increase. The SRBPP will continue to repair erosion sites that threaten banks and levees until current and/or future Central Valley Flood Protection Plan flood risk reduction projects that integrate elements of the Conservation Strategy are implemented.

Response to Comment S2-43

Fees will be assessed, and written notifications provided, on a site-specific basis prior to construction.

Response to Comment S2-44

In addition to the Standard Assessment Methodology (SAM) analyses, the EIS/EIR contains both broad-scale and site-by-site analyses of existing riparian vegetation. The methodology and results for these analyses are presented in Appendix E, Riparian Vegetation Analysis, of the EIS/EIR. Impacts on terrestrial species will be further evaluated during subsequent site-specific environmental analyses.

Response to Comment S2-45

The cumulative effects analysis in Chapter 22 addresses overall and watershed-wide effects, and acknowledges that SRBPP implementation could result in cumulatively considerable significant effects. Avoidance and minimization of effects during project planning and construction could help to minimize these effects.

Response to Comment S2-46

CVFPB will provide DFW with a copy of the draft statement of overriding considerations prior to certification of the Final EIS/EIR.

Response to Comment S2-47

A statement of overriding considerations will be prepared for this project.

Response to Comment S2-48

The acronym PAC, which stands for Post Authorization Change, has been spelled out in the Executive Summary and has been added to the Acronyms and Abbreviations list in the Table of Contents.

Response to Comment S2-49

The list of the flood control benefits of setback levees has been revised to include the reduction of pressure on banks and downstream levees.

Response to Comment S2-50

Some locations within the flood control system, which are not levees, have been rocked in the past because they provide a form of "hydraulic control," whereby they help to direct flow and/or maintain water surface elevations that are needed to allow the system to function properly. These areas are what is referred to as "natural bank distinct from the levee."

Response to Comment S2-51

The text has been revised in the Executive Summary and in Chapter 2 to read: "Measure 2 would be most applicable in areas where there is inadequate space or substantial constraints (for example, critical infrastructure, homes, roadways, pump facilities, real estate issues), either landside or

waterside, where hydraulic concerns would make it difficult to implement the other measures." Only hydraulic, engineering, or other logistical constraints will be considered in determining whether Measure 2 would be necessary.

Response to Comment S2-52

Please see the response to Comment S2-51, above.

Response to Comment S2-53

The following text has been added to the Executive Summary in Section ES.5.6.1, Toe Protection: "A site is considered 'critical' when erosion encroaches into the cross-section of the levee foundation."

Response to Comment S2-54

The text regarding off-site/out of kind mitigation has been revised as suggested in Executive Summary Section ES.6.1, Alternatives Development, and in Chapter 2, Section 2.4, Project Description.

Response to Comment S2-55

Comment noted. The opportunity is described as "potential" and the benefit, therefore, is also only potential. Similarly, in that context, a significant adverse effect is only significantly adverse if the element of the project that causes the effect is implemented.

Response to Comment S2-56

Executive Summary Section ES.7.1.2, Effects Found to be Less than Significant, and Section ES.7.1.4, Beneficial Effects of the Proposed Program, have been revised to eliminate confusion regarding which resource areas would experience significant and unavoidable effects as a result of program implementation.

Response to Comment S2-57

The text regarding monitoring has been revised as suggested under Section ES.10, Relationship between Short-Term Uses of the Environment and Maintenance and Enhancement of Long-Term Productivity in the Executive Summary and in Chapter 1, Introduction, Section 1.6.

Response to Comment S2-58

The SRBPP is a flood risk management program intended to maintain the integrity and functionality of the levees of the SRFCP. The preferred alternative would apply a combination of site-specific bank protection measures to the erosion sites throughout the SRFCP. The programmatic analysis in this EIS/EIR evaluates application of the preferred alternative to 106 representative erosion sites. 90% of the repairs (by length) under Alternative 4A would be implemented only on the waterside of the levee. The comment is unclear regarding how implementing bank protection measures could result in a deer population increase substantial enough to require the installation of orchard protection fencing throughout the program area, or how it would affect upland game bird populations. Effects on wildlife species were analyzed in Chapter 12 in accordance with the State CEQA Guidelines Appendix G (14 California Code of Regulations 15000 et seq.). The EIS/EIR does find that implementation of the SRBPP could cause significant effects on recreation and agriculture. Effects of

the SRBPP on recreation are evaluated in Chapter 14 pursuant to the CEQA Guidelines. Effect REC-2: Long-Term Reduction in Quality of Existing Recreational Opportunities within the Levee Corridor, which is associated with the potential closure of recreation areas, is found to be significant and unavoidable. Agricultural effects are appropriately analyzed pursuant to the CEQA Guidelines in Chapter 13, and economic effects are evaluated as required by NEPA in Chapter 20.

Response to Comment S2-59

The Small Erosion Repair Program has been added to Table 22-1 in Chapter 22, Growth-Inducing and Cumulative Effects.

Response to Comment S2-60

The title of Section 12.4.1.2 in Chapter 12 has been changed from "Effect Mechanisms" to "Types of Effects," and the text has been edited to clarify that the section is discussing direct and indirect effects, not program activities.

Response to Comment S2-61

"Sediment" in construction runoff has been added to the last bullet under "Direct Effects" in Chapter 12, Section 12.4.1.2, as suggested in the comment.

Response to Comment S2-62

The title of the Feather River Habitat Conservation Plan (HCP) has been added to Chapter 12, Section 12.4.2, as suggested in the comment.

Response to Comment S2-63

The discussion of cumulative wildlife effects in Chapter 22, Section 22.2.3.9 finds that implementation of the proposed program could result in cumulatively considerable significant effects on special-status wildlife species.

Response to Comment S2-64

Language has been added to Mitigation Measure WILD-MM-1 to clarify that HCPs and Natural Community Conservation Plans, both adopted and under development, should be reviewed to ensure project consistency.

Response to Comment S2-65

Erosion issues within the Natomas Basin have largely been addressed through the work already completed or under way by the Corps, CVFPB, and the Sacramento Area Flood Control Agency. Much of this work involves construction of substantial adjacent levees. As a result of that work, federal/state bank protection is not anticipated to be needed and therefore would not interfere with the Natomas Basin HCP. Additionally, the work conducted by those agencies was coordinated with and is generally consistent with the Natomas Basin HCP.

Response to Comment S2-66

Mitigation Measure WILD-MM-4 has been revised as requested in the comment.

Response to Comment S2-67

Comment noted. Although toe protection does not avoid all impacts, it can minimize many impacts. Toe protection can allow existing or future riparian vegetation to persist on the upper banks, thereby providing valuable habitat including important components of shaded riverine aquatic habitat. It can also preserve valuable berms in reaches where they are limited and where setback or adjacent levees are infeasible.

Response to Comment S2-68

Effect FCGEOM-1 is an effect in the Flood Control and Geomorphology analysis; in relation to this particular analysis, this effect is considered less than significant. Effects of decreased erosion on wildlife species (including bank swallow) are addressed in Effect WILD-2 in Chapter 12 of the EIS/EIR. This effect is found to be significant and unavoidable for Alternatives 2A, 2B, 4A, 4B, 5A, 5B, 6A, and 6B.

Response to Comment S2-69

The Feather River was added to the list of nesting areas for bank swallow as suggested.

Response to Comment S2-70

Text was modified as suggested under Effect WILD-2.

Response to Comment S2-71

Text was modified under Mitigation Measure WILD-MM-1.

Response to Comment S2-72

Text was modified under Mitigation Measure WILD-MM-3.

Response to Comment S2-73

Text was modified under Mitigation Measure WILD-MM-4.

Response to Comment S2-74

The description of DFW's authority has been revised in Section C.2.2, California Endangered Species Act, in Appendix C.

Response to Comment S2-75

The discussions of the California Fish and Game Code in Sections C.2.4 and C.2.5 of Appendix C have been revised as requested in the comment.

Response to Comment S2-76

The SRBPP is a federal program administered by the Corps and cannot be implemented independently by state or local agencies. If bank protection projects are constructed by the CVFPB or local agencies independent of the SRBPP, those agencies would be responsible for obtaining the appropriate permissions and permits.

Response to Comment S2-77

The discussions of the California Endangered Species Act and the California Fish and Game Code in Appendix J have been revised as recommended in Comments S2-1 and S2-75.

Response to Comment S2-78

Language was added to the title and column headings of Table 6, as well as to the subsequent text, in Appendix J to clarify that the mitigation needs shown are based on the assumption of a 1:1 replacement ratio.

Response to Comment S2-79

The Corps and CVFPB agree that impacts on some species are difficult to mitigate out-of-kind or off-site. Mitigation for each individual site will be designed in coordination with the resource agencies during the Site Selection and Implementation Process to ensure it meets the needs of affected species and habitats.

Response to Comment S2-80

The term "self-mitigation" was changed to "replacement" in Appendix J, Table 8.

Response to Comment S2-81

"Willing private landowners" have been added to the list of opportunities to consider when identifying sites for rock removal in the "Other Possible Off-site Mitigation Approaches" discussion in Appendix J, as suggested in the comment.

Response to Comment S2-82

Comment noted. The SAM analysis will be supplemented with site-specific analysis during the Site Selection and Implementation Process.

Response to Comment S2-83

The "Coordinating with Related Habitat Enhancement Programs" section in the Programmatic Mitigation Strategy (Appendix J) has been updated to include the Central Valley Flood Protection Plan and the associated Conservation Strategy.

Response to Comment S2-84

The word "likely" has been deleted as suggested under the "State or Federal Resources Agency" portion of the "Options for Long-Term Operation" discussion in Appendix J.

2.2.3 Comment Letter S3—California Department of Transportation, District 3, Susan Zanchi, February 27, 2015

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY

EDMUND G. BROWN Jr., Governor

DEPARTMENT OF TRANSPORTATION

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Letter S3

*Flex your power!
Be energy efficient!*

February 27, 2015

FMP # 032014ALL0001
SCH # 2009012081

Mr. Kip Young
Central Valley Flood Protection Board
3310 El Camino Ave, Room 140
Sacramento, CA 95821

Sacramento River Bank Protection Project Phase II Supplemental Authority

Dear Mr. Kip Young:

Thank you for including the California Department of Transportation (Caltrans) in the application review process for the Sacramento River Bank Protection Project Phase II Supplemental Authority Project.

The proposed project is an EIS/EIR that analyzes the environmental effects associated with implementing bank protection measures along 80,000 LF of the Sacramento River Flood Control Project (SRFCP) to arrest or avoid stream bank erosion that threatens the integrity of the SRFCP levee system. The proposed program area spans portions of Butte, Colusa, Glenn, Placer, Sacramento, Solano, Sutter, Tehama, Yolo, and Yuba Counties in California. The following comments are based on the Environmental Impact Statement/Environmental Impact Report.

Traffic Management Plan

If it is determined that traffic restrictions and pedestrian/bicycle detours are needed, a Transportation Management Plan (TMP) or construction traffic impact study may be required by the developer for approval by the lead agency and Caltrans prior to construction. The plans shall be prepared in accordance with the Caltrans's *Manual of Traffic Controls for Construction and Maintenance Work Zones*, which begins as follows: "During any time the normal function of a roadway is suspended, temporary traffic control planning must provide for continuity of function (movement of traffic, pedestrians, bicyclists, transit operations and access to property/utilities)." Further information is available on the following website:

<http://www.dot.ca.gov/hq/traffops/signtech/signdel/trafficmanual.htm>

S3-1

*"Provide a safe, sustainable, integrated and efficient transportation system
to enhance California's economy and livability"*

Mr. Kip Young/ Central Valley Flood Protection Board
February 24, 2015
Page 2

Hydraulics

The project proposes to incorporate Bank Protection Measures (BPMs) for various rivers and their tributaries using site specific Alternative Measures (AMs) appropriate for each location.

Several sites are located adjacent to, or in the immediate vicinity of, state highways or highway facilities including State Routes (SR) SR-20, SR-45, SR-65, SR-99, SR-160 and SR-162, as well as Interstates (I) I-5 and I-80. BPMs proposed in the vicinity of State highway structures or facilities require special attention and consideration.

Either a new report needs to be prepared that specifically addresses the work proposed at or near State highway structures or facilities, or a separate chapter needs to be incorporated into the current EIR which addresses the following:

- Identify each type of AM BPM proposed in the vicinity of any State highway, bridge, or other highway facility. Identify possible operational impacts of the BPM on the State facility (i.e., will it require narrowing of shoulders, a shift of the highway alignment, etc.).
- Identify potential hydraulic changes in the waterway environment such as the possibility of higher velocities at any bridge crossings that would result from stream channel constrictions related to a specific BPM, as well as any changes in water surface elevation which could result in adverse impact on bridge abutments, or highway rights-of-way.
- And potentially even more significant, the new or revised EIR must identify the possible impacts that any new levee construction may have on State highways or facilities, both hydraulically and operationally.

S3-2

Caltrans would like the opportunity to review and comment on these requested changes to the Draft EIS/EIR.

Encroachment Permit

Please be advised that any work or traffic control that would encroach onto the State right of way (ROW) requires an encroachment permit issued by Caltrans. To apply, a completed encroachment permit application, environmental documentation, and five sets of plans clearly indicating State ROW must be submitted to the address below:

S3-3

Office of Permits
Caltrans - District 3
703 B Street
Marysville, CA 95901

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Traffic-related mitigation measures should be incorporated into the construction plans prior to the encroachment permit process. Please visit the following URL for more information:
<http://www.dot.ca.gov/hq/traffops/developserv/permits/>.

S3-4

Please provide our office with copies of any further actions regarding this project.

S3-5

If you have questions regarding these comments or require additional information, please contact Kevin Yount, Intergovernmental Review Coordinator at (530) 741-4286 or by email at kevin.yount@dot.ca.gov.

Sincerely,



SUSAN ZANCHI, Chief
Office of Transportation Planning – North

c: Scott Morgan, State Clearinghouse

*Provide a safe, sustainable, integrated and efficient transportation system
to enhance California's economy and livability."*

2.2.3.1 Responses to Letter S3**Response to Comment S3-1**

If needed, a Transportation Management Plan will be prepared on a site-specific basis prior to construction.

Response to Comment S3-2

The 106 erosion sites presented in this EIS/EIR are only a representative sample selected for the purposes of this EIS/EIR's programmatic analysis. These specific sites may or may not receive bank protection under Phase II of the SRBPP. Although the SRBPP Phase II 80,000 LF Supplemental Authority will consist of individual bank protection sites on SRFCP levees, these sites are not analyzed at a site-specific level as part of this programmatic EIS/EIR because new sites will continue to be identified through annual erosion surveys, and existing sites may change from year to year. The site selection process described in Chapter 2 will be used to determine priority and design for sites to move forward for construction each year. Once a site is identified to move forward, opportunities and constraints will be assessed, consultation will occur with appropriate agencies (including with Caltrans if any sites are situated adjacent to or in the immediate vicinity of state highways), and site-specific environmental analyses will be prepared.

Response to Comment S3-3

The Corps will obtain an encroachment permit from Caltrans on a site-specific basis, when needed, prior to construction.

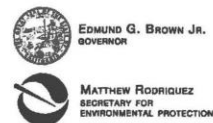
Response to Comment S3-4

Site-specific environmental documents will address traffic mitigation needs prior to construction.

Response to Comment S3-5

The Corps will notify Caltrans of any future actions related to the program.

2.2.4 Comment Letter S4—State Water Resources Control Board, Cliff Harvey, February 27, 2015



State Water Resources Control Board

Letter S4

February 27, 2015

Mr. Brian Mulvaney
Senior Fishery Biologist
U.S. Army Engineer District, Sacramento
Corps of Engineers
1325 J Street
Sacramento, CA 95814

Dear Mr. Mulvaney

**Staff Comment on the Public Draft Post Authorization Change Report and programmatic Environmental Impact Statement/Environmental Impact Report
(State Clearinghouse #2009012081)**

Staff of the State Water Resources Control Board (State Water Board) have reviewed the *Public Draft Post Authorization Change Report and programmatic Environmental Impact Statement/Environmental Impact Report* (EIS/EIR) for the proposed Sacramento River Bank Protection Project Phase II Supplemental Authority (SRBPP, or project) as announced at <http://www.spk.usace.army.mil/Missions/CivilWorks/SacramentoRiverBankProtection.aspx>

The proposed project would implement up to 80,000 linear feet of "additional" bank protection in the Sacramento River Flood Control Project (SRFCP) area, including parts of Butte, Colusa, Glenn, Placer, Sacramento, Solano, Sutter, Tehama, Yolo and Yuba Counties. The U.S. Army Corps of Engineers (Corps) is the federal lead agency for this Draft EIS/EIR, and the Central Valley Flood Protection Board (CVFPB) is the state lead agency, pursuant to the National Environmental Policy Act and the California Environmental Quality Act, respectively.

Pursuant to CEQA guidelines, California Code of Regulations, title 14, section 15096, responsible agencies must specify the scope and content of the environmental information germane to their statutory responsibilities. State Water Board staff has reviewed the Draft EIS/EIR to determine if the proposed project will have significant adverse impacts to water quality and, ultimately, the beneficial use of waters of the state.

We recognize the great importance of flood protection for the communities and farms of the Sacramento River valley. We understand the enormous economic risk and the risk to human life that exists without a safe, functional levee system. However, significant ecological impacts are possible as a result of the proposed project.

FELICIA MARCUS, CHAIR | THOMAS HOWARD, EXECUTIVE DIRECTOR

1001 I Street, Sacramento, CA 95814 | Mailing Address: P.O. Box 100, Sacramento, CA 95812-0100 | www.waterboards.ca.gov



Mr. Brian Mulvaney / SRBPP Comments - 2 -

February 27, 2015

In general, we encourage the Corps and the CVFPB to implement alternatives which conserve to the greatest extent the existing riparian vegetation, especially large mature trees. Alternatives that maximize meander zones should be selected. Setback levees should be used when feasible.

State Water Board staff has prepared the attached comments on the Draft EIS/EIR (see Enclosure 1, Table 1). Comments which pertain to the entire project and the entire document, or which are broadly applicable throughout the Draft EIS/EIR, are presented first. Specific comments about specific sections of text follow in the table, to facilitate location of the sections that are the subject of the comments.

State Water Board staff again thanks the CVFPB for this opportunity to comment on the proposed project. If you have questions regarding any of the comments in this letter or Table 1, please contact me at (916) 558-1709 or clifford.harvey@waterboards.ca.gov.

Sincerely,



Cliff Harvey
Environmental Scientist

Enclosure 1: Table 1: State Water Board Staff Comments on Specific Contents of the SRBPP
DEIR/EIS

cc: see next page

Mr. Brian Mulvaney / SRBPP Comments - 3 -

February 27, 2015

cc: Kip Young
Central Valley Flood Protection Board
3310 El Camino Avenue
Sacramento, CA 95821

George Day
401 Program Manager
Central Valley
Regional Water Quality Control Board –
Redding Office
364 Knollcrest Drive, Su. 205
Redding, CA 96002

Elizabeth Lee
401 Program Manager
Central Valley
Regional Water Quality Control Board –
Sacramento Office
11020 Sun Center Drive, #200
Rancho Cordova, CA 95670

Matt Scroggins
401 Program Manager
Central Valley
Regional Water Quality Control Board –
Fresno Office
1685 E Street
Fresno, CA 93706

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Table 1: State Water Board Staff Comments on Specific Contents of the Sacramento River Bank Protection Project DEIR/EIS <small>*Indicates that the comment applies to the page cited and following pages.</small>				
Com- ment No.	Chapter	Section/ Sub-section	page	
GENERAL COMMENTS – JURISDICTION AND AUTHORITIES				
	1. DOCUMENT ORGANIZATION The DEIR/EIS provides a table of contents, but all sections and subsections below the chapter level are un-numbered. To facilitate future review and reference, preparers of the final EIR/EIS should consider adding section and sub-section numbers to the document. For example, Chapter Five, Environmental Setting, Existing Conditions could more simply be referred to as section 5.1.1.			S4-1
	2. ACRONYMS AND ABBREVIATIONS The table of acronyms and abbreviations at the beginning of the document omits listing the State Water Resources Control Board and its approved short form of address: <i>State Water Board</i> . The Central Valley Regional Water Quality Control Board is listed appropriately. Note that these may be referred to collectively as the <i>Water Boards</i> .			S4-2
	3. AUTHORITY State law assigns responsibility for protection of water quality in the affected regions to the Regional Water Quality Control Boards (RWQCB); in this case, the Central Valley RWQCB. Any discharges of waste that may affect water quality and, ultimately, the beneficial uses of waters of the state may be regulated by the Water Boards. All waters of the state are protected under California law pursuant to the Porter-Cologne Water Quality Control Act (Porter-Cologne). All surface waters and groundwater are considered waters of the state, which include, but are not limited to, aquifers, drainages, streams, washes, ponds, pools, and wetlands. Surface water bodies may be permanent, intermittent, ephemeral or seasonal. Additional protection is provided for waters of the United States (WUS) under the federal Clean Water Act (CWA). The water quality control plans (basin plans) for the affected regions contain policies that the Water Boards use with other laws and regulations to protect water quality. The basin plans provide guidance regarding water quality and how the Water Boards may regulate activities that have the potential to affect water quality within the regions. Water Board staff request that the final environmental document refer to the basin plans and incorporate mitigation measures that consider			S4-3

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Table 1: State Water Board Staff Comments on Specific Contents of the Sacramento River Bank Protection Project DEIR/EIS			
*Indicates that the comment applies to the page cited and following pages.			
Com- ment No.	Chapter	Section/ Sub-section	page
			all applicable water quality standards, prohibitions, and provisions found there.
			4. PERMITTING REQUIREMENTS
			A number of activities associated with the project may require permits issued by the State Water Board or the Regional Water Quality Control Boards. These should be discussed in the "regulatory setting" sections of the various resource analyses in the DEIR/EIS. The regulatory Setting sections of Chapters 5 and 10, which are the chapters most pertinent to the Water Boards' authorities, lists the CWA and Porter-Cologne, but do not provide any detail as to which programs or permits would be involved. A discussion of the specific permitting requirements for these sections might be helpful. In particular:
			<u>STORMWATER</u> : A CWA section 402, subdivision (p) storm water permit, in the form of a National Pollutant Discharge Elimination System (NPDES) Construction General Stormwater Permit, may be required for land disturbance associated with the Project. The NPDES permit requires the development of a Stormwater Pollution Prevention Plan and implementation of best management practices (BMPs) for erosion control and prevention.
			<u>401/WDRs</u> : Alteration, excavation or discharge of fill material to any surface water that is a WUS will require a CWA, section 401 water quality certification. If the surface water that is being impacted is not a WUS (i.e., a non-federal water), or is a WUS that does not require a federal permit or license, a "Report of Waste Discharge" is required, and Waste Discharge Requirements (WDRs) must be obtained from the Regional Water Board pursuant to Porter-Cologne prior to starting the activities.
			5. FEDERAL AND STATE JURISDICTION
			Some waters of the state are "isolated" from waters of the U.S., or do not have a "significant nexus" to WUS. It is important to note that some of these non-federal waters of the state may occur in the project area, and may be subject to impacts by the proposed project. When impacts may occur as a result of project activity to any waters of the state that are not also WUS, a Report of Waste Discharge (ROWD) must be submitted to the appropriate Regional Water Quality Control Board, and WDRs must be obtained from that Regional Water Board before the activity commences.
			We request that the Project proponent consult with the Corps and the State Water Board when performing the necessary jurisdictional determinations for surface waters within the project area, to ensure that the full extent both state and federal jurisdictional areas are accurately documented, and to ensure that appropriate regulatory pathways are followed.

S4-3
cont'd

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Table 1: State Water Board Staff Comments on Specific Contents of the Sacramento River Bank Protection Project DEIR/EIS			
*Indicates that the comment applies to the page cited and following pages.			
Com- ment No.	Chapter	Section/ Sub-section	page
6. BENEFICIAL USE ANALYSES			
			We request that the FEIR/EIS identify and list the beneficial uses of the identified surface waters, as outlined in the basin plans, and evaluate the project's potential impacts to those beneficial uses. All mitigation measures proposed for the protection of surface waters should present evidence that the mitigation avoids, minimizes or compensates for all potentially impacted beneficial uses.
			GENERAL COMMENTS – TECHNICAL
			7. Need For System-Wide Planning Context: Staff concurs with comments from other agencies and entities that project planning in the context of ecosystem-wide assessments and evaluation of the existing system for long term sustainability would result in greater resource protection. ¹ This includes sustainability of the Sacramento Flood Control System from a flood risk reduction perspective and an ecosystem restoration perspective (providing more frequently inundated floodplain habitat and allowing natural river processes to continue). The current program of site by site repair does not provide for system-wide benefits.
			While other existing and developing planning efforts overlie the project area, as discussed in the <i>Introduction - Related Flood Risk Reduction Activities</i> (p. 1-5 and following), it is not clear how these plans were incorporated into the analysis of impacts (or <i>effects</i>) and the development of alternatives, and mitigation measures. In particular, the <i>Draft Central Valley Flood System Conservation Strategy</i> (January, 2015), prepared by the California Department of Water Resources is applicable to this project. In evaluating the environmental effects of project activities, clarifying how the activities contribute to these plans, or to other comprehensive planning efforts by SRBPP, would be helpful. It is reasonable to presume that the need for some maintenance activities such as rip-rap, may decrease over time if elements of a comprehensive plan are carried out.

S4-6

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¹ See, for example, Florsheim, J. et al. 2008. BioScience (2008) 58 (6): 519-529. doi: 10.1641/B580608 <http://bioscience.oxfordjournals.org/content/58/6/519.full>

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Table 1: State Water Board Staff Comments on Specific Contents of the Sacramento River Bank Protection Project DEIR/EIS <small>*Indicates that the comment applies to the page cited and following pages.</small>				
Com- ment No.	Chapter	Section/ Sub-section	page	
				<p>8. Lack of Diversity in Alternatives Presented: The DEIR/EIS relies heavily on five "alternatives" which are merely variations of the implementation of the Corps vegetation management policy (as prescribed in Engineering Technical Letter 1110-2-583, <i>Guidelines for Landscape Planting and Vegetation Management at Levees, Floodwalls, Embankment Dams, and Appurtenant Structures</i> (Vegetation ETL) (U.S. Army Corps of Engineers 2014)). In effect, the "alternatives" are merely variations of implementation of the ETL.</p> <p>In "Purpose and Need and Objectives" (p. ES-1,2) , the project is described as a <i>"multi-year program to repair erosion problems affecting levees that are part of the [Sacramento River Flood Control Plan, or SRFCP]... The program purpose and objective is to arrest or avoid streambank erosion that threatens the integrity of the SRFCP levee system."</i></p> <p>Yet the discussion of the alternatives emphasizes variations of treatments to achieve these needs and objectives through implementation of the Vegetation ETL's guidance. Alternatives 3, 4 and 5 all are variations of Vegetation ETL implementation.</p> <p>In Chapter 2, Alternatives Development (p. 2-13), we find this statement: <i>"For bank protection measures to be feasible, they must comply with the Vegetation ETL</i> (U.S. Army Corps of Engineers 2009). This statement seems to pre-suppose that alternative 6A is infeasible.</p> <p>Full consideration of alternatives which do not rely solely on the vegetation ETL -- Alternative 6A in particular would broaden the analysis to provide greater habitat and water quality protection, especially when hard to replace vegetation, especially large, old trees, is encountered.</p>
				<p>9. Alternative Materials and Construction Methods: In the discussion of Alternatives Development -- Alternative Materials and Construction Methods -- Reinforced Soil Slopes and Mechanically Stabilized Earth Walls (p. ES-10), other alternatives are presented, such as "mechanically stabilized earth walls." These alternatives are mentioned, but not examined; more complete examination of these alternatives, independently from the context of the vegetation ETL, would broaden the analysis to provide greater habitat and water quality protections.</p>

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Table 1: State Water Board Staff Comments on Specific Contents of the Sacramento River Bank Protection Project DEIR/EIS <i>*Indicates that the comment applies to the page cited and following pages.</i>				
Comment No.	Chapter	Section/ Sub-section	page	
<p>10. Development of Regional Exceptions: We concur with the U.S. Fish and Wildlife service, which has stated in its comments on the proposed project:</p> <p style="padding-left: 40px;">"We believe the Corps should assist in development of and/or permit regional exceptions to strict compliance with the ETL until ongoing research can determine the risks and/or benefits of vegetation."</p> <p>The five alternatives presented may not be the only feasible and practicable means to achieve an acceptable level of safety. Studies by the Engineer Research and Development Center (ERDC), cited in the draft EIR/EIS, show the possibility of wind-throw of trees and how that can undermine levees. However, this research may not have fully considered or tested alternatives that mitigate for that effect, such as bioengineered designs, trimming, topping, and staking, and similar approaches that emphasize use and retention of vegetation.</p> <p>We note that many well qualified individuals and agency staff have for many years proposed alternatives to the Vegetation ETL treatments that retain greater amounts of vegetation and that would seem to be capable of providing an acceptable level of safety.² Exploration of a range of alternatives that explore methods whereby vegetation is tolerated to a greater extent would broaden the analysis to provide greater habitat and water quality protection. These may be found in many other guidance documents provided by the Corps, as well as many reports from businesses and non-governmental organizations. For example, bendway weirs (groins) can be effective at removing high flow stresses from stream banks, thus eliminating or reducing the need for Vegetation ETL treatments on banks and levees.</p>				

S4-10

² Numerous references could be cited here. Only a few examples should serve to illustrate the point. See: US Army Corps of Engineers. 2013. <http://www.spk.usace.army.mil/Media/NewsStories/tabid/1033/Article/479169/willow-poles-along-sacramento-river-help-fish-wont-harm-levees.aspx>

Nolan, Michael F. *Vegetation on US Army Corps of Engineers Project Levees in the Sacramento/San Joaquin Valley, California*. 1984. a California Riparian Systems, UC Press, Berkeley. http://publishing.cdlib.org/ucpressebooks/view?docId=1k6C003wp&chunk_id=d0e60531&toc_depth=1&brand=ucpress

California Department of Fish and Wildlife: <https://cdfgnews.wordpress.com/2012/02/07/dfg-signals-intent-to-sue-army-corps-in-order-to-protect-fish-and-wildlife-around-levees/>

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[illegible]

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Table 1: State Water Board Staff Comments on Specific Contents of the Sacramento River Bank Protection Project DEIR/EIS				
*Indicates that the comment applies to the page cited and following pages.				
Com- ment No.	Chapter	Section/ Sub-section	page	
COMMENTS ON SPECIFIC TEXT IN THE DOCUMENT				
ARRANGED BY CHAPTER AND SECTION				
	5			WATER QUALITY AND GROUNDWATER RESOURCES
15	5	Existing Conditions/ Surface Water Quality	5-2*	<p>Water bodies listed under CWA 303d that occur in the project area are mentioned, but not named or discussed. Similarly, total maximum daily loads (TMDLs) for those 303(d) waters are mentioned but not discussed in any detail. Listed waters and TMDLs for proposed project areas should be more fully described.</p> <p>Potential project effects that may exacerbate listings and TMDLs are briefly discussed for turbidity, pH, dissolved oxygen, and conductivity. No discussion is provided which explains or accounts for any other TMDLs that may be in effect for the project area.</p> <p>For example, the Sacramento-San Joaquin Delta Methylmercury TMDL would need to be considered for most of the project area that lies downstream of the confluence of the American River with the Sacramento River (see: http://www.waterboards.ca.gov/rwqcb5/water_issues/tmdl/central_valley_projects/delta_hq/)</p> <p>Reference to the Central Valley Water Quality Control Plan (Basin Plan) and discussion its treatment of all known pollutants and water quality objectives for the project area should be provided. If project activity is found to be unlikely to affect any of these TMDLs or standards, a rationale for that finding should be provided (see: http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/index.shtml).</p>

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Table 1: State Water Board Staff Comments on Specific Contents of the Sacramento River Bank Protection Project DEIR/EIS <small>*Indicates that the comment applies to the page cited and following pages.</small>				
Com- ment No.	Chapter	Section/ Sub-section	page	
16	5	Effects and Mitigation Measures/ Alternative 2A – Low Maintenance	5-10	<p>Effect WQ-1: Effect WQ-1 addresses potential temporary increases in turbidity and suspended solids during construction. The description of Effect WQ-1 in the discussion of <i>Alternative 2A – Low Maintenance</i> (p. 5-10) proposes a range of measures to reduce or eliminate discharges that might cause increases in turbidity. However, this range of measures is not provided elsewhere in the discussion. The summary description of this effect in Table 5-1 (p. 5-1) lists only WQ-MM-1 for mitigation; i.e., monitor turbidity during construction.</p> <p>No mention of measures to reduce or eliminate turbidity is found in the table's summary of these measures. The full description of WQ-MM-1 (p. 5-11) likewise only discusses monitoring, and not prevention or treatment. Alignment of the discussion provided for Effect WQ-1 and incorporation of BMPs to reduce or eliminate the potential for sediment to be delivered to water would more provide a greater level of resource protection.</p> <p>This comment applies to this Effect for all impacts and alternatives, where ever it may occur in the DEIS/EIR.</p>
	10			<p>VEGETATION AND WETLANDS</p> <p>Effects Veg-1 through 6 describe various potential impacts to wetlands and riparian vegetation as a result of project activity. <i>Because the alternatives presented generally have similar types of impacts and are subject to similar mitigation measures, these comments should be considered to be applicable to all alternatives presented.</i></p>

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Table 1: State Water Board Staff Comments on Specific Contents of the Sacramento River Bank Protection Project DEIR/EIS				
*Indicates that the comment applies to the page cited and following pages.				
Com- ment No.	Chapter	Section/ Sub-section	page	
17	10	Introduction and Summary, Table 10-1 Effects and Mitigation Measures/ Alternative 2A – Low Maintenance/ Effect Veg-4	10-3 10-32*	<p>Effect VEG-4: "Loss of Waters of the United States, Including Wetlands, as a Result of Project Construction," would be significant under all alternatives considered except the "no action" alternative (p. 10-3, also 10-32 and following). Mitigation measures are proposed to offset this effect (i.e., impact, as defined by CEQA), including VEG-MM-8, <i>Compensation</i>.</p> <p>If compensation for loss of wetlands is contemplated, a clear description of the appropriate regulatory authorities for this measure is needed. Waters of the state that are not also WUS may be affected by the proposed project. This impact description should be revised to include all potential impacts to all waters of the state, including all WUS.</p> <p>The discussion of Effect VEG-4 on p. 10-32 states: "<i>Construction activities associated with this alternative would result in the loss of waters of the United States, including wetlands. This effect would be considered significant because the proposed program would have a substantial adverse effect on wetlands and other waters that are protected under federal law...</i>"</p> <p>This statement should be revised as follows: "<i>Construction activities associated with this alternative would result in the loss of <u>waters of the state and</u> waters of the United States, including wetlands. This effect would be considered significant because the proposed program would have a substantial adverse effect on wetlands and other waters that are protected under <u>state and</u> federal law...</i>"</p> <p>Note that, under Porter Cologne, the Water Boards are obligated to regulate activities that may affect waters of the state even if those activities do not occur in delineated federal waters. Project impacts may pose potential impacts to non-federal waters of the state and therefore should be considered in this analysis of impacts.</p> <p>This comment applies to this Effect for all impacts and alternatives where it may occur.</p>

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March 2020

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Table 1: State Water Board Staff Comments on Specific Contents of the Sacramento River Bank Protection Project DEIR/EIS <small>*Indicates that the comment applies to the page cited and following pages.</small>				
Com- ment No.	Chapter	Section/ Sub-section	page	
		and Effects and Mitigation Measures/ Alternative 2A – Low Maintenance/ Effect Veg-6		<p>These measures do not specifically provide for effort to <i>reduce</i> the presence of existing populations in project activity sites.</p> <p>We suggest that an additional mitigation measure be provided to specify that existing populations of invasive species within project disturbance areas will be to the greatest extent feasible, removed and replaced with desirable native species (or crop species when in agricultural land) as part of the revegetation plans for the project sites. Staff notes that this would reduce the long-term maintenance costs associated with restoration of these sites.</p> <p>This comment applies to this Effect for all impacts and alternatives where it may occur.</p>
19	10	Environmenta l Setting, Existing Conditions, Program Study Area Land Cover Types, Emergent Marshes	10-6	<p>Emergent Marshes are described as being "restricted to a relatively narrow saturation zone along toes of levee slopes." This may not be a complete description of the scope of wetlands that exist in relation to the levees of the project area. Levees can and sometimes do have wetlands and other waters on the landward side.</p> <p>If a complete site survey of all project sites has confirmed that no such additional waters are present, and no other wetland types exist, that should be stated. Otherwise, this statement should be removed or revised to state that the extent and character of emergent wetlands is not known except for the presence of the saturation zones at the toes of levee slopes.</p> <p>See comments on "Open Water" below.</p>

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Table 1: State Water Board Staff Comments on Specific Contents of the Sacramento River Bank Protection Project DEIR/EIS				
*Indicates that the comment applies to the page cited and following pages.				
Com- ment No.	Chapter	Section/ Sub-section	page	
20	10	Environmenta I Setting, Existing Conditions, Program Study Area Land Cover Types, Open Water	10-6	<p>The description of wetland types in this section of the discussion of the <i>Environmental Setting</i> are inconsistent with statements in the Emergent Marshes section (see previous comment on Emergent Marshes above). These sections should be reconciled</p> <p>"Lumping" rivers, creeks, sloughs, canals, drainages and ponds into one classification is not consistent with accepted aquatic resource classification methods and is not sufficient for describing impacts or assessing mitigation needs in the context of an application for section 401 water quality certification or WDRs.</p> <p>The relative extent and character of wetlands in the project area should be described using accepted classifications and type designations, and these should be the basis for impact assessment and mitigation proposals. State Water Board staff can assist with determination of appropriate classification methods.</p>
21	10	Determin- ation of Effects, Assessment Methods	10-22*	<p>Assessment methods proposed for "vegetation and wetlands" section are adequate for assessment and monitoring of vegetation cover, species composition, age class, etc.</p> <p>Assessment methods that consider the wetland ecosystem as a whole should also be proposed. Rapid Assessments such as California Rapid Assessment Method (CRAM) should be considered. Bioassessment methods for depressional wetlands have been proposed by the State Water Board's Surface Water Ambient Monitoring Program (SWAMP) and might also be helpful in determining impacts and mitigation.</p>
22	10	Determin- ation of Effects, Significance Criteria	10-24*	<p>(See also comment 3 above) The significance criteria for impacts to wetlands is stated in bullet 3 as: <i>"Have a substantial adverse effect on jurisdictional wetlands as defined by Clean Water Act (CWA) Section 404 (including, but not limited to, marshes and vernal pools) through direct removal, filling, hydrological interruption, or other means."</i></p> <p>This statement does not clearly account for the possibility that non-federal waters of the state may exist in the project areas and that these could be subject to impacts due to project activity. This statement should be supported with a clarifying remark that all wetlands as defined in CWA section 404 are protected regardless of federal jurisdiction.</p>

S4-20

S4-21

S4-22

Enclosure 1

Page 13 of 15

Table 1: State Water Board Staff Comments on Specific Contents of the Sacramento River Bank Protection Project DEIR/EIS				
*Indicates that the comment applies to the page cited and following pages.				
Com- ment No.	Chapter	Section/ Sub-section	page	
23	10	Determin- ation of Effect, Effects Assumptions, bullet 7	10-25*	The assumption that discharge of fill into waters of the U.S. would require a CWA section 401 water quality certification is valid, but incomplete. The list of assumptions should also note that WDRs, as described above, would be required for any dredge and fill impacts to non-federal waters of the state.
24	10	Effects and Mitigation Measures, Alternative 2A – Low Maintenance,	10-33	The mitigation measure, for compensatory mitigation for loss of wetlands and other waters, states that compensation will be provided at a minimum ratio of 1:1. Staff agrees that site-by-site assessment of impacts is the only way to adequately determine appropriate mitigation ratios. Accomplishment of this mitigation measure may require assessment of more than vegetation composition and acreage. (See comment 8, above) Impacted sites should be assessed using methods that account for the condition of the ecosystem as a whole as well as for specific components. Mitigation plans should account for those resources and the expected recovery times. Specific assessment methods should be proposed and those should be subject to permitting agency approval before impacts occur. This comment applies to this mitigation measure for all impacts and alternatives where it may occur.
25	13	Land Use and Agriculture	13-1*	Staff has no specific comments regarding effects/impacts in the Land Use and Agriculture chapter, but notes that mitigation opportunity exists for restoration of soughs and streams in agricultural lands of the Central Valley, and that these sites can be restored with minimal loss of existing agricultural acreage.
26	14	Recreation	14-1	Staff notes that contact- and non-contact water based recreation is a designated beneficial use of waters of the state throughout the project area. Any WDRs or CWA 401 water quality certifications for the proposed project under any alternatives may include conditions or requirements pertaining to impacts or effects to recreational resources. This should be noted in the Regulatory Setting section of this chapter.

S4-23

S4-24

S4-25

S4-26

Enclosure 1

Page 14 of 15

Table 1: State Water Board Staff Comments on Specific Contents of the Sacramento River Bank Protection Project DEIR/EIS <small>*Indicates that the comment applies to the page cited and following pages.</small>					
Com- ment No.	Chapter	Section/ Sub-section	page		
27	16	Utilities and Public Services	16-1	Staff notes that drinking water and irrigation water supplies are designated beneficial uses of waters of the state throughout the project area. Any WDRs or CWA 401 WQCs for the proposed project under any alternatives may include conditions or requirements pertaining to impacts or effects to drinking water and irrigation water supplies. This should be noted in the Regulatory Setting section of this chapter.	S4-27
28	Appendix C	Regulatory Background		In Appendix C, the description of the Porter-Cologne Water Quality Control Act and the authorities of the State Water Board and the Regional Water Quality Control Board is incomplete. Staff is available to assist the preparers of this Appendix with drafting a more complete description of Porter-Cologne and the authorities of the Water Boards.	S4-28
29	Appendix J	Draft Program-matic Mitigation Strategy		The "Regulatory and Policy Related Mitigation Requirements/Commitments section of Appendix J omits mention of any requirements under Porter-Cologne for mitigation of impacts to waters of the state, including waters of the U.S. The Standard Assessment Methodology (SAM) used to quantitatively assess the potential effect of the projects on various species and habitats similarly omits consideration of non-habitat elements of aquatic resources. Assessments that consider these non-habitat elements should be provided and used to evaluate the expected efficacy of any proposed mitigation. The discussion on "Mitigation Needs for Other Impacts" should be expanded to address these concerns. The discussion of "Mitigation Approaches" should similarly consider these concerns.	S4-29

2.2.4.1 Responses to Letter S4

Response to Comment S4-1

Sub-section numbering has been implemented throughout the document, to the fourth header level.

Response to Comment S4-2

"State Water Board" has been added to list of acronyms, as suggested.

Response to Comment S4-3

In Appendix C, Regulatory Background, under "Porter-Cologne Water Quality Control Act," the role of the Central Valley Regional Water Quality Control Board is explained in the context of the Porter-Cologne Water Quality Control Act and implementation of the Water Quality Control Plan for the Sacramento River and its tributaries. In Chapter 5, Water Quality and Groundwater Resources, the discussion of Effect WQ-1: Temporary Increase in Turbidity and Suspended Solids during Construction indicates that erosion control measures would be implemented under the Stormwater Pollution Prevention Plan as part of the National Pollutant Discharge Elimination System permitting process, including any Waste Discharge Requirements (WDRs) for construction disturbing more than 1 acre. The types of erosion control measures that would avoid or minimize increases in

turbidity and suspended solids are described under this impact. In addition, turbidity would be further minimized by implementation of Mitigation Measure WQ-MM-1: Monitor and Control Turbidity during Construction, which identifies the Basin Plan turbidity objectives as the "identified limits" for turbidity for the Sacramento River and affected adjacent water bodies downstream of project construction. Further, as indicated in Appendix C, any WDRs issued for project-level actions may also include conditions or requirements pertaining to effects on designated beneficial uses of waters within project areas.

Response to Comment S4-4

In Appendix C, Section C.1.10, Clean Water Act, Sections 404 (permits for fill placement in waters and wetlands), 402 (permits for discharge to surface waters), and 401 (water quality certification) and associated permitting and permit requirements are discussed.

Response to Comment S4-5

In Appendix C, Section C.2.6.4, State Implementation Plan, Section 13260 of the California Water Code and associated requirements, including filing a report of waste discharge, are described. The Corps and CVFPB will consult with the State Water Board when performing jurisdictional determinations for surface water within the project area.

Response to Comment S4-6

Table 5-3, Beneficial Uses for Surface Waters in the Program Area, has been added to Chapter 5. This table lists beneficial uses for program area surface waters that had beneficial uses designated in the Basin Plan.

Response to Comment S4-7

Please see the response to Comment S2-42, above.

Response to Comment S4-8

This EIS/EIR is a programmatic evaluation covering the implementation of 80,000 LF of erosion repair. The Site Selection and Implementation Process, detailed in Chapter 2, explains how erosion sites are identified and repair options are evaluated. All erosion repairs carried out under the SRBPP will comply with the Engineering Technical Letter 1110-2-583 (Vegetation ETL). One method of complying with this guidance is to obtain a variance under the Vegetation ETL.

For the programmatic analysis presented in this EIS/EIR, several alternatives were used to cover a range of potential outcomes. Alternative 4A and Sub-Alternative 4B assume implementation without a variance, because it is not possible to determine whether variance for all sites considered can be successfully obtained until project-level, site-specific information is available to determine the need for, and feasibility of, a variance. Alternative 6A and Sub-Alternative 6B have been included in the analysis to represent what implementation would look like if a variance was successfully obtained for all sites as needed, primarily to demonstrate how this might affect the overall implementation of the 80,000 LF. Alternative 4A and Sub-Alternative 4B was selected as the preferred alternative based on the information currently available, assuming that no variance will be needed or obtained. Utilizing this approach in a programmatic analysis assures that the EIS/EIR adequately addressed the full extent of potential adverse effects from this action. If variances are

determined to be needed during the site-specific analysis and then obtained and implemented, the effects on vegetation and associated habitat values and aesthetics will likely be less severe than represented in the analysis of Alternative 4A and Sub-Alternative 4B and generally consistent with the effects presented in the analysis of Alternative 6A and Sub-Alternative 6B.

The Corps is still developing and refining the process for seeking and obtaining variances under the Vegetation ETL for erosion sites. To utilize a variance, a risk-based analysis (RBA) must be performed for any woody vegetation remaining within the vegetation-free zone (VFZ) and incorporated into a site design. The RBA requires a substantial amount of site-specific information to determine if a variance is needed and feasible. The RBA will take into account both positive and negative influences that vegetation may have on erosion and levee safety, and the outcome would be intended to minimize effects on vegetation while meeting levee safety requirements. Mitigation plantings and existing vegetation in the VFZ that are allowed to remain by the RBA will be included in the ETL variance process.

The bank protection measures included in the programmatic analysis are conceptual and will be modified to the degree necessary to be suitable for conditions at any given erosion site. As a result, the effect on existing vegetation, particularly vegetation outside of the VFZ, is not yet known. Therefore, assumptions made for purposes of the NEPA/CEQA analysis will change to some extent as a site design progresses toward implementation. A number of assumptions are made for analysis purposes and are based on past construction experience. The actual amount of retained vegetation could vary substantially from site to site during implementation. New vegetation would be limited to native grasses within the VFZ, while woody vegetation could be replaced by planting outside of the VFZ, as allowed by specific site conditions.

Response to Comment S4-9

Alternative materials and construction methods were not examined as appropriate methods for the approach to the SRBPP Phase II 80,000 LF Supplemental Authority because they have not been fully vetted as acceptable SRFCP erosion repair methods. A basis-of-design or design memorandum would need to be prepared and approved by the Corps Levee Safety Officer before an alternative method could be considered as an SRBPP repair alternative. Repair alternatives will be examined on a site-specific basis if deemed appropriate by the Levee Safety Office. The current alternatives and bank protection measures have been continually refined over the past 30 years to balance flood protection and to maximize opportunities for habitat replacement opportunities.

Response to Comment S4-10

Please see the response to Comment S4-8, above.

Response to Comment S4-11

Because this is a programmatic-level environmental analysis, site-specific designs have not been prepared. Project-level analyses will include plan views and details of each site's design.

Response to Comment S4-12

Monitoring of all vegetation (including vegetation involved in bioengineered design elements) planted as part of the SRBPP will occur as part of project implementation, as described under Step 15 of the Site Selection and Implementation Process in Chapter 2.

Response to Comment S4-13

Comment noted. Each site-specific design and project-level analysis will comply fully with Clean Water Act Section 401 and WDRs.

Response to Comment S4-14

Loss of riparian habitat and river function will be fully mitigated as required in permits issued by USFWS, NMFS, and DFW.

Response to Comment S4-15

Table 5-2, Clean Water Act Section 303(d) Listed Pollutants and Sources for Surface Waters in the Program Area, has been added to Chapter 5. This table lists pollutants and stressors for program area surface waters. A rationale for why construction of the program would not result in increased impairment relative to those pollutants and stressors in the identified surface waters in the program area has also been added to Chapter 5, following Table 5-2. Because the environmental setting need only provide a description of the existing conditions by which it is determined whether an impact is significant, and because the water quality impact analysis is not quantitative, Total Maximum Daily Loads for all Section 303(d) listed waters in the program area were not added. Providing these values in the setting would not inform the analysis and, thus, would add unnecessary detail to the setting.

Response to Comment S4-16

The measures described under Effect WQ-1 are best management practices that will likely be required by the Stormwater Pollution Prevention Plan. Because implementation of these measures will be a condition of a permit, they are not considered mitigation measures and are not listed as such in the tables, or described as such under Mitigation Measure WQ-MM-1.

Response to Comment S4-17

The text has been revised under Chapter 10, Section 10.4.2, Significance Criteria, Section 10.4.3, Effect Assumptions, and Effect VEG-4 to clarify that waters of the state may possibly be affected in addition to federal waters.

Response to Comment S4-18

The SRBPP will remove invasive species located within project footprints during construction as part of Mitigation Measure VEG-MM-12. This measure has been revised to include efforts to reduce the presence of existing populations of invasive plants project footprints by continuing the removal of invasive species until vegetation reestablishment is complete. The LMAs will be responsible for long-term management of vegetation.

Response to Comment S4-19

Text has been added under the "Emergent Marsh" discussion in Chapter 10, Section 10.2.1.1, Program Study Area Land Cover Types, to clarify that emergent marsh can occur on the landside of levees.

Response to Comment S4-20

Open water types were discussed under a single heading due to the large size of the program area and general nature of the setting discussion. This EIS/EIR is a programmatic-level environmental analysis; each project-level analysis will include detailed information on the extent and types of wetlands and other waters in the individual project areas. Wetlands and other waters will be classified sufficiently to support applications for Clean Water Act Section 401 certification or WDRs.

Response to Comment S4-21

The following text has been added to Section 10.4.1, Assessment Methods, in Chapter 10: "The California Rapid Assessment Method and the Surface Water Ambient Monitoring Program may be used for site-specific, project-level environmental analyses."

Response to Comment S4-22

Please see the response to Comment S4-17.

Response to Comment S4-23

The following sentence was added to the seventh bullet in Section 10.4.3, Effect Assumptions, in Chapter 10: "In addition, any dredge or fill impacts on nonfederal waters of the state would require a permit under the state's Waste Discharge Requirement Program."

Response to Comment S4-24

Language was added to Mitigation Measure VEG-MM-8 requiring agency-approved habitat assessments prior to any construction disturbance. The assessment results will be provided to the resource agencies to support mitigation decisions.

Response to Comment S4-25

Comment noted; thank you for the suggestion.

Response to Comment S4-26

The following sentence has been added to Section C.1.10.3, Section 401: Water Quality Certification, in Appendix C: "Any Section 401 permits issued for project-level actions may also include conditions or requirements pertaining to effects on designated beneficial uses of waters within project areas."

Response to Comment S4-27

The following sentence has been added to Section C.2.6.1, Central Valley Regional Water Quality Control Board, in Appendix C: "Any WDRs issued for project-level actions may also include conditions or requirements pertaining to effects on designated beneficial uses of waters within project areas."

Response to Comment S4-28

The description of the Porter-Cologne Water Quality Control Act in Appendix C, Section C.2.6, and authorities of the State Water Board and Central Valley Regional Water Quality Control Board therein, have been revised.

Response to Comment S4-29

A summary of the State Water Resources Control Board and Regional Water Quality Control Boards' authority to regulate discharges of fill and dredged material under the 401 Water Quality Certification and Wetlands Program, and their charge to protect waters of the state has been added to the "Regulatory- and Policy-Related Mitigation Requirements/Commitments" section of Appendix J.

The purpose of the Programmatic Mitigation Strategy (Appendix J), is to establish a mitigation framework for SRBPP effects on biological resources and associated habitat. Effects on non-habitat elements of aquatic resources, such as water quality and beneficial uses, are analyzed in Chapter 5, Water Quality and Groundwater Resources.

2.2.5 Comment Letter S5—Delta Protection Commission, Erik Vink, February 27, 2015

STATE OF CALIFORNIA – NATURAL RESOURCES AGENCY

EDMUND G. BROWN, JR., Governor

DELTA PROTECTION COMMISSION

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February 27, 2015

Letter S-5

*Contra Costa County Board of
Supervisors*

*Sacramento County Board of
Supervisors*

*San Joaquin County Board of
Supervisors*

*Solano County Board of
Supervisors*

*Yolo County Board of
Supervisors*

*Cities of Contra Costa and
Solano Counties*

*Cities of Sacramento and
Yolo Counties*

Cities of San Joaquin County

*Central Delta Reclamation
Districts*

North Delta Reclamation Districts

South Delta Reclamation Districts

CA State Transportation Agency

*CA Department of Food and
Agriculture*

CA Natural Resources Agency

CA State Lands Commission

Alicia E. Kirchner
Chief, Planning Division
U.S. Army Corps of Engineers
Sacramento District
1325 J Street
Sacramento, CA 94514

Re: Sacramento River Bank Protection Project Environmental Impact
Statement/Environmental Impact Report (SCH # 2009012081)

Dear Ms. Kirchner:

Thank you for providing the Delta Protection Commission (Commission) the opportunity to review the Environmental Impact Statement/Environmental Impact Report for the Sacramento River Bank Protection Project (Project).

The Commission is a state agency charged with ensuring orderly, balanced conservation and development of Delta land resources and improved flood protection. Proposed local government projects within the Primary Zone of the Legal Delta must be consistent with the Commission's Land Use and Resource Management Plan (LURMP).

Proposed U.S. Army Corps of Engineers (USACE) actions are not subject to consistency requirements with the LURMP since the Project is sponsored by a federal agency. However, the Commission reviewed the EIS/EIR for possible impacts on the resources of the Primary Zone and recommends that USACE consider the following LURMP policies in its analysis:

Land Use, P-10: Maintain sites for the storage of dredged material from channels within the Delta and discourage the conversion of existing sites to other uses, as appropriate. Soil that is suitable for levee rehabilitation and raising Delta lowlands should remain within the Delta.

Agriculture, P-2: Conversion of land to non-agriculturally-oriented uses should occur first where productivity and agricultural values are lowest.

Natural Resources, P-3: Lands managed primarily for wildlife habitat should be managed to maximize ecological values. Appropriate programs, such as "Coordinated Resource Management and Planning" (Public Resources Code Section 9408(c)) should ensure full participation by local government and property owner representatives.

S5-1

S5-2

S5-3

S5-4

Alicia E. Kirchner, U.S. Army Corps of Engineers
Page 2

Natural Resources, P-6: Support the implementation of appropriate buffers, management plans and/or good neighbor policies (e.g. safe harbor agreements) that among other things, limit liability for incidental take associated with adjacent agricultural and recreational activities within lands converted to wildlife habitat to ensure the ongoing agricultural and recreational operations adjacent to the converted lands are not negatively affected.

S5-5

Natural Resources, P-7: Incorporate, to the maximum extent feasible, suitable and appropriate wildlife protection, restoration and enhancement on publicly-owned land as part of a Delta-wide plan for habitat management.

S5-6

Natural Resources, P-9: Protect and restore ecosystems and adaptively manage them to minimize impacts from climate change and other threats and support their ability to adapt in the face of stress.

S5-7

Recreation and Access, P-4: Encourage new regional recreational opportunities, such as Delta-wide trails, which take into consideration environmental, agricultural, infrastructure, and law enforcement needs, and private property boundaries. Also, encourage opportunities for water, hiking, and biking trails.

S5-8

Levees Goal: Support the improvement, emergency repair, and long-term maintenance of Delta levees and channels. Promote levee maintenance and rehabilitation to preserve the land areas and channel configurations in the Delta as consistent with the objectives of the Act.

S5-9

In addition, the Great California Delta Trail Act (Chapter 839, statute of 2006) directed the Commission to develop and adopt a plan and implementation program for a continuous regional recreational corridor extending throughout the five Delta Counties linking to the San Francisco Bay Trail and Sacramento River Trail. In support of this objective, the Commission approved two resolutions that support bicycle lanes in the Delta along State Routes 4, 12, and 160, and along improved Delta levees. These resolutions encourage the incorporation of improved bicycle lanes as Delta levees are designed, engineered, and upgraded, taking into account the concerns of local residents and the viability of the Delta economy. Given the proximity of your Project to numerous Delta recreation resources (including windsurfing, trails, marinas, fishing, camping and picnic sites) please consider incorporating the Delta Trail into your environmental analysis and into improvements that accommodate bicycle lanes.

S5-10

Thank you for the opportunity to provide input. Please contact Blake Roberts, Associate Environmental Planner, at 916-375-4237 for any questions regarding the comments provided.

Sincerely,

Erik Vink
Executive Director

cc: Don Nottoli, Sacramento County Board of Supervisors
Skip Thomson, Solano County Board of Supervisors
Oscar Villegas, Yolo County Board of Supervisors

2.2.5.1 Responses to Letter S5

Response to Comment S5-1

Thank you for reviewing the document. The Land Use and Resource Management Plan (LURMP) goals listed in the letter are generally consistent with the goals of the SRBPP, and are addressed individually in the responses below.

Response to Comment S5-2

The SRBPP is authorized only to repair erosion on levee structures within the SRFCP; it does not implement dredging projects.

Response to Comment S5-3

The following bullet has been added to the list of avoidance and minimization measures to be considered during project-level design, within the discussion of Effect LA-3: Conversion of Important Farmland to Nonagricultural Uses:

- Design bank protection projects to avoid or minimize siting of project features on the highest valued agricultural land, to the greatest extent feasible.

Response to Comment S5-4

The SRBPP is authorized only to repair erosion on levee structures within the SRFCP; it does not own or manage lands.

Response to Comment S5-5

The SRBPP is not a restoration program; it is a flood risk management program authorized to address erosion on levee structures. Habitat enhancement activities associated with the SRBPP are limited to mitigation of site-specific habitat impacts. However, opportunities and constraints, including compatibility with adjacent land uses, will be addressed for individual sites during the Site Selection and Implementation Process.

Response to Comment S5-6

Please see the response to Comment S5-5.

Response to Comment S5-7

Appendix J describes how adaptive management will be integrated into the SRBPP programmatic habitat mitigation strategy.

Response to Comment S5-8

Although the current SRBPP authority does allow for construction of recreation facilities, the work must be associated with an eroding site on the inventory. Previously constructed works have included public boat facilities with launch ramps and associated bank protection to protect the eroding berm and levee. Typical erosion repair sites range from a few hundred to several thousand feet long along discontinuous waterside sections of levee throughout the SRFCP, which would not

1 allow adequate opportunity for a longer, continuous levee trail. During the site selection process,
2 the Project Delivery Team will reach out to other local, state, and federal entities to coordinate with
3 existing or future projects within the repair area.

4 **Response to Comment S5-9**

5 The SRBPP is consistent with the LURMP Levees Goal. The objective of the SRBPP is to arrest or
6 avoid streambank erosion that threatens the integrity of the SRFCP levee system.

7 **Response to Comment S5-10**

8 Please see the response to Comment S5-8, above.

2.2.6 Comment Letter S6—Delta Stewardship Council, Cindy Messer, February 27, 2015



DELTA STEWARDSHIP COUNCIL
A California State Agency

Letter S6

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February 27, 2015

Mr. Kip Young
Central Valley Flood Protection Board
3310 El Camino Avenue, Room 151
Sacramento, California 95821

Chair
Randy Fiorini

Members
Aja Brown
Frank C. Damrell, Jr.
Phil Isenberg
Patrick Johnston
Mary Piepho
Susan Tatayon

Executive Officer
Jessica R. Pearson

RE: Sacramento River Bank Protection Project Environmental Impact Statement/Environmental Impact Report, SCH# 2009012081

Dear Mr. Young:

Thank you for the opportunity to comment on the Public Draft Sacramento River Bank Protection Project Environmental Impact Statement/Environmental Impact Report (EIS/EIR). As mentioned in the draft EIS/EIR, the Delta Stewardship Council (Council) has a legally enforceable management framework for the Delta and Suisun Marsh called the Delta Plan. The Delta Plan applies a common sense approach based on the best available science to restore habitat, increase the diversity and efficiency of California's water supplies, enhance floodplains, improve the Delta's levee system and preserve the Delta's agricultural values. In many cases, the Delta Plan calls for balancing competing needs in the Delta, i.e., enhancing floodplain and riparian habitat while maintaining levee integrity, and avoiding or mitigating impacts to agriculture while restoring habitat. Because a portion of the Sacramento River Flood Control Project lies within the Delta and plays an important role in maintaining the integrity of the Delta levee system, it is essential that our agencies coordinate closely on these types of efforts.

Delta Plan Covered Actions and Certification of Consistency

Through the Delta Reform Act, the Council was granted specific regulatory and appellate authority over certain actions that take place in whole or in part in the Delta and Suisun Marsh. The Council exercises that authority through development and implementation of the Delta Plan. State and local agencies are required to comply with the set of 14 regulatory policies contained within the Delta Plan.

According to the Delta Reform Act, it is the state or local agency approving, funding, or carrying out the project that must determine if a project is a "covered action" subject to regulations of the Delta Plan, and if so, certify consistency of the project with Delta Plan policies (Water Code Section 85225). Generally the CEQA lead agency, the Central Valley Flood Protection Board (CVFPB), in the case of the Sacramento River Bank Protection Project, makes the determination if a project is a covered action. If the project is determined to be a covered action, CVFPB will need to complete a certification of consistency that demonstrates that the project is consistent with the regulatory policies of the Delta Plan. (Please refer to our website at <http://deltacouncil.ca.gov/covered->

S6-1

"Coequal goals" means the two goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem. The coequal goals shall be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place."

— CA Water Code §85054

Kip Young, Central Valley Flood Protection Board
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Page 2

[actions](#) for more information about the covered action process.) Information and analysis needed to support a consistency certification could be taken directly from the EIS/EIR.

S6-1
cont'd

Council staff has reviewed the draft EIS/EIR and have found that several of the proposed Sacramento River bank protection measures are within the Delta and could have significant impacts on biological and agricultural resources. This proposed project may be a “covered action”, and therefore subject to Delta Plan regulations, although that determination ultimately resides with the CVFPB. Consequently, we have identified below issues that we believe you should consider, for the purposes of compliance with both the Delta Reform Act and the California Environmental Quality Act.

Comments on the Draft EIS/EIR

For this letter, our comments are organized by subject area. Within each subject area we have included information on Delta Plan policy (or policies) possibly implicated by this project and the requirements of these policies, as well as specific comments on the draft EIS/EIR, its alternatives and mitigation measures. Where appropriate, we have also provided information on mitigation measures from the Delta Plan’s EIR that should be considered for this project if it is deemed a covered action. We have observed a lack of specificity regarding the location and extent of impacts to biological and agricultural resources and the related mitigation measures, which is typical of programmatic environmental documents. We understand that you will be preparing project-level environmental documents, tiering from this programmatic analysis, and we look forward to providing additional comments when those documents are released.

1. Delta Plan EIR Mitigation Measures

Delta Plan Policy **G P1** (23 CCR Section 5002) requires that actions not exempt from CEQA and subject to Delta Plan regulations must include applicable feasible mitigation measures consistent with or more effective than those identified in the Delta Plan Environmental Impact Report (EIR). The Delta Plan’s Program EIR provides a list of mitigation measures to address including those to address impacts to biological resources and agricultural resources. (Mitigation measures can be found in the Delta Plan Mitigation and Monitoring Reporting Program document, http://deltacouncil.ca.gov/sites/default/files/documents/files/Agenda%20Item%206a_attach%202.pdf.) Our comments below highlight the Delta Plan mitigation measures we think are especially relevant.

2. Best Available Science and Adaptive Management

Delta Plan Policy **G P1** (23 CCR Section 5002) also states that actions subject to Delta Plan regulations must document use of best available science. Additionally, this policy calls for ecosystem restoration projects to include adequate provisions for continued implementation of adaptive management, appropriate to the scope of the action. This requirement can be satisfied through the development of an adaptive management plan that is consistent with the framework described in Appendix 1B of the Delta Plan (<http://deltacouncil.ca.gov/delta-plan-regulations>), along with documentation of adequate resources to implement the proposed adaptive management process.

S6-2

The draft EIS/EIR Appendix J identifies how adaptive management will be integrated into the programmatic habitat mitigation strategy. This adaptive management plan identifies that measurable objectives will be identified and that the Interagency Work Group will lay out a process for making decisions in the event that

Kip Young, Central Valley Flood Protection Board
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Page 3

these measurable targets are not achieved. We applaud the integration of adaptive management into this project and the commitment to identify quantifiable objectives so that both success and failure to reach stated objectives can prompt and inform management decisions. As outlined in the Delta Plan adaptive management framework in Appendix 1B of the Delta Plan regulations, project goals and objectives should be identified upfront as part of the project planning process to guide design and implementation of setback levees and restoration of riparian and nearshore aquatic habitats. These goals and objectives should include components related to both regulatory compliance (i.e., to address specific permit requirements) and target outcomes for ecological functions (e.g., created wetland benches provide improved rearing cover for listed fish) – both of these components are critical for a robust effectiveness evaluation of habitat projects. In addition, an important part of adaptive management is the use of conceptual models to help guide decision-making processes, such as planning and designing the project, as well as monitoring, evaluating and reporting on project performance. Without a conceptual framework to guide understanding and frame hypotheses on how certain management decisions will result in expected outcomes, it will be challenging to make informed management decisions. In the final EIS/EIR or its associated appendices, please include goals and objectives, as well as conceptual models, for the habitat mitigation strategy.

S6-2
cont'd

3. Habitat Restoration

Delta Plan Policy **ER P2** (23 CCR Section 5006) states that habitat restoration must be consistent with Appendix 3 of the Delta Plan regulations, which is an excerpt from the 2011 Draft Ecosystem Restoration Program Conservation Strategy. Appendix 3 describes the many ecosystem benefits related to restoring floodplains, but provides two notes of caution. First, restoration must incorporate as much natural connection with the river as possible to reduce potential standing of native fish. Second, floodplain restoration activities should include investigation and implementation of Best Management Practices (BMPs) to control methylmercury production and transport because periodic wetting and drying of floodplains makes these areas prone to methylation of mercury. In the final EIS/EIR, please describe how these potential impacts will be avoided or mitigated.

S6-3

The Delta Plan's EIR Biological Resources Mitigation Measure 4-3 calls for proponents to design projects that avoid impacts that would lead to substantial loss of fish and wildlife habitat. If there will be a loss of habitat for fish and wildlife species from a project, Mitigation Measure 4-3 calls for proponents to replace, restore, or enhance habitats for those species and preserve in-kind habitat. The Preferred Alternative is expected to have major impacts on near-shore aquatic and riparian habitat, by removing established riparian vegetation and instream woody structure and increasing the size of shallow-water substrate through placement of rip-rap. These impacts are often estimated by the EIS/EIR's Standard Assessment Methodology (SAM) to be substantial for work in the northern portion of the Delta along the Sacramento River mainstem (Region 1b in the EIS/EIR), because many of these sites are proposed to undergo either bank protection measures 2, 4a, 4b, 4c, or 5, which involve placement of rock revetment.

S6-4

Overall, the impacts on fish and wildlife habitat will range from a decrease of shading of shallow aquatic habitat to a loss of riparian trees for terrestrial wildlife. These effects are expected to last potentially for decades post-construction, because while some of the effects will be mitigated through establishment and growth of planted riparian vegetation (e.g., **Mitigation Measure VEG-MM-1**) it will take many years for this vegetation to take hold and redress the initial impacts of riparian vegetation removal (e.g., loss of riparian habitat for terrestrial species and loss of shading of nearshore aquatic habitat for native fish species). We recommend that subsequent project-scale environmental documentation of these proposed levee erosion

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Page 4

control measures analyze in further detail the effects that these long-term alterations in aquatic and terrestrial habitat will have on sensitive, native species.

S6-4
cont'd

The EIS/EIR's **Mitigation Measure FISH-MM-2** is intended to help redress the impacts of the levee work to aquatic habitat for fish species through either on-site or off-site mitigation. On-site mitigation measures would consist of placement of in-water woody vegetation structure to provide cover for juvenile fish and constructed wetland and riparian benches; off-site mitigation may involve setback levees, placement of in-water woody vegetation, construction of wetland benches, planting of riparian vegetation, and removal of rock substrates. We believe that it is particularly important for the habitat mitigation strategy to protect and maintain channel margin habitat along important salmonid migratory corridors in the Delta, including the Sacramento River mainstem and its major distributaries of Sutter and Steamboat Sloughs. All four races (i.e., fall-run, late fall-run, winter-run, spring-run) of Central Valley Chinook salmon as well as Central Valley steelhead migrate along the lower Sacramento River in the Delta and channel margin habitat is particularly important rearing habitat and refugia for juvenile salmonids. We recommend that to the maximum extent feasible, any impacts to channel margin habitat along important salmonid migration corridors in the Delta be mitigated on-site; in the event that off-site mitigation is necessary, we recommend that any off-site mitigation occurs in close proximity and along the same waterway as where the impacts would occur (e.g., impacts to habitat along Steamboat Slough should be mitigated along Steamboat Slough) to demonstrate that the mitigation is restoring equivalent, in-kind habitat.

S6-5

4. Setback Levees

Delta Plan Policy **ER P4** (23 CCR 5008) calls for levee projects to evaluate and where feasible incorporate alternatives, including the use of setback levees, to increase floodplains and riparian habitats. The policy also calls for the evaluation of setback levees of certain areas of the Delta within the Sacramento River watershed including: Sutter and Steamboat Sloughs, Sacramento River between Freeport and Walnut Grove, and urban levee improvement projects in the cities of West Sacramento and Sacramento.

The Sacramento River Bank Protection Project includes actions to conduct erosion control measures on 17 levee segments within the area identified by ER P4 where setback levees must be considered. Of these locations, the Preferred Alternative (4A) calls for a setback levee in only one location, on the right margin of the Sutter Slough at River Mile 24.7. It was not clear to us why this site alone was selected. In the final EIS/EIR, please provide a clear explanation of your methodology for determining whether a setback levee, or other alternative that expands floodplain and riparian habitats, is feasible and appropriate for a given location within the Delta.

S6-6

5. Invasive Species

Delta Plan Policy **ER P5** (23 CCR Section 5009) calls for avoiding introductions and habitat improvements for invasive nonnative species. This policy states that "The potential for new introductions of or improved habitat conditions for nonnative invasive species, striped bass, or bass must be fully considered and avoided or mitigated in a way that appropriately protects the ecosystem." Analysis on this matter should address both nonnative wildlife species (e.g., introduced sport fish species), as well as nonnative vegetation, including both aquatic and terrestrial weeds. Rock revetment is often negatively associated with native fish species like Chinook salmon, but often provides cover for nonnative predators like striped bass. We understand that rock revetment is already in place along many of the levee segments being considered for this project. We also

S6-7

Kip Young, Central Valley Flood Protection Board
February 27, 2015
Page 5

have identified several areas where the EIS/EIR calls for placement of new rock revetment, through bank protection measures 2, 4a, 4b, 4c, and 5, on areas not already armored (see Table 1 below).

Table 1. Locations of Delta Levees Where New Rock Revetment is Proposed

Water Feature	River Mile	Left or Right Bank
Cache Slough	22.8	Right bank
Sacramento River	21.5	Right bank
Sacramento River	24.8	Left bank
Sacramento River	25.2	Left bank
Sacramento River	56.5	Right bank
Sacramento River	56.7	Right bank

In the final EIS/EIR, please describe how the project will avoid or mitigate impacts associated with new rock revetments, including the creation of habitat conducive to invasive fish predators which could impact listed, native fish.

S6-7
cont'd

Delta Plan Biological Resources Mitigation Measure 4-1 includes a requirement that an invasive species management plan shall be developed and implemented for any projects whose construction or operation could lead to introduction or facilitation of invasive species establishment. Based on the concerns we raised above regarding invasive species, we believe that such a plan is necessary and should be developed soon to help guide site-specific levee improvement designs. This plan is to be developed in consultation with Department of Fish and Wildlife (DFW) and local experts. The invasive species management plan is to include the following elements: nonnative species eradication methods, nonnative species management methods, early detection methods, notification requirements, best management practices for preconstruction, construction, and post construction periods, monitoring, remedial actions and report requirements; provisions for updating the target species list over the lifetime of the project as new invasive species become potential threats to the integrity of the local ecosystems.

S6-8

6. Land Use Conflicts

Delta Plan Policy **DP P2** (23 CCR Section 5011) states that plans for ecosystem restoration must be sited to avoid or reduce conflicts with existing uses when feasible, considering comments from local agencies and the Delta Protection Commission.

Within the Delta, this project proposes levee bank protection work in Solano, Yolo, and Sacramento counties. If agricultural lands are converted, we recommend that you work closely with those counties to ensure that adequate mitigation is provided that will offset potential impacts. Additionally, we recommend that where setback and adjacent levees are proposed in the Delta, the Army Corps and the CVFPB consult with the Delta Protection Commission.

S6-9

According to the draft EIS/EIR, the proposed project could result in significant and unavoidable impacts to agricultural resources due to the conversion of important farmland. Council staff appreciates the inclusion of **Mitigation Measure LA-MM-1** to offset potential impacts to agricultural resources. This measure states: "Evaluate the Potential for Direct Farmland Conversion at the Project Level and Avoid, Minimize, and Compensate for Loss of Farmland Compensate for unavoidable Important Farmland conversion impacts by:

S6-10

Kip Young, Central Valley Flood Protection Board
February 27, 2015
Page 6

- Protecting productive off-site agricultural land subject to conversion through the purchase or transfer of its development rights. Agricultural conservation easements shall be acquired at a 1:1 ratio, and the lands on which the easements are acquired shall be maintained in agricultural use.
- Paying any applicable agricultural land mitigation fees, as required by a local government agency with jurisdiction over the project."

S6-10
cont'd

We also recommend adding Delta Plan Mitigation Measures 7-1 and 7-2, which are drawn from the Delta Plan's Mitigation and Monitoring Reporting Program, to ensure that farmlands are protected to the greatest extent possible:

- "Design proposed projects to minimize, to the greatest extent feasible, the loss of the highest valued agricultural land.
- Redesign project features to minimize fragmenting or isolating farmland. Where a project involves acquiring land or easements, ensure that the remaining non-project area is of a size sufficient to allow viable farming operations. The project proponents shall be responsible for acquiring easements, making lot line adjustments, and merging affected land parcels into units suitable for continued commercial agricultural management.
- Reconnect utilities or infrastructure that serve agricultural uses if these are disturbed by project construction. If a project temporarily or permanently cuts off roadway access or removes utility lines, irrigation features, or other infrastructure, the project proponents shall be responsible for restoring access as necessary to ensure that economically viable farming operations are not interrupted.
- Manage project operations to minimize the introduction of invasive species or weeds that may affect agricultural production on adjacent agricultural land.
- Design proposed projects to minimize, to the greatest extent feasible, conflicts and inconsistencies with land protected by agricultural zoning or a Williamson Act contract and the terms of the applicable zoning/contract."

7. Risk Reduction

Delta Plan Policy RR P1 (23 CCR Section 5012) calls for the prioritization of state investments in Delta flood risk management, including levee operation, maintenance and improvements. This policy includes interim priorities categorized as specific goals (e.g., localized flood protection, levee network and ecosystem conservation) to guide budget and funding allocation for levee improvements and to assist the Department of Water Resources and the CVFPB in achieving a balance in funding the various goals. The scope of this project, as described in the draft EIS/EIR, appears to be consistent with several goals contained in Delta Plan Policy RR P1.

8. Inconsistencies with the Delta Plan

The final EIS/EIR should discuss any inconsistencies between the proposed plan and the Delta Plan, as required by 15125(d) of the California Environmental Quality Act Guidelines. Please note that the CEQA guidelines' Appendix G states that a project that is inconsistent with any applicable land use plan, policy, or regulations may result in a finding of significant impact on biological resources.

S6-11

Kip Young, Central Valley Flood Protection Board
February 27, 2015
Page 7

Early Consultation

The Council strongly encourages all agencies who propose to approve, fund, or carry out an action in the Delta, as early in the project's development as possible, consult with the Council and ensure the project (whether it is a covered action or not) is consistent with the Delta Plan. If CVFPB staff and the project proponent choose to engage in early consultation, the Council staff will meet with you and offer guidance on determining whether the project meets the definition of a covered action, provided that the ultimate determination in this regard must be made by your agency. Council staff will also work with you and the project proponent to ensure consistency between the project and the Delta Plan's policies and recommendations. We also can help guide you through the certification process. S6-12

As stated above, Delta Plan Policy **GP1** requires that restoration projects document use of best available science and include an adaptive management plan when filing a certification of consistency with the Delta Plan. We recommend that adaptive management for this project incorporate a monitoring, evaluation and reporting program that evaluates whether the project is successfully achieving the goals and objectives for the project. Delta Stewardship Council staff, including staff from the Delta Science Program, can provide early consultation to help in your preparation of documentation of use of best available science and adaptive management. S6-13

Next Steps

We look forward to continuing to work with your agency and other local, state, and federal agencies on this project as well as on other multi-benefit projects in the Delta. I encourage you to contact You Chen (Tim) Chao at YouChen.Chao@deltacouncil.ca.gov or Daniel Huang at Daniel.Huang@deltacouncil.ca.gov with your questions, comments, or concerns. We would like to work with you to ensure consistency of the Sacramento River Bank Protection Project with the Delta Plan while also avoiding, minimizing, or mitigating potential environmental impacts. We look forward to continued coordination with you.

Sincerely,



Cindy Messer
Deputy Executive Officer
Delta Stewardship Council

CC: Brian Mulvey, U.S. Army Corps of Engineers Sacramento District

2.2.6.1 Responses to Letter S6

Response to Comment S6-1

The Corps and CVFPB will coordinate with the Delta Stewardship Council (DSC) during the Site Selection and Implementation Process (described in Chapter 2 of the EIS/EIR) when erosion sites are identified for repair within the Sacramento–San Joaquin River Delta, and, if the individual repairs are determined to be “covered actions,” Delta Plan policies and requirements will be addressed during site-specific environmental review. At this time, because this is a programmatic EIS/EIR, specific sites have not yet been selected for repair.

Response to Comment S6-2

As discussed in the response to Comment S6-1, the Corps and CVFPB will coordinate with DSC as part of the Site Selection and Implementation Process when specific erosion sites in the Delta are selected for repair in the future. It should be noted that the SRBPP is not a restoration action; it is a flood risk management program authorized to address erosion on levee structures. Planting activities associated with the SRBPP are limited to mitigation of site-specific habitat impacts. The SRBPP is, therefore, not subject to the adaptive management requirement set forth in the Delta Plan. According to the “Glossary” included in the Delta Plan (as well as in the definitions provided in 23 California Code of Regulations Section 5001), restoration actions “may include restoring interconnected habitats within the Delta and its watershed, restoring more natural Delta flows, or improving ecosystem water quality.” However, as noted in the comment, an adaptive management strategy is proposed as part of the SRBPP to ensure that ecological functions and habitat values affected by the SRBPP are reestablished.

Response to Comment S6-3

As discussed in the response to Comment S6-1, the Corps and CVFPB will coordinate with DSC as part of the Site Selection and Implementation Process when specific erosion sites in the Delta are selected for repair in the future. It should be noted that the SRBPP is not a restoration action; it is a flood risk management program authorized to address erosion on levee structures. However, if setback levees are constructed under the SRBPP, the area between the stream and the new levee will be sloped to drain properly and avoid fish stranding and ponding. Issues associated with setback levees, including fish stranding and mercury methylation, will be addressed during site-specific environmental review.

Response to Comment S6-4

Comment noted. Subsequent site-specific environmental analysis will carefully examine potential temporal losses of fish and wildlife habitat.

Response to Comment S6-5

Appendix J of the EIS/EIR contains the SRBPP Programmatic Mitigation Strategy, which establishes a mitigation framework for SRBPP effects on biological resources and associated habitat. The mitigation approach recommended in this strategy calls for maximizing on-site mitigation. Where on-site mitigation is not feasible, off-site mitigation will be implemented within the same region in

order to fully mitigate the temporal and spatial effects of the action. These strategies are consistent with the recommendations in the comment.

Response to Comment S6-6

The discussion of the Site Selection and Implementation Process has been expanded and updated to include more information regarding which criteria are key factors in considering setback levees. These criteria are described in Step 6, "Conceptual-Level Alternatives," of the Site Selection and Implementation Process discussion in Chapter 2 of the EIS/EIR.

It is important to note that the 106 erosion sites presented in this EIS/EIR, including those that are located within the area identified by Delta Plan Policy ER P4, are only a representative sample selected for the purposes of this EIS/EIR's programmatic analysis. These specific sites may or may not receive bank protection under Phase II of the SRBPP. The Site Selection and Implementation Process will be used to determine which sites receive treatment, and the specific design for each erosion site. The Corps will continue to consider setbacks among the various design options under the preferred alternative on a site-by-site basis.

Response to Comment S6-7

Effects related to nonnative, invasive plant species are discussed in Chapter 10 under Effect VEG-6: Potential Introduction or Spread of Invasive Plants as a Result of Program Construction, and several mitigation measures are presented to ensure that the SRBPP would not have a substantial adverse effect on sensitive natural plant communities or special-status plant species from the introduction or spread of invasive plants. The fish analysis in Chapter 11 discusses how nonnative fish species contribute to the decline in abundance of native species and discusses how long-term changes in nearshore habitat can have adverse effects on all special-status fish species.

It is important to note that the 106 erosion sites presented in this EIS/EIR, including those that are identified in the comment as being locations within the Delta where new rock revetment is proposed, are only a representative sample selected for the purposes of this EIS/EIR's programmatic analysis. These specific sites may or may not receive bank protection under Phase II of the SRBPP. The Site Selection and Implementation Process will be used to determine which sites receive treatment, and the specific design for each erosion site. As discussed in the response to Comment S6-1, the Corps and CVFPB will coordinate with DSC as part of the Site Selection and Implementation Process when specific erosion sites in the Delta are selected for repair in the future, and the site-specific environmental analyses will address nonnative and invasive species. Once the sites are selected, the site-specific environmental analyses will utilize the best available models to predict effects to native and nonnative species and their habitat, and mitigation will be designed accordingly.

Response to Comment S6-8

As described above under Response to Comment S6-1, the Corps and CVFPB will coordinate with DSC as part of the Site Selection and Implementation Process when specific erosion sites in the Delta are selected for repair in the future. However, the potential introduction of invasive plant species is assessed under Effect VEG-6 in Chapter 10 of the EIS/EIR, and three mitigation measures are presented to minimize the effect.

Response to Comment S6-9

The discussion of the SRBPP Site Selection and Implementation Process in Chapter 2 of the EIS/EIR has been expanded and updated to include more information regarding how erosion sites are selected for repair and how the bank protection design for each site is ultimately selected. During Step 5 of the Site Selection and Implementation Process, the Project Delivery Team identifies potential opportunities and constraints associated with each site. This process includes coordinating with, and soliciting input on opportunities and constraints from, other local, state, and federal agencies that have an interest in or oversight responsibilities for each site. Interested agencies and groups will also be able to provide input through the subsequent CEQA/NEPA process for each site.

Response to Comment S6-10

As described above under Response to Comment S6-1, the Corps and CVFPB will coordinate with DSC as part of the Site Selection and Implementation Process when specific erosion sites in the Delta are selected for repair in the future. However, text regarding the first two proposed mitigation measures from the Delta Plan has been added to the impact discussion for Effect LA-3 under Alternative 3A—Maximize Meander Zone (Environmentally Superior Alternative) in Chapter 13. Text relevant to the third mitigation bullet in the comment has been added to Mitigation Measure PUB-MM-1 in Chapter 16, Utilities and Public Services, under Alternative 2A—Low Maintenance. Potential impacts related to invasive species are discussed under Effect VEG-6, as well as Mitigation Measures VEG-MM-11, VEG-MM-12, and VEG-MM-13 in Chapter 10, Vegetation and Wetlands. Regarding the fifth bullet, conflicts with Williamson Act contracts and agricultural zoning are not discussed, as described under Chapter 13, Section 13.4.1, Assessment Methods and Section 13.4.2, Significance Criteria.

Response to Comment S6-11

Please see the response to Comment S6-1.

Response to Comment S6-12

Please see the response to Comment S6-9.

Response to Comment S6-13

Please see the response to Comment S6-2.

Local Agency and Tribal Comments and Responses

This chapter contains the comments received on the Draft EIS/EIR from local agencies and tribes. Each comment letter has been assigned a unique code, and each comment within the letter has also been assigned a unique code, noted in the right margin. For example, the code “L2-1” indicates the first distinct comment (indicated by the “1”) in the letter from the Sacramento County Department of Transportation, which was the second letter (indicated by the “2”) recorded from a local agency (indicated by the “L”). The chapter presents each comment letter immediately followed by the responses to that letter. Table 3-1 summarizes the commenting party and comment letter signatory.

Table 3-1. Local Agencies and Tribes Commenting on the Draft EIS/EIR

Letter Number	Commenter	Date
Local Agencies		
L1	Karen Huss, Sacramento Metropolitan Air Quality Management District	January 26, 2015
L2	Kamal Atwal, Sacramento County Department of Transportation	February 24, 2015
L3	Stephen Arakawa, Metropolitan Water District of Southern California	February 26, 2015
Tribes		
T1	Marcos Guerrero, United Auburn Indian Community of the Auburn Rancheria	January 27, 2015
T2	Oscar Serrano, Colusa Indian Community Council	January 29, 2015
T3	James Sarmento, Tewe Kewe Cultural Center	February 24, 2015

3.1 Local Agencies

3.1.1 Letter L1—Sacramento Metropolitan Air Quality Management District, Karen Huss, January 26, 2015



Letter L1

Larry Greene
AIR POLLUTION CONTROL OFFICER

January 26, 2015

SENT VIA E-MAIL ONLY

Mr. Brian Mulvey
U.S. Army Corp of Engineers, Sacramento District
1325 J Street
Sacramento, CA 95814-2992

Sacramento River Bank Protection Project Phase II Supplemental Authority Draft Environmental Impact Statement/Environmental Impact Report (SAC201501530)

Dear Mr. Mulvey:

The Sacramento Metropolitan Air Quality Management District (SMAQMD) reviewed the Sacramento River Bank Protection Project (SRBPP) Phase II Supplemental Authority Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR). The SRBPP Phase II includes 80,000 linear feet of levee improvements that will be conducted over a 10 year period. Actual projects will be selected each year for implementation; therefore subsequent environmental documents for projects selected will tier from this programmatic EIS/EIR. Staff comments on the EIS/EIR follow.

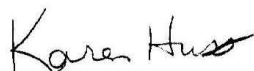
- | | |
|---|------|
| 1. Correct SMAQMD's attainment status for the federal PM10 standard (page 8-15). SMAQMD attains this standard. The SMAQMD's webpage provides the details on the PM10 redesignation . | L1-1 |
| 2. AQ-1 and AQ-MM-1b assume NOx can be mitigated to net zero if the general conformity de minimis is exceeded but the other air pollutants cannot. Clarify why the other pollutants aren't treated in the same manner as NOx. | L1-2 |
| 3. SMAQMD modified its enhanced exhaust control practices to make them more easily understandable. Consider replacing the control practices in the document with the most current control practices , or reference to check the SMAQMD's website for the most current control practices available at the time a project is being considered for construction. | L1-3 |
| 4. Off-site mitigation fees are a feasible option to reduce emissions if onsite mitigation does not reduce the emissions below the SMAQMD thresholds of significance. Chapter 3 of the SMAQMD's CEQA Guide describes the off-site mitigation fee in more detail. Mitigation fees should be added to SMAQMD mitigation measures in Appendix D. | L1-4 |
| 5. Clarify that SMAQMD adopted GHG significance thresholds in October 2014 that can be used in subsequent environmental documents for projects being implemented through the SRBPP. | L1-5 |
| 6. All projects are subject to applicable SMAQMD rules in affect at the time of construction. A list of the most common rules that apply to construction projects is attached for your convenience. SMAQMD rules can be obtained on the SMAQMD's webpage: www.airquality.org . | L1-6 |

777 12th Street, 3rd Floor ■ Sacramento, CA 95814-1908
916/874-4800 ■ 916/874-4899 fax
www.airquality.org

*Mr. Mulvey
SRBPP Phase II Supplemental Authority DEIS/EIR
January 26, 2015
Page 2*

If you have any questions regarding these comments please contact me at (916) 874-4881 or khuss@airquality.org. I'd like to be included on the mailing list or distribution for all future information on the SRBPP.

Sincerely,



Karen Huss
Associate Air Quality Planner/Analyst

Attachment

Cc: Larry Robinson, SMAQMD
Kip Young, CVFPB

777 12th Street, 3rd Floor ■ Sacramento, CA 95814-1908
916/874-4800 ■ 916/874-4899 fax
www.airquality.org

Mr. Mulvey
SRBPP Phase II Supplemental Authority DEIS/EIR
January 26, 2015
Page 3

ATTACHMENT - SMAQMD Rules & Regulations Statement (revised 3/12)

The following statement is recommended as standard condition of approval or construction document language for all development projects within the Sacramento Metropolitan Air Quality Management District (SMAQMD):

All projects are subject to SMAQMD rules in effect at the time of construction. A complete listing of current rules is available at www.airquality.org or by calling 916.874.4800. Specific rules that may relate to construction activities or building design may include, but are not limited to:

Rule 201: General Permit Requirements. Any project that includes the use of equipment capable of releasing emissions to the atmosphere may require permit(s) from SMAQMD prior to equipment operation. The applicant, developer, or operator of a project that includes an emergency generator, boiler, or heater should contact the SMAQMD early to determine if a permit is required, and to begin the permit application process. Portable construction equipment (e.g. generators, compressors, pile drivers, lighting equipment, etc.) with an internal combustion engine over 50 horsepower are required to have a SMAQMD permit or a California Air Resources Board portable equipment registration. Other general types of uses that require a permit include, but are not limited to dry cleaners, gasoline stations, spray booths, and operations that generate airborne particulate emissions.

Rule 403: Fugitive Dust. The developer or contractor is required to control dust emissions from earth moving activities, storage or any other construction activity to prevent airborne dust from leaving the project site.

Rule 414: Water Heaters, Boilers and Process Heaters Rated Less Than 1,000,000 BTU PER Hour. The developer or contractor is required to install water heaters (including residence water heaters), boilers or process heaters that comply with the emission limits specified in the rule.

Rule 417: Wood Burning Appliances. This rule prohibits the installation of any new, permanently installed, indoor or outdoor, uncontrolled fireplaces in new or existing developments.

Rule 442: Architectural Coatings. The developer or contractor is required to use coatings that comply with the volatile organic compound content limits specified in the rule.

Rule 460: Adhesives and Sealants. The developer or contractor is required to use adhesives and sealants that comply with the volatile organic compound content limits specified in the rule.

Rule 902: Asbestos. The developer or contractor is required to notify SMAQMD of any regulated renovation or demolition activity. Rule 902 contains specific requirements for surveying, notification, removal, and disposal of asbestos containing material.

Naturally Occurring Asbestos: The developer or contractor is required to notify SMAQMD of earth moving projects, greater than 1 acre in size in areas "Moderately Likely to Contain Asbestos" within eastern Sacramento County. Asbestos Airborne Toxic Control Measures, Section 93105 & 93106 contain specific requirements for surveying, notification, and handling soil that contains naturally occurring asbestos.

777 12th Street, 3rd Floor ■ Sacramento, CA 95814-1908
916/874-4800 ■ 916/874-4899 fax
www.airquality.org

3.1.1.1 Responses to Letter L1**Response to Comment L1-1**

Table 8-6 has been revised to reflect attainment status as requested in the comment.

Response to Comment L1-2

The discussion of Effect AQ-1 and Mitigation Measure AQ-MM-1b have been revised to clarify that offsets can only be used for ROG, NO_x, and PM, and a statement regarding Section 93.158(a)(3) and use of offsets for CO has been added to the discussion.

Response to Comment L1-3

The measures listed in Appendix D-7 have been revised, consistent with the 2016 CEQA guide. A statement has been added to the appendix indicating that the most recent measures at the time of construction will be used.

Response to Comment L1-4

Information on the Heavy-Duty Low-Emission Vehicle Incentive Programs have been added to Mitigation Measure AQ-MM-1b. A new section describing use of offsets as mitigation has also been added to Appendix D-7.

Response to Comment L1-5

The Sacramento Metropolitan Air Quality Management District's GHG thresholds have been added to Chapter 8 under the "Greenhouse Gas Emissions" assessment methods discussion (Section 8.3.1.4).

Response to Comment L1-6

Site-specific environmental documents will address all Sacramento Metropolitan Air Quality Management District rules prior to construction.

3.1.2 Letter L2—Sacramento County Department of Transportation, Kamal Atwal, February 24, 2015

Letter L2

February 24, 2015

Brian Mulvey
U.S. Army Engineer District, Sacramento
1325 J Street
Sacramento, CA 95814
Brian.M.Mulvey@usace.army.mil

SUBJECT: COMMENTS ON THE PUBLIC DRAFT POST AUTHORIZATION CHANGE REPORT AND PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT/ENVIRONMENTAL IMPACT REPORT (PACR/EIS/EIR) FOR THE SACRAMENTO RIVER BANK PROTECTION PROJECT (SRBPP).

Dear Mr. Mulvey:

The Sacramento County Department of Transportation has received the notice for the draft PACR/EIS/EIR for the SRBPP. Our comments are simply that we would expect that if this project has any impacts on the transportation facilities in the County of Sacramento that mitigation measures be included in the environmental documents that address these impacts. To that end we would request that any county roadways used for hauling be evaluated. United States Army Corps of Engineers (USACE) and its contractors shall enter into an agreement with County of Sacramento to do repairs on any damage to public roadways caused by hauling activities for this project. Please work with our office regarding getting that agreement in place prior to bidding any work.

L2-1

L2-2

We would also urge USACE to work with our department for any opportunities to add a class 1 multi-use path on the levee system for public use. Good example of this effort was established when the North Natomas Levee Improvement Project was done by Sacramento Area Flood Control Agency. A copy of our bicycle master plan is available for your reference at <http://www.sacdot.com/Pages/BikewayMasterPlan.aspx>.

L2-3

Prior to the closure of any public roadways, please coordinate with our department for advance notification to the effected property owners and users.

L2-4

If you have any questions please call me at (916) 875-2844.

Sincerely,



Kamal Atwal, P.E.
Associate Transportation Engineer
Department of Transportation

KA

Cc: Matt Darrow, DOT
Dean Blank, DOT
Juliette Robinson, Department of Community Development

3.1.2.1 Responses to Letter L2**Response to Comment L2-1**

Impacts on transportation will be analyzed and mitigation identified in supplemental site-specific environmental documents prior to construction.

Response to Comment L2-2

The Corps will work with the Sacramento County Department of Transportation to ensure roads within the county are not damaged.

Response to Comment L2-3

Please see the response to Comment S5-8 in Chapter 2 of Volume II.

Response to Comment L2-4

The Sacramento County Department of Transportation will be notified prior to any program-related road closures in Sacramento County.

3.1.3 Letter L3—Metropolitan Water District of Southern California, Stephen Arakawa, February 26, 2015



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Office of the General Manager

Letter L3

February 26, 2015

U.S. Army Corps of Engineers
Attention: Brian Mulvey
1325 J Street
Sacramento, CA 95814

Dear Mr. Mulvey:

Comments on the Draft Programmatic Environmental Impact Statement/Environmental Impact Report: Sacramento River Bank Protection Project Phase II Supplemental Authority

The Metropolitan Water District of Southern California (Metropolitan) has reviewed the Draft Programmatic Environmental Impact Statement/Environmental Impact Report (EIS/EIR) prepared by the two lead agencies, U.S. Army Corps of Engineers and Central Valley Flood Protection Board, to comply with the National Environmental Policy Act and the California Environmental Quality Act, respectively. As proposed, the Sacramento River Bank Protection Project Phase II Supplemental Authority (proposed project) would afford additional bank protection in the Sacramento River Flood Control Project (SRFCP) area. Approximately 80,000 linear feet of bank protection would be implemented to arrest or avoid streambed erosion that threatens the integrity of the current SRFCP levee system. This letter contains Metropolitan's comments on the EIS/EIR as a stakeholder in the State Water Project (SWP) and the Sacramento-San Joaquin Delta (Delta).

Southern California has an important stake in the Delta region and its existing infrastructure, including the SRFCP. As a SWP contractor, Metropolitan has invested and will continue to invest significantly in the SWP, efforts to restore sensitive fish populations in the Delta watershed, and scientific research into the causes of decline in fish native to the Delta. Even with the diversification of its supply sources and water use efficiency and conservation efforts, the SWP will remain a critical source of water supply for Metropolitan's service area. Given the importance of the Delta to Metropolitan and other SWP contractors, Metropolitan is engaged in key studies, debates, and decision-making regarding Delta policy. Metropolitan's Board of Directors approved key Delta policy principles and a Delta Action Plan Framework in 2006 and 2007, which relate to this proposed project:

L3-1

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

U.S. Army Corps of Engineers

Page 2

February 26, 2015

“C. Flood Control and Storage¹ – The third component of a comprehensive approach would be construction of flood control and storage facilities. These actions would include *levee hardening in critical areas*, construction of bypasses to deal with increased runoff associated with climate change and construction of more storage, either surface water or groundwater storage.”

Strategic levee protection measures, like the proposed project, are absolutely necessary to better protect lives, infrastructure, and water quality in the Central Valley and the Delta. However, the environmental impacts of levee improvements must be assessed in the broader context of the suite of actions needed to address the long-term welfare of the Delta and the state. As recognized in the CALFED Record of Decision (2000), the Bay Delta Conservation Plan (BDCP or Plan) (2006-present), the Delta Reform Act (2009), the Delta Plan (2013), the California Water Action Plan (2014), and the recent passage of Proposition 1, the Water Quality, Supply and Infrastructure Improvement Act of 2014 (among a host of other sources), a multifaceted approach is needed to address flood risks, render water supplies more reliable, restore fish habitat for sensitive/protected fish species, and address invasive species, natural flow patterns, and salinity intrusion due to sea level rise while protecting lives, property and infrastructure in the Delta. Strategic levee improvements help to address flood risks in the Delta that could jeopardize water quality for both sensitive native fish and millions of Californians who rely on fresh water flows through the Delta. But the proposed project must avoid or mitigate any potentially significant adverse impacts on water quality, water supply, and environmental resources in the Delta, and it should be consistent with the suite of actions needed to address the multiple stressors and risks facing the Delta.

L3-1
cont'd

With respect to the proposed project, temporary, localized construction activities must not result in substantial turbidity plumes in the vicinity of the points of diversion for the SWP or the Central Valley Project (CVP) in the south Delta at the first flush of highly turbid water in late November, December and January. Recent scientific evidence suggests Delta smelt use turbidity as cover from predators and may move with such a plume toward south Delta points of diversion, which can trigger reductions in water supplies to comply with state and federal regulations intended to protect Delta smelt.

L3-2

In addition, Metropolitan is concerned that some activities associated with the proposed project may not be compatible or may not align with efforts to achieve the state's coequal goals of reestablishing a more reliable water supply and restoring the Delta ecosystem while respecting the Delta as a place in the absence of coordination efforts between affected agencies and stakeholders, including the state and federal agencies involved in the BDCP planning process. Three river systems within the proposed project's area are located in the Delta and fall within

L3-3

¹ The Metropolitan Water District of Southern California. 2007. Board letter entitled "Adopt proposed framework for Metropolitan's Delta Action Plan. June 12, 2007 and Minutes Item No. 47135.

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Restoration Opportunity Areas (ROAs)² identified by the California Department of Fish and Wildlife and incorporated into the Delta Plan and BDCP: Sacramento River, Cache Slough/Cache Creek, and Yolo Bypass (including Sutter, Steamboat, and Georgiana sloughs). In particular, Alternative 4A, where new stone protection/habitat benches would involve the removal of existing habitat, such actions may affect BDCP recommendations for restoring those very same sites.

L3-3
cont'd

Specific project details for each system with respect to BDCP recommendations are as follows:

1) Sacramento River:

The Preferred Alternative 4A levee improvements from River Mile 21 to 76 would include 9,896 feet of water-side levee improvements, which would be 12 percent of all levee improvements proposed and about 3 percent of the total levee lengths of the Sacramento River within these reaches. Improvements would include Measure 2 - Bank Fill Stone Protection with no on-site woody vegetation, Measure 3 - Adjacent Levee with existing levee vegetation, Measure 4a - Riparian Bench with vegetation and in stream woody material above summer/fall water line, Measure 4b - Riparian Bench with vegetation and in stream woody material above and below summer/fall water line, Measure 4c - Bank Protection with vegetation below the winter/spring water line, and Measure 5 - Bank Fill Stone Protection with vegetation below winter/spring water line. The Environmentally Preferable Alternative 3A similarly would include 9,896 feet of water-side levee improvements on the Sacramento River, including Measure 3 - Adjacent Levee with existing levee vegetation.

L3-4

Sacramento River levee improvements would be added intermittently from River Mile 21 to 76, enhancing this conveyance feature. Levee improvements would run adjacent to the Cache Slough ROA and West Delta ROA, which are key areas targeted for restoration, e.g., under the BDCP's CM3 - Natural Communities Protection and Restoration and CM4 - Tidal Natural Communities Restoration. Levee improvements would be in Conservation Zones 1, 3, and 5 extending from Isleton to the northern end of the Plan Area near Woodland. As such, the Sacramento River levee improvement actions under the proposed project should be evaluated by the lead agencies for consistency with BDCP environmental enhancement and restoration actions in the Final EIS/EIR.

2) Cache Slough and Cache Creek:

The Preferred Alternative 4A levee improvements would include 2,454 feet of water-side levee improvements, which would be 3 percent of all levee improvements proposed and about 3 percent of the total levee lengths of Cache Slough and Cache Creek. Improvements would

L3-5

² Restoration Opportunity Areas (ROAs) are those locations and elevations in the BDCP area considered most appropriate for the restoration of tidal wetland natural communities and that would benefit sensitive native species in the Delta.

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include Measure 1 - Setback Levees with floodplain and existing levees vegetation, Measure 2 - Bank Fill Stone Protection with no on-site woody vegetation, and Measure 4c - Bank Protection with vegetation below the winter/spring water line. The Environmentally Preferable Alternative 3A similarly would include 3,001 feet of water-side levee improvements on the Yolo Bypass, including Measure 1 - Setback Levees with floodplain and existing levees vegetation, and Measure 3 - Adjacent Levee with existing levee vegetation.

L3-5
cont'd

Isolated levee enhancements would be within the Cache Slough and Cache Creek conveyance feature. These improvements would lie within the Cache Slough ROA, which would include the BDCP's CM3 Natural Communities Protection and Restoration and CM4 Tidal Natural Communities Restoration efforts. The minimum restoration targets for tidal natural communities in the Cache Slough ROA would be 5,000 acres. In the Plan Area, there is a target for 48,000 acres of tidal wetlands restoration of all types by year 40. Proposed project levee improvements would be in Conservation Zone 1, which would extend northwesterly from Rio Vista including the Cache Slough ROA. As such, the Cache Creek and Cache Slough levee enhancement actions under the proposed project should be evaluated for consistency with the above BDCP environmental enhancement and restoration actions in the Final EIS/EIR.

3) Yolo Bypass:

The Preferred Alternative 4A levee improvements would include 3,001 feet of water-side levee improvements, which would be 4 percent of all levee improvements proposed and about 1 percent of the total levee lengths of the Yolo Bypass. Improvements would include Measure 2 - Bank Fill Stone Protection with no on-site woody vegetation, and Measure 5 - Bank Fill Stone Protection with vegetation below winter/spring water line. The Environmentally Preferable Alternative 3A similarly would include 3,001 feet of water-side levee improvements on the Yolo Bypass, including Measure 3 - Adjacent Levee with existing levee vegetation.

L3-6

The proposed project provides isolated levee enhancements along the Yolo Bypass conveyance feature. It is partially within the Cache Slough ROA, which would include the BDCP's CM2 Yolo Bypass Fisheries Enhancement and CM4 Tidal Natural Communities Restoration efforts. As such, the Yolo Bypass levee enhancement actions under the proposed project should be evaluated for consistency with BDCP environmental enhancement and restoration actions. It is in Conservation Zone 2 extending northerly from the central Delta encompassing Yolo Bypass and the Sacramento Deep Water Ship Channel. Accordingly, these enhancements in Conservation Zone 2 should be evaluated by the lead agencies for consistency with BDCP environmental enhancement and restoration actions in the Final EIS/EIR.

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- **Sutter and Steamboat Sloughs:**

The Preferred Alternative 4A levee improvements would include 5,101 feet of water-side levee improvements, which would be 6 percent of all levee improvements proposed and about 4 percent of the total levee lengths of Sutter and Steamboat sloughs. Improvements would include Measure 1 - Setback Levees with floodplain and existing levees vegetation, Measure 3 - Adjacent Levee with existing levee vegetation, and Measure 4c - Bank Protection with vegetation below the winter/spring water line. The Environmentally Preferable Alternative 3A similarly would include 5,001 feet of water-side levee improvements, including Measure 1 - Setback Levees with floodplain and existing levees vegetation and Measure 3 - Adjacent Levee with existing vegetation.

L3-7

Isolated levee improvements would be on Sutter Slough and more concentrated levee improvements on Steamboat Slough. Sutter and Steamboat sloughs are not within a ROA of the BDCP. However, these improvements would be in Conservation Zone 2, extending from West Sacramento in the north to Isleton in the south.

- **Georgiana Slough:**

The Preferred Alternative 4A levee improvements would include 17,400 feet of water-side levee improvements, which would be 22 percent of all levee improvements proposed and about 15 percent of the total levee lengths on the slough. Improvements would include Measure 1 - Setback Levees with floodplain and existing levees vegetation, Measure 3 - Adjacent Levee with existing levee vegetation, and Measure 4c - Bank Protection with vegetation below the winter/spring water line. The Environmentally Preferable Alternative 3A would similarly include 17,400 feet of water-side levee improvements on Georgiana Slough, including Measure 1 - Setback Levees with floodplain and existing levees vegetation and Measure 3 - Adjacent Levee with existing levee vegetation. Georgiana Slough improvements would provide substantial levee enhancements of this conveyance feature, providing freshwater to the central and south Delta.

L3-8

Georgiana Slough is not within an ROA. ROAs encompass those locations considered to be the most appropriate for the restoration of tidal natural communities in the Delta. It is in Conservation Zone 5 extending from the central Delta eastward, to encompass lands along the eastern edge of the Plan Area, which would include approximately 25 percent conservation lands.

The proposed project does not necessarily conflict with restoration of habitat for sensitive

L3-9

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native species. However, to avoid conflicts in addition to the potential for conflicts between the proposed project and long-term restoration objectives in the ROAs, consideration must be given to increases in predator habitat and changes to turbidity transport in the Delta with project implementation. Although several of the Bank Protection Measures (e.g., BM4) would create increased rearing habitat for salmon, they raise two potential issues:

L3-9
cont'd

1. Increased rearing habitat for salmon done incorrectly would result in more habitat for predators instead, and
2. Under Alternative 4 there would be increased BM 4-type measures creating quiescence zones for settling out sediment upstream of the Delta and thereby reducing downstream transport.

Likewise, the Environmentally Preferable Alternative 3A would involve setback levees with a habitat/meander zone between the existing and new setback levee that may also result in turbidity settling out of the water column.

Since the Delta smelt rely on turbidity as cover from fish predators, the proposed project may adversely impact Delta smelt and their critical habitat as the intent of the project is to reduce scouring effects. However, it is not clear whether the existing modeling done for this environmental analysis is sufficiently comprehensive to confirm if sediment reduction would occur and in turn decrease the available habitat for Delta smelt. Clarification on this matter should be included in the Final EIS/EIR.

L3-10

Overall, these concerns for the Yolo Bypass apply mostly to sites located near Cache Slough. Additional modeling by the lead agencies could help determine the potential for loss of sediment transport for each BM at each river mile within the BDCP ROAs.

Separately from the ROAs comparisons, the proposed project improvements should also be coordinated by the lead agencies with the California Department of Water Resources (DWR) where these improvements may occur at locations of the proposed DWR Emergency Drought Barriers Project, thereby ensuring compatibility in design, construction, and in the ultimate goals to be achieved.

L3-11

Lastly, the fisheries citations are not current. For example: "Although the peak high and low values have occurred in different years, the TNS and FMWT indices show a similar pattern of Delta smelt relative abundance; higher prior to the mid-1980s and very low in the past seven years (U.S. Fish and Wildlife Service 2008)." Many concepts are out-of-date such as obligate spawning in the upper reaches of North Delta, migration patterns and timing, salinity tolerances, spawning times, behavior, and the effectiveness of the trawls. The proposed BDCP

L3-12

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Draft EIR/EIS has recent references that can assist in updating this Draft EIS/EIR chapter:
http://baydeltaconservationplan.com/Libraries/Dynamic_Document_Library/Public_Draft_BD_CP_EIR-EIS_Chapter_34_-_References_Cited.sflb.ashx (BDCP Draft EIR/EIS References, Chapter 34, Pages 34-44 through 34-72).

L3-12
cont'd

We appreciate the opportunity to provide input to your planning process, and we look forward to receiving future information concerning this proposed project. If we can be of further assistance, or if you would like to discuss Metropolitan's comments, please contact me at sarakawa@mwdh2o.com or Mr. Randall Neudeck at rneudeck@mwdh2o.com.

Very truly yours,



Stephen Arakawa
Manager, Bay-Delta Initiatives

DWS:rrw

1

2

3.1.3.1 Responses to Letter L3**Response to Comment L3-1**

Thank you for your support of the proposed program. The programmatic analysis in the EIS/EIR contains mitigation for all potentially adverse environmental effects of program implementation, including those related to water quality and biological resources. Site-specific design and analysis will take into consideration other local, regional, and related projects to ensure consistency.

Response to Comment L3-2

As described under "Construction Activities" in Chapter 2, Section 2.7.1, in-water construction activities will be limited to the months of August to November in order to avoid impacts on Delta smelt and other sensitive fish species. Turbidity will be monitored and controlled during construction activities, as required in Mitigation Measure WQ-MM-1. Based on observations at previous Sacramento River Flood Control Project (SRBPP) erosion repair sites, increased turbidity is localized and relatively limited during construction, and has not been an issue based on water quality certification requirements. The turbidity of the first flush is typically much higher and occurs throughout the system.

Response to Comment L3-3

The SRBPP is a long-term flood risk management project to maintain the integrity of the Sacramento River Flood Control Project (SRFCP). SRBPP will continue to repair erosion threats to banks and levees until current or future flood risk reduction projects are implemented. The site selection process and site-specific design and analysis will include consultation with all affected agencies, councils, and commissions, and will take into consideration other local, regional, and related projects to ensure consistency.

Response to Comment L3-4

Please see the response to Comment L3-3 above.

Response to Comment L3-5

Please see the response to Comment L3-3 above.

Response to Comment L3-6

Please see the response to Comment L3-3 above.

Response to Comment L3-7

Please see the response to Comment L3-3 above.

Response to Comment L3-8

Please see the response to Comment L3-3 above.

Response to Comment L3-9

This comment brings up three concerns, each of which are addressed below.

Concern #1

Increased rearing habitat for salmon done incorrectly would result in more habitat for predators instead.

Response to Concern #1: Mitigation design features for levee repair projects are based in large part on current understanding of the importance of shallow nearshore habitat for juvenile salmonids, which has been well documented in the scientific literature (e.g., Garland et al. 2002, Beechie et al. 2005, Tiffan et al. 2006) and supported by the results of the long-term monitoring program for the SRBPP (FISHBIO 2015a, 2015b). The incorporation of features typically associated with natural shorelines (shallow water, large woody material) into levee repair designs to improve their cover and refuge functions is especially critical in the project area where pelagic predators are numerous (e.g., striped bass) and much of the shoreline is dominated by steep, armored levees. Although the benefits of such habitat are most often associated with smaller, rearing individuals (McLain and Castillo 2009; H.T. Harvey & Associates and PRBO Conservation Science 2011), good quality channel margin habitat also functions as holding habitat during downstream migration (Burau et al. 2007; Zajanc et al. 2012), thereby reducing exposure of migrants to roving mid-channel predators.

Fish sampling and habitat characterization at various levee repair and “naturalized” sites along the Sacramento River in 2011–2015 showed that the abundance of juvenile salmonids is higher at mitigated repair sites than at unmitigated (rock revetment) reference sites, and, for some mitigation designs (10:1 slope), approximates or exceeds habitat use at naturalized sites (FISHBIO 2015a, 2015b). The observed associations between juvenile Chinook salmon and steelhead occupancy of nearshore areas and bank slopes, woody material, and substrate are generally consistent with current conceptual models used in designing mitigation design features (e.g., Standard Assessment Methodology-based species responses).

The planning and design process also includes recognition of the association of certain nonnative predators (e.g., smallmouth and largemouth bass) with shallow water and other mitigation features (e.g., woody material) that may reduce the overall value of the designs for the target species. Although the levels of predation associated with the current mitigation designs are unknown, monitoring has shown that black bass are generally associated with steeper banks (deeper water) and larger substrate (rock) than are juvenile salmonids (H.T. Harvey & Associates 2011 and PRBO Conservation Science; FISHBIO 2015a), suggesting that levee repair designs with gently sloping banks (shallow water) and finer substrate can be effective in reducing the co-occurrence of these species at the repair sites. Another important aspect of the current designs that limits potential interactions of black bass and native fishes at the repair sites is the construction of shallow-water benches at elevations that limit potential utilization of these habitats to the winter and early spring (December through March) when high flows and cooler water temperatures favor occupation by juvenile salmonids and other native fishes over black bass and other warmwater species that are generally more active later in the season.

Concern #2

Under Alternative 4 there would be increased BM4-type measures creating quiescence zones for settling out sediment upstream of the Delta and thereby reducing downstream transport.

Response to Concern #2: Overall, this type of accretion has not been observed at previously repaired SRBPP sites with similar designs. Albeit unquantified, observations at various existing protection sites suggest that bench designs have not demonstrated any significant sediment deposition over time. Some locations have illustrated deposition driven by hydrologic conditions, such as major prolonged flood flow events, which result in a significant amount of sediment movement; however, sediment then slowly erodes through remobilization in subsequent events so that there is little evidence of long-term major accumulation. It is also important to place any potential effects into the context of the overall scale of the system. As a conservative, exaggerated scenario, consider if all 80,000 linear feet (LF) of bank protection had a 15-foot-wide bench that deposited 6 inches of sediment without subsequent remobilization, resulting in 600,000 cubic feet less sediment entering the Delta (= ~17,000 cubic meters, or ~14,400 metric tons based on density of 850 kilograms per cubic meter from Porterfield 1980). This would amount to just over 1% of sediment otherwise entering the Delta from the Sacramento River (Wright and Schoellhamer 2005). However, as noted above, remobilization tends to occur.

Concern #3

Alternative 3A would involve setback levees with a habitat/meander zone between the existing and new setback levee that may also result in turbidity settling out of the water column.

Response to Concern #3: Construction of setback levees would allow an active meander process. The replacement of a meander process would provide much greater sediment input to the system downstream than any potential accretion on the floodplain area.

Response to Comment L3-10

It is acknowledged that there is some uncertainty related to how turbidity could change with respect to bank protection actions proposed under the SRBPP. As the comment notes, the SRBPP aims to reduce scouring effects; however, this will be done in such a manner that the fundamental flood management function of the system is not compromised. Current conceptual models for sedimentation in the Delta note that bank protection actions can increase or decrease sediment supply to the Delta (Schoellhamer et al. 2012): “While bank protection would tend to reduce sediment supply from the banks of the river, levees tend to confine flows, potentially resulting in erosion of the channel bed and increased sediment supply. The levees also serve to isolate the flood basins, which were likely depositional environments during floods, keeping the flood flows and suspended sediment in the channel... Thus, the various flood-control measures that have been implemented affect sediment supply in different ways, and these processes have not been quantified such that a net effect can be discerned.” Note also that the inclusion of some bank protection designs such as setback levees and adjacent levees may increase somewhat the amount of erodible material entering the Delta as existing levees are degraded further.

Response to Comment L3-11

Site-specific design and analysis will take into consideration other local and related projects, including the Emergency Drought Barriers, to ensure consistency and coordinate or modify construction schedules, if necessary.

1 **Response to Comment L3-12**

2 The delta smelt life history discussion in Chapter 11, Section 11.2.2.3 has been updated with current
3 studies.

3.2 Tribes

3.2.1 Letter T1—United Auburn Indian Community of the Auburn Rancheria, Marcos Guerrero, January 27, 2015

Letter T1

From: [Mulvey, Brian M SPK](#)
To: [McNair, Natalie](#)
Subject: FW: SRBPP: Draft PACR/EIR/EIS (UNCLASSIFIED)
Date: Tuesday, February 24, 2015 10:08:04 AM

Classification: UNCLASSIFIED
Caveats: NONE

-----Original Message-----

From: Marcos Guerrero [<mailto:mguerrero@auburnrancheria.com>]
Sent: Tuesday, January 27, 2015 10:00 AM
To: Mulvey, Brian M SPK; Kirchner, Alicia E SPK
Cc: Jason Camp
Subject: [EXTERNAL] SRBPP: Draft PACR/EIR/EIS

Hello Brian,

Would it be possible to receive a copy of the GIS for the preferred alternatives of this project so we can assess the potential impacts to known cultural and natural resources?

This would help facilitate our inventory search. Also, can we get the latest version of any cultural resources records search, survey and inventory, and/or evaluation reports that have been prepared?

T1-1

Marcos Guerrero, RPA
Cultural Resources Manager
United Auburn Indian Community of the Auburn Rancheria
10720 Indian Hill Road
Auburn, CA 95603
Office: (530) 883-2364
Cell: (916) 300-8792
Fax: (530) 885-5476

Nothing in this e-mail is intended to constitute an electronic signature for purposes of the Electronic Signatures in Global and National Commerce Act (E-Sign Act), 15, U.S.C. §§ 7001 to 7006 or the Uniform Electronic Transactions Act of any state or the federal government unless a specific statement to the contrary is included in this e-mail.

Classification: UNCLASSIFIED
Caveats: NONE

3.2.1.1 Response to Letter T1**Response to Comment T1-1**

The 106 erosion sites presented in this EIS/EIR are only a representative sample selected for the purposes of this EIS/EIR's programmatic analysis. These specific sites may or may not receive bank protection under Phase II of the SRBPP. Although the SRBPP Phase II 80,000 LF Supplemental Authority will consist of individual bank protection sites on SRFCP levees, these sites are not analyzed at a site-specific level as part of this programmatic EIS/EIR because new sites will continue to be identified through annual erosion surveys, and existing sites may change from year to year. The site selection process described in Chapter 2 will be used to determine priority and design for sites to move forward for construction each year. Once a site is identified to move forward, site-specific analyses will be prepared and appropriate consultation will occur. The latest inventory of erosion sites can be found at this website: <http://www.spk.usace.army.mil/Missions/Civil-Works/Sacramento-River-Bank-Protection>. Because this EIS/EIR is programmatic in scope, no records searches, surveys, inventories, or evaluation reports have been generated yet for the SRBPP Phase II Supplemental Authority.

3.2.2 Letter T2—Colusa Indian Community Council, Oscar Serrano, January 29, 2015

Letter T2

From: [Mulvey, Brian M SPK](#)
To: [McNair, Natalie](#)
Subject: FW: Sac River Bank Protection project (UNCLASSIFIED)
Date: Tuesday, February 24, 2015 10:08:30 AM
Attachments: [Untitled Extract Pages.pdf](#)

Classification: UNCLASSIFIED
Caveats: NONE

-----Original Message-----

From: Oscar Serrano [<mailto:oserrano@colusa-nsn.gov>]
Sent: Thursday, January 29, 2015 2:26 PM
To: Mulvey, Brian M SPK
Cc: SacRiverBank
Subject: [EXTERNAL] Sac River Bank Protection project

Hi Brian,

Could you please provide me with additional information regarding the improvements that are being proposed immediately north of Colusa along the Sacramento River in your Sacramento River Bank Protection Project. Figures 2-3 through 2-7 in the EIR/EIS show improvements at this location but it does not say what they are. The location appears to be very close to the reservation.

T2-1

Thanks,

Oscar.

Oscar Serrano, P.E.
Senior Engineer

Water Resources Division

Colusa Indian Community Council
3730 Highway 45
Colusa, CA 95932

P 530.458.8231

C 530.682.5412

F 530.458.3866
oserrano@colusa-nsn.gov

www.colusa-nsn.gov <<http://www.colusa-nsn.gov/>>

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Classification: UNCLASSIFIED
Caveats: NONE

3.2.2.1 Response to Letter T2

Response to Comment T2-1

The erosion site identified in the Draft EIS/EIR just upstream from Colusa on the Sacramento River is the left bank site at river mile 152.8. Table 2-2 identifies the specific bank protection measures assigned to each site for each alternative; under the preferred alternative (Alternative 4A and Sub-Alternative 4B), the proposed treatment for this site would be Bank Protection Measure 4b, a riparian bench with revegetation and instream woody material above and below summer/fall waterline. However, it is important to note that the 106 erosion sites presented in the EIS/EIR are only a representative sample selected for the EIS/EIR analysis. These specific sites may or may not receive bank protection under Phase II of the SRBPP. New sites will continue to be identified through future erosion surveys, and existing sites may change from year to year, so actual selection of sites will depend on the current annual inventory at time of selection. Although the SRBPP Phase II 80,000 LF Supplemental Authority will consist of individual bank protection sites on SRFCP levees, specific sites are not analyzed at a site-specific level as part of this programmatic EIS/EIR. The latest inventory of erosion sites can be found at this website: <http://www.spk.usace.army.mil/Missions/Civil-Works/Sacramento-River-Bank-Protection/>. Additionally, the alternatives presented in this EIS/EIR are programmatic in nature and have been developed for analysis purposes only. A design selection process for individual sites will be carried out prior to implementation, including additional project-specific environmental review as may be appropriate, tiering from this EIS/EIR's programmatic analysis.

3.2.3 Letter T3—Tewe Kewe Cultural Center, James Sarmento, February 24, 2015

Twitter: www.twitter.com/USACESacramento

Letter T3

BUILDING STRONG®

From: James Sarmento [mailto:JSarmento@yochadehe-nsn.gov]
Sent: Tuesday, February 24, 2015 4:35 PM
To: Hess, Erin E SPK
Cc: Anthony Flores
Subject: [EXTERNAL] Sacramento River Bank Protection Project

Hi Erin,

I was wondering if we could make some time on Tuesday next week to talk with you regarding the Sacramento River Bank Protection Project. I am not sure if this is your project or if it falls under a different division. Basically, I was going through the file and we seem to have a lot of missing information. Basically, I wanted to see if we could get copies of the Correspondences between Yocha and USACE, as well as any agreements we may have signed (PA or MOA or MOU etc.).

T3-1

If you can please forward this to the right person that would be great.

Respectfully,

James

James Sarmento

Cultural Resources Manager

Tewe Kewe Cultural Center

PO Box 18 | Brooks, CA 95606

c 530.723.0452 | p 530.796.3400 | f 530.796.2143

jsarmento@yochadehe-nsn.gov <<mailto:bseibel@yochadehe-nsn.gov>>

www.yochadehe.org

file:///K:/...ment%20Files/Yocha%20Dehe%20FW%20Sacramento%20River%20Bank%20Protection%20Project%20(UNCLASSIFIED).txt[3/25/2015 9:17:08 AM]

1 **3.2.3.1 Response to Letter T3**

2 **Response to Comment T3-1**

3 The Corps forwarded all SRBPP correspondence with the Yocha Dehe Wintun Nation on file to James
4 Sarmiento on May 15, 2017 (Martin pers. comm.).

Non-Governmental Organization and Business Comments and Responses

This chapter contains the comments received on the Draft EIS/EIR from non-governmental organizations and businesses. Each comment letter has been assigned a unique code, and each comment within the letter has also been assigned a unique code, noted in the right margin. For example, the code “N2-1” indicates the first distinct comment (indicated by the “1”) in the letter from River Partners, which was the second letter (indicated by the “2”) recorded from a non-governmental organization (indicated by the “N”). The chapter presents each comment letter immediately followed by the responses to that letter. Table 4-1 summarizes the commenting party and comment letter signatory.

Table 4-1. Non-Governmental Organizations and Businesses Commenting on the Draft EIS/EIR

Letter Number	Commenter	Date
Non-Governmental Organizations		
N1	Lucas R. RossMerz, Sacramento River Preservation Trust	February 26, 2015
N2	Helen Swagerty, River Partners	February 27, 2015
N3	Ryan Luster, The Nature Conservancy	February 27, 2015
Businesses		
B1	Nicole S. Suard, Snug Harbor Resorts, LLC	February 25, 2015

4.1 Non-Governmental Organizations

4.1.1 Letter N1—Sacramento River Preservation Trust, Lucas R. RossMerz, February 26, 2015



Letter N1

February 26, 2015

U.S. Army Corps of Engineers
1325 J Street
Sacramento, CA 95814
Attention: Brian Mulvey
916-557-6708

Central Valley Flood Protection Board
3310 El Camino Avenue
Sacramento, CA 95821
Attention: Kip Young
916-574-2559

Subject: Sacramento River Bank Protection Project Environmental Impact Statement/ Environmental Impact Report Public Draft Comments from the Sacramento River Preservation Trust (State Clearinghouse #2009012081)

Dear Mr. Mulvey and Mr. Young,

This letter outlines the initial comments from the Sacramento River Preservation Trust (Trust) has chosen to submit regarding the Sacramento River Bank Protection Project Environmental Impact Statement/ Environmental Impact Report (State Clearinghouse #2009012081) released in November of 2014, as prepared by ICF International and HDR Engineering, Inc.

The Trust has been working with government agencies, non-governmental organizations, and an array of diverse stakeholder groups, to preserve, protect, and enhance the natural values of the Sacramento River since 1984. Our staff and board of directors have been reviewing documents related to flood protection, riparian habitat alteration, threatened and endangered species, and other topics related to the Sacramento River Watershed for decades. We have been working for the last thirty years to encourage a holistic system-wide approach to managing the Sacramento River for habitat, species, farms, families, and flood protection.

Recently we have been participating in the Middle and Upper Sacramento River Regional Flood Management Planning efforts. We have also been following the progress related to state flood planning documents, including the Conservation Strategy. While we are excited by some of the forward thinking alternatives and site-specific mitigation approaches to flood control that have been included in this most

recent version of the Sacramento River Bank Protection Project, we have some concerns regarding the amount of congruency between state plans, goals, and strategies, and those listed or identified in this federal project proposal.

We have reviewed the above referred DEIR/S and appreciate the opportunity to provide comments and questions described below.

Role of the State

The description of the project purpose and background (pages 1-1,2,3,4) makes little or no mention of the California's role as partner in this project, specifically the reason the Central Valley Flood Protection Board (CVFPB) is the CEQA lead for the document. These sections should describe the State Plan of Flood Control (SPFC) as the state's authority and interest. The only reference we found in the DEIR/S was in Figure 1-2, in the section on related activities which incorrectly left off the CVFPB as a lead. This section, beginning page 1-5 should be organized in a logical progression, starting with the CVFPB, rather than a seemingly random list of projects.

N1-1

We note that although this is meant to be a joint document between the ACOE and the CVFPB, there are seven listed contributors from the ACOE and only two listed under the Department of Water Resources (page 25-1) and none from the CVFPB itself.

N1-2

Over the years, the Trust has seen promises by California and the federal government that a system-wide approach, emphasizing a corridor ecosystem as well as a more rational way to maintain levees and other structures, will be forthcoming. The ACOE Comp Study promised this, yet has failed to deliver to date.

The new State CVFPP, and accompanying Conservation Strategy, now promises again a more system-wide, sustainable approach. Sadly, this DEIR/S is not a new way of doing business and will lead to more chipping away at the Sacramento River watershed's important riverine-riparian resources. The ACOE and the CVFPB should make a more concerted effort to utilize the new approaches represented by the CVFPP and specially the Conservation Framework (2012) and the draft Conservation Strategy now under review.

N1-3

Project Description and Alternatives

In the Project Purpose and Objectives section, page 1-3: lines 17-25, and elsewhere in the document, the levee system is described as having been created to scour Gold Rush sediment. This is not true for upstream areas north of Colusa, where levees are set back, and not the case for the Delta, where boat wakes and tides, not scouring "hungry water," are the problem. The Delta levees are described correctly elsewhere in the document - even on the same page (page 1-3, lines 37-38). The problems of the

N1-4

levees should be consistently described throughout the document, not a simplistic repetition of the scour issue.

N1-4
cont'd

The review of this document was difficult and submitting comments based on the 106 sites described in some detail within the document may not be effective because, as stated in the document (page 1-5, line 19), "specific sites are not identified or analyzed." Due to the programmatic approach of this document which used economic analysis of feasibility within basin regions some areas have been left out for future site-specific considerations. This does not fit in to the system-wide approach to protect urban and rural areas of the valley that the state has been working toward. For example, will Colusa Basin be left out completely for further consideration of federal Sac Bank assistance?

N1-5

Another questions we have is how was the 80,000 linear feet of bank protection number arrived at? Is this an arbitrary number, or does it have legitimate scientific and engineering reasons for the amount authorized?

N1-6

There needs to be a thorough description for why the preferred alternative(s) (Alternative 4A-Habitat Replacement & Sub-Alternative 4B-Habitat Replacement with Economically Justified Basins) were selected and why the environmentally preferred alternative (Alternative 3A-Maximize Meander Zone) was not - simple declarations are not justifications.

N1-7

It is difficult to understand the difference between project alternatives and bank protection alternatives. For example, Alternative 6 is a combination of bank protection measures, but with Engineering Technical letter (ETL) variance.

N1-8

Since an ETL variance for vegetation would avoid significant habitat impacts, why isn't this applied to the environmentally preferred alternative to make it even better? Further, why isn't ETL variance a mitigation measure for all alternatives?

N1-9

Vegetation, Fisheries, and Wildlife:

The chapters present the usual menu of impact analysis, avoidance, and at least partial mitigation for the footprint of a bank protection project. Unfortunately this will not be adequate to avoid the significant impacts to the riverine-riparian ecosystem, which will continue to accumulate as more bank protection work and maintenance of the levee systems move forward.

N1-10

The cumulative effects analysis (beginning page 22-3) is woefully inadequate. First, the SRFCP, and the previous Sacramento River Bank Protection Projects should be the most important past and current projects discussed here. It is incontrovertible that the flood control system has caused major adverse impacts on the ecosystems within the Sacramento River Valley. Oddly, this section includes some fish and wildlife restoration projects, and places an unusual emphasis on beneficial projects, rather than

N1-11

ecologically harmful projects. This section should also cover water management for flood control as well as the physical footprint of the flood control project(s).

N1-11
cont'd

Concluding Comments:

Thank you for the opportunity to comment on this document and I look forward to hearing back from you as to how we can work together to foster a more system-wide approach using multi-benefit flood control applications within the Sacramento River Watershed in order to achieve our common goal to create watersheds that are functional, healthy, and safe. Please contact me to confirm your receipt of these comments and questions, and with any further project updates.

Sincerely,



Lucas R. RossMerz
Executive Director
Sacramento River Preservation Trust
631 Flume Street
Chico, CA 95928
530-345-1865
lucas@sacrivertrust.org

4.1.1.1 Responses to Letter N1**Response to Comment N1-1**

Language has been added to Chapter 1 explaining why the Central Valley Flood Protection Board (CVFPB) is the state partner of the U.S. Army Corps of Engineers (Corps) in implementing the Sacramento River Bank Protection Project (SRBPP). The discussion of the Central Valley Flood Protection Plan, which presents CVFPB's systemwide investment approach for long-term flood management in areas currently protected by facilities of the State Plan of Flood Control (SPFC) has been moved up to be first in the list of "Related Flood Risk Reduction Activities," and Figure 1-2 has been corrected to show CVFPB as the lead for the SPFC and the SRBPP.

Response to Comment N1-2

California Department of Water Resources Division of Flood Management staff is acting on behalf of the CVFPB during preparation of this environmental document.

Response to Comment N1-3

Please see the response to Comment S2-42 in Chapter 2 of Volume II.

Response to Comment N1-4

The following text has been added to the "Purpose and Need and Objectives" section of the Executive Summary (Section ES.3) and the "Project Purpose and Objectives" section of Chapter 1, Section 1.2: "The upper reaches of the Sacramento River levees in the SRFCP are set back from the river and encounter erosive forces less frequently, but can still occasionally experience erosion during high winter flows. In the Delta region, high winter flows, boat wakes, and tides have eroded levee banks along the network of waterways that convey water toward the San Francisco Bay."

Response to Comment N1-5

Please see the response to Comment F2-1 in Chapter 2 of Volume II.

Response to Comment N1-6

SRBPP authorization is unique due to the fact the project is based on linear footage and not tied with federal Section 902 Cost Limit Policy. The additional 80,000 linear feet (LF) was roughly based on 20% of the original Phase II authorization of 405,000 LF.

Response to Comment N1-7

Please see response to Comment F2-3 in Chapter 2 of Volume II.

Response to Comment N1-8

Comment noted. The SRPBB is a complex program with many options, and all efforts were made to ensure the EIS/EIR was as clear as possible. Thank you for your careful review of the document.

Response to Comment N1-9

Please see the response to Comment S4-8 in Chapter 2 of Volume II.

Response to Comment N1-10

Please see the response to Comment S2-45 in Chapter 2 of Volume II.

Response to Comment N1-11

Thank you for reviewing the document so closely. Table 22-1 was misrepresented and misplaced in Chapter 22, which led the reader to infer that the bulk of projects considered for the cumulative effects analysis were fish and wildlife restoration projects. This is not the case; the cumulative effects analysis focused most closely on other flood-risk reduction projects, which are described in Section 22.2.2.1. The additional projects in Table 22-1 are included only because they could affect fish and wildlife that utilize the SRBPP area. Table 22-1 has been moved to its intended location at the end of Section 22.2.2 and clarifying language has been added to the section.

4.1.2 Letter N2—River Partners, Helen Swagerty, February 27, 2015



Letter N2

MISSION STATEMENT:
CREATING WILDLIFE HABITAT
FOR THE BENEFIT OF PEOPLE
AND THE ENVIRONMENT.

BOARD OF DIRECTORS

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February 27, 2015

Department of the Army
U.S. Army Engineer District, Sacramento
Corps of Engineers
1325 J Street
Sacramento, California, 95814-2922

Subject: Public Draft Post Authorization Change Report and Programmatic
Environmental Impact Statement/Environmental Impact Report for the Sacramento
River Bank Protection Project (SRBPP) Phase II Supplemental Authority

Dear Mr. Brian Mulvey:

River Partners is a 501(c)(3) non-profit corporation dedicated to creating wildlife habitat. We have reforested more than 8,000 acres of riparian land, providing essential habitat for wildlife, including threatened and endangered species. Our goal is to balance the basic requirements of wildlife populations with the economic and recreational needs of local citizens.

River Partners staff has reviewed the subject document and provides the following comments:

- Bank Protection Measure 1-Setback Levee, offers the greatest long term benefit to flood safety while also offering the best alternative for management of the State's natural resources. Great examples of setback levees include Three Rivers Levee Improvement Authority's Bear and Feather River Setback projects that resulted in expanding the floodplain by 2,225 acres, creating over 750 acres of habitat and re-establishing floodplain connectivity. **N2-1**
- Although it doesn't provide as much new habitat as a setback levee, Bank Protection Measure 3-Adjacent Levee provides a net increase in riparian habitat. In areas that are narrow or limited by land-use, an adjacent levee affords some flexibility in providing additional habitat that can aid in species recovery. **N2-2**
- Please reconsider Alternative 3A-Maximize Meander Zone, which the Environmentally Superior Alternative. This alternative removes only 7.60 acres, but allows for on-site mitigation and provides a net increase in riparian habitat (26.99 acres) unlike the preferred alternative (25.22 acres removed and 25.55 acres created). **N2-3**
- Alternative 3A allows for natural river processes to occur. Many native flora and fauna depend on these processes (channel movement/meander, erosion, and **N2-4**

deposition) for their survival. Installing 80,000 linear feet of additional bank protection will perpetuate the slide of many species toward extinction.

- River Partners is concerned about the effects and mitigation measures outlined in the document on both floral and faunal resources within the system. To use the bank swallow as an example - On the Sacramento River and its tributaries, the most important overall threat to Bank Swallows has been the gradual loss of river processes that provide habitat for Bank Swallows and other wildlife. Bank Swallow populations have been impacted through direct mortality, as well as loss of suitable nesting and foraging habitat resulting from land conversion, bank stabilization, flood management activities, and water supply operations throughout California (Remsen, 1978; Humphrey and Garrison, 1987; CDFG, 1992; Schlorff, 1997). To help address these issues the Bank Swallow Technical Advisory committee was formed. This diverse coalition of State and federal agency and NGOs produced a conservation strategy for the species (http://www.sacramentoriver.org/bans/bans_lib/BANSConsStrat_062813_final.pdf). River Partners requests the Sac Bank project follow the recommended conservation actions outlined in the document.

N2-4
cont'd

N2-5

River Partners appreciates the opportunity to comment on the Public Draft EIS/EIR for the Sacramento River Bank Protection Project. If you have any questions, please contact me at (530) 894-5401 ext. 227 or via email at hswagerty@riverpartners.org.

Sincerely,



Helen Swagerty
Senior Restoration Biologist/Project Manager

4.1.2.1 Responses to Letter N2**Response to Comment N2-1**

Thank you for reviewing the document. Comment noted.

Response to Comment N2-2

Comment noted.

Response to Comment N2-3

Please see the response to Comment S2-28 in Chapter of Volume II.

Response to Comment N2-4

The updated Site Selection and Implementation Process described in Chapter 2 recognizes the need to protect environmental resources. As a result, there are several steps that incorporate conservation of environmental resources into the process. These include Step 5 (Identify Opportunities and Constraints) and Step 6 (Conceptual-Level Alternatives). Step 6 in particular involves evaluation of the feasibility of implementing a setback or an adjacent levee, either of which can allow natural river processes to continue.

Response to Comment N2-5

The Corps and CVFPB are aware of, and have had some participation, in the Bank Swallow Technical Advisory Committee. Specific to bank swallows, mitigation measure WILD-MM-1 requires field surveys and habitat assessments in order to avoid direct mortality. Mitigation Measure WILD-MM-2 includes redesign or modification of actions (such as setback or adjacent levees) to avoid direct and indirect effects and to preserve bank swallow habitat (including existing or suitable nesting habitat).

4.1.3 Letter N3—The Nature Conservancy, Ryan Luster, February 27, 2015



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nature.org

Letter N3

Alicia Kirchner
Chief, Planning Division
Army Corps of Engineers – Sacramento District
1325 J Street
Sacramento, CA 95814-2922

February 27, 2015

Re: Public Draft Sacramento River Bank Protection Project EIR/EIS, November 2014
(SCH 2009012081).

Dear Ms. Kirchner,

Thank you for the opportunity to provide comments on this project. We are concerned about the placement of bank revetment on the Sacramento River and its tributaries because of the well documented adverse impacts that it has on the health of the river and its natural communities. In a recent characterization of the status and trends of the riparian ecosystem on the Sacramento River, bank revetment was identified as one of the greatest ongoing threats to both terrestrial and aquatic biota (Golet et al. 2013).

While we recognize that in certain instances it is absolutely necessary to halt erosion in order to protect critical infrastructure, we have witnessed some bank revetment projects (e.g., Sacramento River mile 182R) that have gone far beyond what was needed. These projects were completed without proper planning, and as a consequence, were much more environmentally damaging and expensive than was needed. In an effort to avoid similar outcomes in the future, we provide comments on the proposed project, as well as suggested steps that should be taken in the near term.

Comments on the proposed project:

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. This project should not include the repair of erosion sites where no critical infrastructure is imminently threatened. For all repair sites determinations must be made as to whether or not it is possible to allow continued meander. In general, a wider range of alternatives should be feasible on the reaches of the Sacramento River above Colusa, where levees do not directly align the channel on both sides. The river bank should be allowed to erode when possible. Flood easements and/or setback levees should be given primary consideration when seeking long-term, cost effective solutions. | <div style="border-left: 1px solid black; padding-left: 10px;">N3-1</div> |
| <ol style="list-style-type: none"> 2. Placing new bank revetment should always be the last resort. Purchasing highly erodible lands for long-term conservation ownership may be considerably less expensive over the long term than continuing to repair erosion sites through traditional placement of revetment. | <div style="border-left: 1px solid black; padding-left: 10px;">N3-2</div> |
| <ol style="list-style-type: none"> 3. Although each erosion site must be considered individually, there must be consideration given to reach and watershed effects. Issues of temporal and spatial scale must be considered to | <div style="border-left: 1px solid black; padding-left: 10px;">N3-3</div> |



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characterize likely impacts on natural river processes such as erosion and sediment deposition, as well as important human considerations such as flood protection.

N3-3
cont'd

4. In addition to considering the full range of impacts (as called for above), there should be an assessment of the *cumulative* impacts of all the bank revetment that has been done to date in addition to the 80,000 feet proposed under this EIS/R. Incremental repair projects may not lead to large additional impacts to the environment, but in combination with all the past work that has been done, the impacts are substantial.

N3-4

5. Although it is stated that a range of different solutions (site specific measures BM1 – BM5 within Alternatives 1-5) were considered for individual repairs, Alternative 4 has been selected as the Preferred Alternative which will employ site specific measure BM4b (Riparian Bench with Revegetation and Instream Woody Material above and below Summer/Fall Waterline) on all repair sites above Colusa on the mainstem of the Sacramento River (Sacramento River miles 172, 168.3, 163, 152.8). This indicates that no other alternatives, such as levee setbacks will be used for repairing Sacramento River mainstem sites above Colusa where the Sacramento River is still able to meander laterally in a limited manner. Given the lack of critical infrastructure in the vicinity of these erosion sites, and the urgent need to restore river meander, we strongly recommend these repair sites be re-evaluated, and that the levee setback (BM1) alternative be selected as the preferred alternative.

N3-5

6. Trees are needed along the levees. Flume experiments conducted at the University of California Davis suggest that trees do not necessarily increase erosion potential on levees (Chen et al. 2009).

N3-6

We strongly advocate that it is time for the Corps to embrace a new paradigm in how bank erosion is treated along the Sacramento River. As was determined in our extensive research on river processes, bank revetment is highly detrimental to the functioning of a healthy Sacramento River (Golet et al. 2013). Alternatives to the outdated use of bank revetment exist that are less expensive over the long term, and that enable river processes that benefit both people and nature. We look forward to seeing changes in how the Corps plans and implements projects under Sac Bank, and to working with you to develop alternatives to bank revetment on these important projects in the future.

N3-7

Sincerely,

Ryan Luster
Project Director
The Nature Conservancy
rluster@tnc.org
(530) 897-6370, ext. 213

Citations:



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Chen Z.Q. R., M.L. Kavvas, H. Bandeh, E. Tan, J. Carlon, F.T. Griggs, and S. Lorenzato. 2009. Study of the roughness characteristics of native plant species in California floodplain wetlands. Report to Department of Water Resources State of California.

Golet G.H., D.L. Brown, M. Carlson, T. Gardali, A. Henderson, K.D. Holl, C.A. Howell, M. Holyoak, J. Hunt, G.M. Kondolf, E.W. Larsen, R.A. Luster, C. McClain, C. Nelson, S. Paine, W. Rainey, Z. Rubin, F. Shilling, J.G. Silveira, H. Swagerty, N.M. Williams, and D.M. Wood. 2013. Successes, Failures and Suggested Future Directions for Ecosystem Restoration of the Middle Sacramento River, California. *San Francisco Estuary and Watershed Science* 11(3):1-29.
<http://www.escholarship.org/uc/item/0db0t6j1>.

4.1.3.1 Responses to Letter N3

Response to Comment N3-1

The updated Site Selection and Implementation Process described in Chapter 2 recognizes the need to protect environmental resources and allow natural processes to occur. As a result, there are several steps that incorporate conservation of environmental resources into the process. These include Step 5 (Identify Opportunities and Constraints) and Step 6 (Conceptual-Level Alternatives). Step 6 in particular involves evaluation of the feasibility of implementing a setback or an adjacent levee, either of which can allow natural river processes to continue. Specific to areas upstream of Colusa, this area currently does not contain economically justified basins. As a result, SRBPP would not implement projects in this reach. It should be noted that economic analyses are revisited approximately every 5 years and the status of individual basins could change.

Response to Comment N3-2

The overall sentiment of this comment has been noted. The SRBPP is authorized only to repair individual erosion sites to maintain the integrity of the SRFCP. These sites are typically small (ranging from a few hundred to several thousand feet), and there are economic as well as environmental challenges involved in attempting setback levees at this scale. However, the Corps will continue to consider setback levees at each economically justified site.

Response to Comment N3-3

Please see the response to Comment S2-45 in Chapter 2 of Volume II.

Response to Comment N3-4

Please see the response to Comment S2-45 in Chapter 2 of Volume II.

Response to Comment N3-5

This EIS/EIR is a programmatic evaluation covering the implementation of 80,000 LF of erosion repair. The site selection process, detailed in Chapter 2, explains how erosion sites are identified and repair options are evaluated. For EIS/EIR impact evaluation, the preferred alternative is Alternative 4A; however, when a site is selected for erosion repair under the SRBPP, site-specific design and project-level environmental documentation will determine which of the bank protection measures is to be applied. Setback levees have not been ruled out as a possibility for sites upstream of Colusa if setback levees are economically feasible and necessary to optimize environmental benefits and/or minimize impacts.

Response to Comment N3-6

The Corps and the CVFPB agree regarding the importance of trees remaining on levees and providing erosion protection. However, at sites where erosion has encroached into the engineered levee slope, erosion repairs are required to maintain the functionality of the SRFCP. Please see the response to Comment S4-8 in Chapter 2 of this volume for a discussion of obtaining a variance from the Guidelines for Landscape Planting and Vegetation Management at Levees, Floodwalls, Embankment Dams, and Appurtenant Structures.

- 1 **Response to Comment N3-7**
- 2 Please see the response to Comment N3-2.

4.2 Businesses

4.2.1 Letter B1—Snug Harbor Resorts LLC, Nicole S. Suard, February 25, 2015



February 25, 2015

Re: Public Notice SPK-2014-00187 and also Public Draft State Clearinghouse #2009012081

Request for extension of public comment period and request for public meeting called by USACE sent via email to the following persons:

Mr. William Guthrie, Project Manager
US Army Corps of Engineers, Sacramento District
1325 J Street, Room 1350
Sacramento, California 95814-2922
Email: william.h.guthrie@usace.army.mil

Mr. Brian Mulvey, Senior Fishery Biologist
Brian.M.Mulvey@usace.army.mil

Ms. Alicia E. Kirchner, Chief, Planning Division, Environmental Resources Branch
SacRiverBank@usace.army.mil

Dear Mr. Guthrie, Mr. Mulvey and Ms. Kirchner:

This letter is a request for public meeting and request for extension of comment period, submitted regarding Public Notice SPK-2014-00187, and also is a request for extension of comment period for the Sacramento River Bank Protection Project, as the cumulative impacts from the joint proposed projects has not been addressed and could cause substantial flood risk and environmental damage and harm to humans and native fish species. Project documents can be found at the following links: http://www.water.ca.gov/waterconditions/docs/Emergency_Drought_Barriers_Initial_Study_and_Proposed_Mitigated_Negative_Declaration.pdf and http://www.spk.usace.army.mil/Portals/12/documents/civil_works/SacBank/SRBPP-Phil-PACR-EIS-EIR_InterestedParties22DEC2014.pdf and <http://www.spk.usace.army.mil/Missions/CivilWorks/SacramentoRiverBankProtection.aspx>. This request applies to both Public Notice SPK-2014-00187 and to Public Draft State Clearinghouse #2009012081 including its attachments, addendums and change orders. (No public notice published date or Public Notice SPK number was provided on the notice of meetings and review letter published online and signed by Alicia E. Kirchner, Chief, Planning Division, USACE, Sacramento, Environmental Resources Branch)

2/25/2015 Suard request Page 1 of 6

The cumulative impact of the combined projects, and the flood risk impacts of the individual projects has not been adequately assessed or reported by DWR to USACE in the documents reviewed. I own land and a business located on the waterside of Steamboat Slough, and will be one of the impacted persons should USACE fail to consider the real cumulative impacts from the combined project proposals as opposed to reliance on DWR computer modeling that has been verified to be based on false flow and export baseline data. I therefore request that both SRBPP and the "Barriers" project public comment periods be extended to March 30, 2015 at a minimum, and that public meetings be held in the Delta with the focus of those meetings being the impacts to the persons, environment, aquatic species, navigation, recreation, transportation, agriculture, residents and businesses located within the legal Delta region.

Regarding the "Barriers" proposal, per the notice found at the <http://www.spk.usace.army.mil/Media/RegulatoryPublicNotices/tabid/1035/Article/562903/spk-2014-00187-emergency-drought-barriers.aspx> I request that **at least two public hearings** be held to consider the DWR application for installation of barriers across three navigable rivers of the Delta, including False River, Steamboat Slough and Sutter Slough as proposed in the document found at http://www.water.ca.gov/waterconditions/docs/Emergency_Drought_Barriers_Initial_Study_and_Proposed_Mitigated_Negative_Declaration.pdf Per the notice found at <http://www.spk.usace.army.mil/Missions/CivilWorks/SacramentoRiverBankProtection.aspx> I am requesting public hearing to address the possible cumulative flood risk associated with the joint proposal riverine and levee modifications to North Delta navigable waterways specifically, with the focus on the risk to humans, businesses, residents, transportation, navigation and agriculture in the North Delta. I ask that the public comment period for SRBPP, which ends February 27, 2015 be extended to March 30, 2015 or later to give the affected public opportunity to review and understand the cumulative impacts once DWR/USACE better defines those cumulative impacts of both SRBPP and the "Barriers" proposal.

B1-1

I am requesting the public hearings regarding the "barriers" proposal, and for the extension of the public comment period to March 30 2015 or later, for the following reasons:

(A) neither the short term nor long term impacts to fish, agriculture, and landowners has been adequately assessed by DWR for barriers installed for just one year, let alone the possibility of three consecutive years as proposed by DWR. It is very likely, given the project timeline of the SRBPP that the levee work and riparian benches proposed for Steamboat and Sutter Sloughs will impede the travel of the rock barges proposed for the Barriers project, and visa versa. It is very likely the low water levels, modified water quality and changes in hydraulic patterns will negatively impact the freshwater vegetation and restoration sites proposed as mitigation for the SRBPP, which means taxpayer funds will be used to destroy projects to put in other taxpayer-funded flow restriction barriers which will have to be removed by funding not yet defined;

(B) DWR has refused to answer very basic questions or provide adequate documentation to verify DWR's computer modeling assumptions of impacts. Specifically DWR has failed to address the issues submitted at last year's unofficial meeting in Walnut Grove or the recent 2015 unofficial meeting in Clarksburg regarding impacts to water quality on Steamboat and Sutter Sloughs that would affect the tall trees and landscape of recreational facilities and residents located on the water side along Steamboat Slough. DWR provided the benefits to the South Delta export pumps area while ignoring to report the detriments and in particular peak salinity expected in various locations along Steamboat and Sutter Sloughs. Since DWR failed to inform the most affected parties of barrier impacts, I assume USACE scientists and water engineers were also not informed of the impacts of the barriers on the restoration actions of the SRBPP site locations in the same areas. If USACE scientists and water engineers were informed of the proposed barriers planning, from as early as 2004, why wasn't the possibility addressed in the preliminary SRBPP documentation?

(C) DWR has not defined a "trigger point" for installation of one, two or all three barriers which means

B1-2

B1-3

they will install at will with the same disregard as the state agency has shown for at least ten years for the Delta's aquatic environment, native fish, terrestrial forested adjacent reaches and human businesses, residents, recreation and navigation. With no clearly defined trigger for allowance of the installation of the barriers, DWR could install barriers at a time that is detrimental to SRBPP project outcomes, embroiling USACE and the SRBPP planners in the litigation and costs associated with unintended or undefined negative impacts to humans, aquatic species, terrestrial and riverine environment, navigation and agriculture, and loss of use of residents and business lands on or near the subject waterways.

B1-4

(D) Regarding barrier physical locations, DWR has not effectively considered alternatives proposed by local landowners that would be less expensive, less damaging to aquatic species, less damaging to agriculture in the North Delta. If the purpose of the barriers is to create a hydrologic barrier to repel high-salinity water, wouldn't it make more sense to consider the best location to protect the largest agricultural and aquatic as possible in the North Delta by better location of the barriers? One specific proposal brought to the attention of DWR in March 2014 is the concept of placing a single barrier with boat gate lock on Steamboat Slough near the confluence with Cache Slough around river mile 15-16 and utilizing the lands already owned by the government on the Grand Island side. Only one barrier is needed, which should be less expensive to install, but larger culverts and a boat lock rather than ramps would be required to allow continued recreation and navigation on historic Steamboat Slough. Fresh water would be maintained east of the barriers allowing the local farming operations on Grand Island, Ryer Island, Sutter Island and the "Oxford" area to continue without impact to their irrigation practices. Millions of dollars of freshwater restoration work installed by DWR and USACE contractors over the last several years at approximately river mile 16.5-17 would be preserved. And impacts to traffic would be substantially reduced because the barges with rock would need to travel a short distance on deep open water and all landside construction work could be conducted from the Grand Island side where traffic is much more sparse than on the Ryer Island side at that river mile site;

(E) DWR has not identified the funding source for removal of the barriers nor the funding source for mitigation and compensation measures that will be required if the barriers go in;

(F) DWR has not considered the cumulative impacts from installation of the barriers plus installation of the levee repairs and riparian benches which would cause a hindrance of flood flows which, combined with the actions of the SRBPP along Steamboat and Sutter Sloughs could create flood hazard for the residences and businesses located along these waterways, and substantial levee damage risk and flooding for Ryer Island, Grand Island, Sutter Island at a minimum.

(G) The USACE website notice page regarding the "Barriers proposal" provided maps showing the location of the proposed barriers, and reference to the DWR barriers website, but does not provide a way to easily access the actual documents or historical background reference documents nor the computer modeling upon which the salinity impacts are based-information that would be helpful for interested and affected parties to understand the true short and long term impacts of the barriers proposal. The lack of easy access to the documents would appear to be prima facie inadequate notice on the part of USACE;

(H) Current DWR documents regarding impacts from the proposed barriers provide only guesstimates of benefits to water export contractors while ignoring realistic and rational assumed short and long term impacts to North Delta landowners, agriculture, businesses, residents, navigation and aquatic native species and transportation. DWR uses flow data that has been shown to be suspect due to gaps in reported flows, unaccounted for exports, and computer modeling based on false or outdated physical characteristics of the waterways proposed for barriers. For example, flow data for DSM2 may not account for the gaps in CDEC live flow data as reported online. An example of the gaps in flow data can be seen at page 6 of the following document: <http://snugharbor.net/images-2014/comments/wheresthewater/cdecdatagaps.pdf> also <http://www.snugharbor.net/images-2014/news/notices/flowmissingsummarysm.pdf> and for more unanswered questions regarding the last five years of DWR Delta flow reporting please see http://snugharbor.net/dwr_reporting_of_inflow_and_outf.html

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As another example of DWR failure to consider impacts from the barriers project, DWR proposes to begin installation of barriers on May 1 which is prime boating and recreation season, and DWR will cause traffic clogs along State Routes 160 and 84 and hinder use of State Route 220 due to assumed barge travel route. According to DWR, the installation of the barriers will take two months-all during prime recreation time. No mitigation is offered to the impacted businesses in the areas of Walnut Grove and Isleton, at a minimum and for the affected recreation businesses along the waterways since the customers will be discouraged from their normal use due to the traffic hindrance;

(I) DWR estimates of flows and impacts are based on computer model input data that was very likely based on incorrect flow data that was reported by DWR during the time the modeling was done. Since DWR published incorrect flow, export and DICU in the "final" published 2013 Water Plan, one can assume the computer modelers were also provided that incorrect data. As just one example, DWR published the Delta exports and flow summary for 10 years in the FINAL version of the 2013 Water Plan, published at the site shown in the screen print. When DWR was questioned about the missing or unaccounted for water exports, DWR simply changed the chart without providing explanation of the mistake or what the accurate flow and export numbers are, and this happened at the same time as the computer modeling for the barriers. See original DWR flow and export summary at the following link: http://snugharbor.net/images-2014/bdcp/flows/unaccounted_diversions.pdf Which set of numbers did DWR use for the computer modeling to assess impact to the North Delta waterways and lands on the "salty" side of the barriers? DWR has been repeatedly asked what the peak salinity is expected to be on the lower reaches of Steamboat Slough, and that information and the flow data to verify DWR computer modeling has never been provided. For the review of unaccounted for flows and exports based on the data provided by DWR, please see http://snugharbor.net/dwr_reporting_of_inflow_and_outf.html

(J) Quoting the DWR document, "*The purpose of the barriers is to reduce the intrusion of saltwater into the Delta ... which could render Delta water undrinkable ...*" Yet the **function** of the proposed barriers does exactly the opposite of what DWR says the purpose is, as the barriers render Delta water undrinkable for the northwestern half of the Delta, as the salinity levels are modeled to go over 1 ppt. Impacts to residential drinking water wells, native trees that require fresh water, animal watering and crop irrigation impacts are not adequately addressed by DWR, if not entirely ignored as an impact.

(K) Steamboat Slough is a natural navigable waterway that historically has been a primary migration route for all species of salmon that use the Sacramento River watershed. The barrier, if installed on Steamboat Slough, would hinder salmon migration use of this route due to the water temperatures as the salmon would avoid the deadly warmth of the projected low-flow waterway. In fact the obstruction to flow that materialized at the north end of Steamboat Slough in 2008 should be removed immediately to allow more natural flow into Steamboat Slough, which needs more fresh water for native aquatic species, not less! All salmon migration studies conducted after 2007 were influenced by the restriction of flow into Steamboat Slough which would thereby affect migration patterns for salmon that were being studied. Specifically, a pile of rocks or other structure materialized across the north end of Steamboat Slough sometime in 2008 which reduced the mouth from 19 feet to about 10 feet at low tides. A description of the function of such an obstruction was described in a report. Since the documentation of those studies do not provide a calculation to account for the barriers to migration along Steamboat Slough, it is safe to assume the scientists conducting the salmon migration studies were not aware of the barrier to migration. In addition, DSM2 and RMA computer modeling for impacts to the North Delta may have been based on false assumptions as to the split of flows between Steamboat Slough, Sutter Slough, the DCC, Georgiana and the reach of the Sacramento River below Georgiana Slough, all of which would impact the salmon migration choices during the migration studies. See the documents and graphics if you want more information on the existing in-water barrier across Steamboat Slough at the bridge area, and the manipulation of fish migration pathway choices which occurred due to the existence of the in-water barrier please go to

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http://snugharbor.net/sacramento_river_barrier.html and for a historical timeline with links to the data regarding past barrier proposals see <http://snugharbor.net/images-2015/barriers/BARRIERStimelineLinks.pdf> (L) DWR has failed to consider the cumulative effects of the barriers proposal in conjunction with other Delta area proposed work, such as the Sacramento River Bank Protection project. USACE is currently in public review comment period regarding the proposed 80,000 lineal feet of levee improvements and mitigation in the Sacramento River watershed. Documents are located at <http://www.spk.usace.army.mil/Missions/CivilWorks/SacramentoRiverBankProtection.aspx> and specify levee repairs and riparian bench installation along the same waterways proposed for barriers, or more specifically Steamboat and Sutter Sloughs. Review of the Sacramento River Bank Protection Project indicates there was no consideration or assessment of the cumulative impacts from the combination of the levee repairs, riverine benches and barriers on Steamboat and Sutter Sloughs. In the same way, the "Barriers" proposal ignores the existence of the proposed Sacramento River Bank Protection actions along Steamboat Slough and Sutter Slough and therefore also fails to address potential cumulative impacts to native fish migration, flood flows, groundwater and drinking water quality and impacts to recreation and agriculture if both projects are completed as proposed. For this reason, I request that the comment period for the Sacramento River Bank Protection project be extended to coincide with the requested extension of the "Barriers" proposal, to give DWR, USBR, USACE, USFW, DPC, SWC and Delta land and business owners the opportunity to consider and comment on the cumulative potential impacts and mitigations of the combined projects. According to the notice posted at http://www.spk.usace.army.mil/Portals/12/documents/civil_works/SacBank/SRBPP-PhII-PACR-EIS-EIR_InterestedParties22DEC2014.pdf the SRBPP comment period ends 2/27/2015 and I request that the comment period for both the "Barriers" proposal and the Sacramento River Bank Protection project be extended to at least March 30, 2015 and that a public meeting be held by USACE at least 15 days prior to the end of both comment periods.

The reason for the Corps should hold public hearings regarding the "Barriers" in at least two locations, on two different days is for the propose of allowing the public to be provided with adequate information from USACE and/or DWR to be able to individually conduct a thorough evaluation of the personal impacts to homes, businesses, lives, aquatic environment in the short term and long term. I am specifically requesting that a public meeting be held by USACE in the North Delta area, with the focus of the meeting being on the realistic cumulative impacts to North Delta area agriculture, recreation, navigation, aquatic species and transportation. I am also specifically requesting that a public meeting be held by USACE in a location near the proposed False River barrier, with the focus of that meeting being the realistic cumulative impacts to the areas of the Delta including but not limited to areas west of the barrier, Bethel Island, Franks Tract, Bradford Island, Webb Tract, Brannan Island, Sherman Island and Rio Vista. I request specifically that USACE address the issue of how the False River barrier protects freshwater exports without also putting a barrier across Three Mile Slough and/or the San Joaquin River. I also specifically request that the comment period for the barriers proposal and also the SRBPP project be extended to a minimum of two weeks *after the completion of the public meetings* conducted by USACE to give all interested parties the time to prepare comments based on the answers hopefully provided by USACE and/or DWR at the USACE public meetings. My request for public meetings called by USACE is based upon the above general comments and on the specific research reflected in the links provided above, all of which are incorporated by reference, and are based upon independent research of past DWR published data, documents and current proposals, and from "on the ground and in the water" local knowledge of impacts of past DWR similar actions.

Finally, I request that each of you respond to me by email by end of day 2/26/2015 either granting the extension(s) of comment period and the extension dates, granting the request for public hearing and the date of such hearing, or provide a written explanation as to why these reasonable requests

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are being denied given the detailed reasons provided in this letter. I ask for expeditious response because the end of comment period for the SRBPP is reported at USACE website to end on 2/27/2015 despite the additional barriers project proposal which would clearly impact the outcome of the SRBPP when cumulative effects are considered.

Respectfully submitted by

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The peninsula known locally as Snug Harbor is connected to Ryer Island in Steamboat Slough above river mile 17, in Solano County. Website: <http://snugharbor.net>

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4.2.1.1 Responses to Letter B1**Response to Comment B1-1**

Because four public meetings were conducted, including one in Walnut Grove, and the comment period was open for 66 days, the Corps was not able to grant this request. A letter to that effect was sent to Ms. Suard on March 11, 2015.

Response to Comment B1-2

Site-specific design and analysis will take into consideration other local and related projects, including the Emergency Drought Barriers, and will require site-specific surveys and evaluations that will include water surface elevations. The logistics of erosion repair activities will be coordinated between the Corps and construction contractors; if ongoing levee, waterway, or road projects were to impede or constrain the contractor's ability to complete the work, a revised project schedule or work plan would be submitted. If the project were to occur during implementation of a future emergency drought barrier, the contractor would likely be required to haul materials via land transportation.

Long-term hydraulic conditions are used in the design of the erosion repair projects. The designs may take into account drought and flood conditions, but only as average conditions for revegetation design. Levee revegetation must adapt to low and high water conditions, not one specific condition that may occur infrequently. Monitoring and performance requirements have been developed to ensure the establishment of target vegetation.

Response to Comment B1-3

The SRBPP is an existing flood risk management project to maintain the integrity of the SRFCP. The Emergency Drought Barrier project is implemented infrequently during extreme Governor-declared drought emergencies to prevent saltwater from pushing with the tides into the central Sacramento-San Joaquin Delta. The short-term activities of any future drought barrier will not impact bank protection work to protect SRFCP levees.

Response to Comment B1-4

Please see the responses to Comments B1-2 and B1-3 above.

5.1 Printed References

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8 5.2 Personal Communications

9 Martin, Sara. Project Manager. ICF, Sacramento, CA. May 15, 2017—email to James Sarmento,
10 Cultural Resources Manager, Tewe Kewe Cultural Center.