

**DEPARTMENT OF WATER RESOURCES**

Division of Flood Management
P.O. Box 219000
SACRAMENTO, CA 95821-9000

March 3, 2015

Ms. Elizabeth Lee
Central Valley Regional Water Quality Control Board
11020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670-6114

Subject: **California Department of Water Resources Delta Flood Emergency Facilities Improvement Project Request for Section 401 Water Quality Certification**

Dear Ms. Lee:

The California Department of Water Resources (DWR) is pleased to submit the enclosed application for Water Quality Certification pursuant to Section 401 of the Clean Water Act for the Delta Flood Emergency Facilities Improvement Project (FIP), for the Rio Vista site located in Solano County, California.

The FIP, a Component of the Delta Flood Emergency Preparedness, Response, and Recovery Program (DFEPRRP), consists of improving the Rio Vista transfer facility site where quarry rock, sand, soil and other flood fight materials can be efficiently transferred from trucks to barges to expedite levee repairs and facilitate channel closures in the event of Delta levee breaches. In addition, the Rio Vista FIP site would serve other emergency response functions needed by DWR to respond rapidly and effectively to significant emergencies in the Delta, including storage of repair materials and flood fight supplies.

Implementation of the proposed project would result in impacts to non-riparian forested seasonal wetland habitat that qualifies as waters of the United States, which are also waters of the state. Impacts to jurisdictional wetlands total approximately 0.009 acres as a result of improving and widening an access road from a variable 20 to 24-foot width to a consistent 28 feet wide gravel road.

DWR is submitting this application package to obtain Water Quality Certification in accordance with Section 401 of the Clean Water Act. Construction is expected to take up to 8 months to complete, beginning in September 2015.

The enclosed application package includes:

- Attachment A: Continuation Form
- Attachment B: Impact Map
- Attachment C: Copy of NOD and Supplemental IS/MND
- Attachment D: Copy of 404 application for Nationwide Permit 39
- Attachment E: Fee Calculator and Check for \$600.00
- CD containing an electronic copy of the Notification package

If you have any questions regarding the project or need additional information, please contact me by phone at 916.574-2167 or e-mail at kristin.richmond@water.ca.gov.

Sincerely,


Kristin Richmond
Project Manager

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

SECTION 401 WATER QUALITY CERTIFICATION APPLICATION FORM

Application Fees: Application fees shall be based on the current fee schedule in accordance with Title 23 CCR § 2200 (a)(3), and is required. To determine the total fee, please use the fee calculator at: http://www.waterboards.ca.gov/water_issues/programs/#wqcert. In order to process the application, a \$600.00 deposit is required except for projects qualifying for a flat fee category in which case the flat fee must be remitted with the application. Please include a check payable to the **State Water Resources Control Board**.

Annual Fees: After the certification has become effective, annual fees will be based on the fee schedule at time of billing.

Application and Fee Submission: See the Section 401 Water Quality Certification Application Instructions and Information Sheet at the end of the application form for instructions on submitting the application and fees.

Attach additional sheets as necessary. If any information is not applicable to the proposed project please indicate that as N/A.

1. APPLICANT INFORMATION

2. AGENT INFORMATION*

Applicant: California Department of Water Resources, Division of Flood Management	Agent* AECOM, Inc.
Contact Name: Kristin Richmond	Contact Name: Sarah A.N. Bennett
Address: 3310 El Camino Avenue, Suite 200	Address :2020 L Street, Suite 400
Sacramento, CA 95821	Sacramento, CA 95819
Phone No: (916) 574- 2167	Phone No: (916) 266-4922
Fax No: (916) 574-2767	Fax No: (916) 414-5850
E-mail Address: Kristin.Richmond@water.ca.gov	E-mail Address: sarah.bennett@aecom.com

*Complete only if applicable

3. PROJECT DESCRIPTION

a) Project Title: Delta Flood Emergency Facilities Improvement Project, Rio Vista
b) Project Location: The project site is located north of the city of Rio Vista, north of Airport Road in Solano County California. See Attachment A for a Regional Map. County: <u>Solano</u> Section: <u>unsectioned</u> Township: <u>4 North</u> Range: <u>2 East</u> Quadrangle Name: <u>Rio Vista</u> Latitude: <u>38°10'29.68" N</u> Longitude: <u>-121°40'46.57" W</u> *Attach site map with "waters" clearly indicated (e.g. USGS 7 ½ quadrangle map)
c) Project Description (Please provide a detailed explanation of all project activities. Include applicable information such as: avoidance and minimization measures for project impacts; alternatives analysis; project activity impacts to water bodies and/or water quality; and implementation of Low Impact Development (LID) strategies. Attach additional pages as necessary): The proposed project would improve and operate a permanent rock stockpile and emergency transfer site near Rio Vista, California. Specifically, the project would modify the existing material storage facility and establish a flood fight supply facility at this location. In addition, the Rio Vista site could be used to support an Incident Command Post (ICP). Attachment A provides additional project description detail.

d) Proposed Schedule (start date, and completion date): September 1, 2015–April 30, 2016
e) Total Project Size (clearing, grading, other construction activities): <u>27.45</u> acres _____ linear feet (if appropriate)

4. IMPACTED WATER BODIES

a) Name(s) of Receiving Water Body(ies): Unnamed forested seasonal wetland adjacent to the Sacramento River. Unnamed wetlands separated from Sacramento River by approximately 1,500 feet.
b) Anticipated potential stream flow during project activity: NA. No flowing streams present within project site.
c) Describe potential impacts to water quality: Temporary and short-term impacts on water quality could occur from ground-disturbing activities during project construction. However, flowing streams are not present within the project site and there is little to no threat of degrading nearby water bodies because no surface water connection is present. No concrete would be placed in waters of the state. Project construction activities will expose soil and could result in erosion and sedimentation. A Storm Water Pollution Prevention Plan (SWPPP) will be prepared by the contractor and Best Management Practices (BMPs) will be used throughout project construction. Standard erosion control measures (e.g., management, structural, and vegetative controls) would be implemented for all construction activities that expose soil. Erosion control barriers such as silt fences and mulching material would be installed, and disturbed areas would be reseeded with native grasses or other plants where necessary. See Attachment A, Box 6 for additional BMPs to protect water quality.

d) **Waters of the United States:** Indicate in ACRES and LINEAR FEET (where appropriate) the proposed waters of the United States to be impacted by any discharge other than dredging, and identify the impacts(s) as permanent and/or temporary for each water body type listed below:

Water Body Type	Permanent Impacts		Temporary Impacts	
	(acres)	(linear feet)	(acres)	(linear feet)
Jurisdictional Wetland	0.009			
Riparian				
Streambed un-vegetated				
Lake/Reservoir				

e) **Non-Federal Waters:** This section is **only** for waters that the U.S. Army Corps of Engineers does **not** consider federally jurisdictional. Indicate in ACRES and LINEAR FEET (where appropriate) the proposed **waters of the State** to be impacted by any discharge other than dredging, and identify the impacts(s) as permanent and/or temporary for each water body type listed below: None.

Water Body Type	Permanent Impacts		Temporary Impacts	
	(acres)	(linear feet)	(acres)	(linear feet)
Isolated Wetland				
Ditch/Canal				
Other				

f) **Fill:** Indicate the amount (cubic yards) and type of fill material to be discharged/installed in waters of the State/United States:

Type of Material (Soil, concrete, steel, rock.....)	Amount (cubic yards)	What type of water body? (Wetland, riparian, streambed, lake.....)	Indicate if fill is in federal or non-federal waters
Aggregate base	14.5 CY	Forested seasonal wetland	Federal waters
Geotextile fabric	392 SF	Forested seasonal wetland	Federal waters

g) **Dredge/Removal:** Indicate the amount (cubic yards) and type of material to be dredged and/or removed from waters of the State/United States:

Type of Material (Soil, concrete, steel, rock.....)	Amount (cubic yards)	What type of water body? (Wetland, riparian, streambed, lake.....)	Indicate if dredge or removal is in federal or non-federal waters

5. COMPENSATORY MITIGATION

a) Indicate in ACRES and LINEAR FEET (where appropriate) the total quantity of **waters of the United States** proposed to be Created, Restored and/or Enhanced for purposes of providing Compensatory Mitigation If mitigating for state waters that were not considered federally jurisdictional then attach a description of the proposed mitigation:

DWR proposes to purchase credits for floodplain mosaic wetland habitat at the Cosumnes Floodplain Mitigation Bank, operated by Westervelt, for the loss of forested seasonal wetland habitat within the project site.

Water Body Type	Created		Restored		Enhanced	
	(acres)	(linear ft)	(acres)	(linear ft)	(acres)	(linear ft)
Jurisdictional Wetland	0.01					
Riparian						
Streambed						
Lake/Reservoir						

b) If contributing to a Mitigation or Conservation Bank, indicate the agency, dollar amount, acreage, and water body type (if applicable):

Mitigation Bank or Conservation Agency Cosumnes Floodplain Mitigation Bank

\$ for 0.01 acres of seasonal wetland (water body type)

How many acres of this mitigation area qualify as waters of the United States? 0.01

c) Other Mitigation (omit if not applicable): NA

How many acres of this mitigation area qualify as waters of the United States? _____

d) Location of Compensatory Mitigation Site(s) (attach map of suitable quality and detail):

City of Area _____ County Sacramento

Longitude/Latitude _____ Township/Range _____

6. OTHER ACTIONS/BEST MANAGEMENT PRACTICES (BMPs)

Briefly describe other actions/BMPs to be implemented to Avoid and/or Minimize impacts to waters of the United States, including preservations of habitats, erosion control measures, project scheduling, flow diversions, etc.

Impacts to water quality will be avoided and/or minimized by implementation of BMPs. A storm water pollution prevention plan (SWPPP) will be developed by the contractor for the proposed project, to obtain a Construction General Permit. See Attachment A for additional detail.

Flowing streams are not present within the project site and no work would occur within a flowing stream. No dewatering is required for project construction.

7. OTHER PERMITS/AGREEMENTS/ETC

a) U.S. Army Corps of Engineers Permit: Indicate the type of ACOE permit (*check one*)

Nationwide Permit No(s) 39 Individual Permit No(s): _____ Regional Permit No(s): _____

Letter(s) of Permission _____ ACOE Permit Reference Number _____

Have you notified ACOE of project? Yes, permit application submitted concurrent.

Have you reviewed the General Conditions for your ACOE permit? Yes.

Have you attached a copy of the application/notification to ACOE? Yes.

b) California Department of Fish and Game Lake or Streambed Alteration Agreement: NA.

Date of Application: _____

Have you attached a copy of the application?

Has the Agreement been issued? _____ if so, list Agreement number: _____

c) Water Rights: NA.

If the project is directly related to any diversion, obstruction, extraction, or impoundment of the natural flow of a river, stream, lake or underground source then provide the Water Right Application ID Number _____ or Permit ID Number _____

8. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

a) Indicate the type of CEQA Document required for this project:
 Categorical Exemption ___ Negative Declaration ___X_ Environmental Impact Report ___
 Has the document been certified/approved, or has a Notice of Exemption been filed? ___Yes.____
 If yes date of approval/filing 02/11/2015 If no, expected approval/filing date: _____
 Lead Agency California Department of Water Resources, Division of Flood Management
 Have you attached a copy of the draft/final CEQA documentation*? Yes. SCH No. 2014112056
 * A final copy of valid CEQA documentation must be provided before a project can be certified

b) List State and Federal Threatened/Endangered Species that could potentially be impacted by this project:
 No state or federally listed species have potential to occur within the project site, nor be impacted by project implementation.

9. PAST/FUTURE PROPOSALS BY THE APPLICANT

Briefly list/describe any projects carried out in the last 5 years or planned for implementation in the next 5 years that are in any way related to the proposed activity or may impact the same receiving body of water. Include the estimated adverse impacts from the past or future projects.

Within the project site, DWR established a rock stockpile of approximately 113,000 tons on approximately 3.4 acres of land owned by the Sacramento-San Joaquin Drainage District through the State of California Central Valley Flood Protection Board (CVFPB) in 2007-2008. In January 2013, DWR constructed a ramp to facilitate movement of the stockpiled rock in an emergency to Dutra Group’s barge-loading facility, located on the Sacramento River.

No additional future projects are planned for the Rio Vista site at this time. DWR is proposing to develop the West Weber site, located in Stockton, California as a second Delta Flood Emergency Facilities Improvement Project location. The West Weber site, located in San Joaquin County is located within the Lower-Calaveras-Mormon Slough Watershed (HUC 18040004).

SIGNATORY REQUIREMENTS

All reports, notices, or other documents required by the Water Quality Certification or requested by the Central Valley Regional Water Quality Control Board (Central Valley Water Board) shall be signed by a person described below or by a duly authorized representative of that person.

- a. For a corporation: by a responsible corporate officer such as (1) a president, secretary, treasurer, or vice president of the corporation in charge of a principal business function; (2) any other person who performs similar policy or decision-making functions for the corporation; or (3) the manager of one or more manufacturing, production, or operating facilities if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- b. For a partnership or sole proprietorship: by a general partner or the proprietor.
- c. For a municipality, State, federal, or other public agency: by either a principal executive officer or ranking elected official.

10. CERTIFICATION [Any person signing or submitting a document, e.g. an application, a monitoring report, etc., to demonstrate compliance with the Water Quality Certification regulations shall make the following certification, whether written or implied]

"I certify under penalty of law that this document, including all attachments and supplemental information, were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

Print Name: Kristin C. Richmond Title: Project Manager
Signature: *Kristin C. Richmond* Date: 3/2/2015

STATEMENT OF AUTHORIZATION (if designating a specific agent)

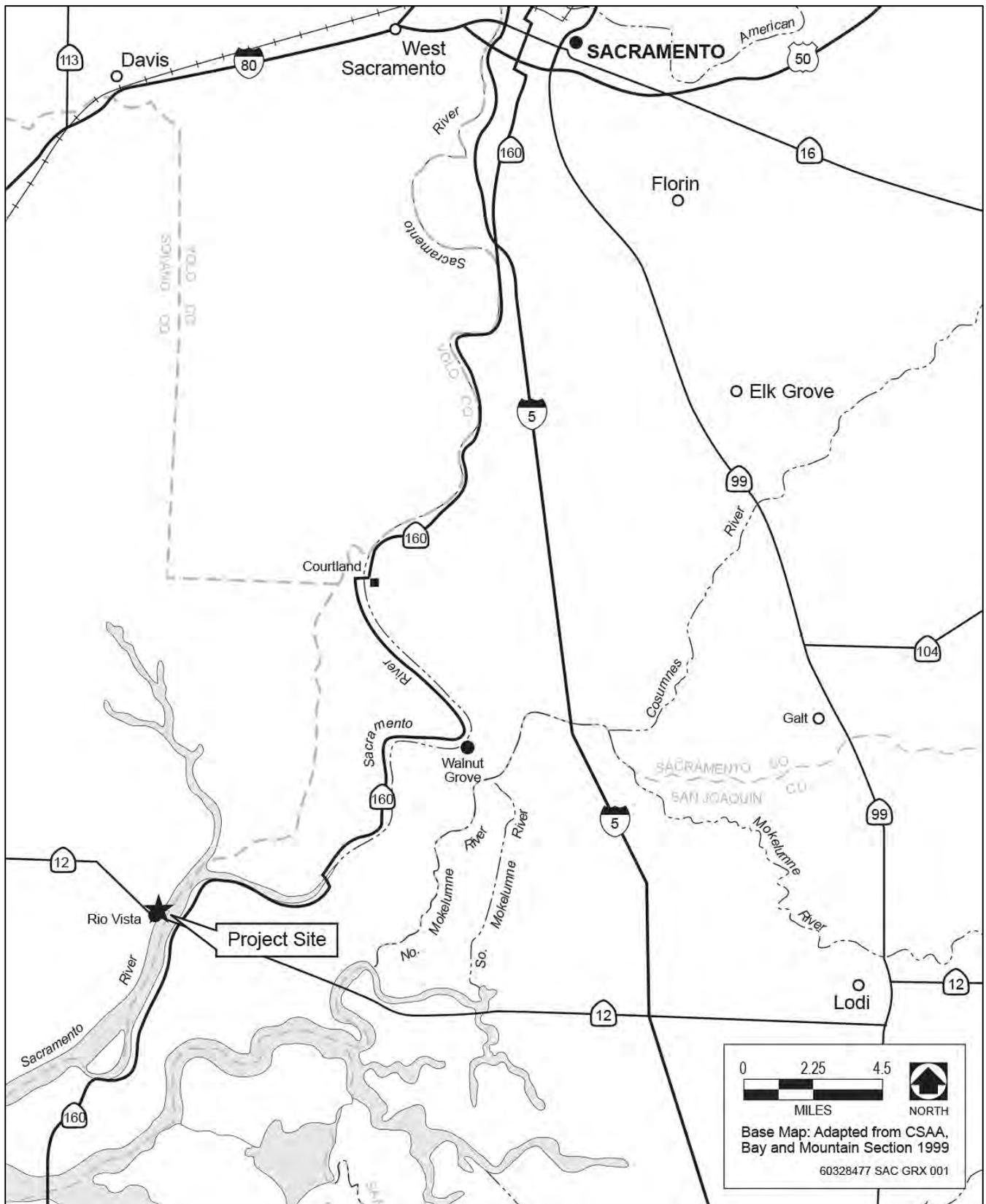
I hereby authorize Sarah Bennett to act on my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application.

X *Kristin C. Richmond* DATE 3-2-2015
APPLICANT'S SIGNATURE (not the authorized agent)

All information on this application becomes part of the public record, and as such is subject to public records requests disclosure. In addition, the application will be posted for public review on the Regional Board's web site in accordance with California Code of Regulations Title 23 Section 3858.

ATTACHMENT A

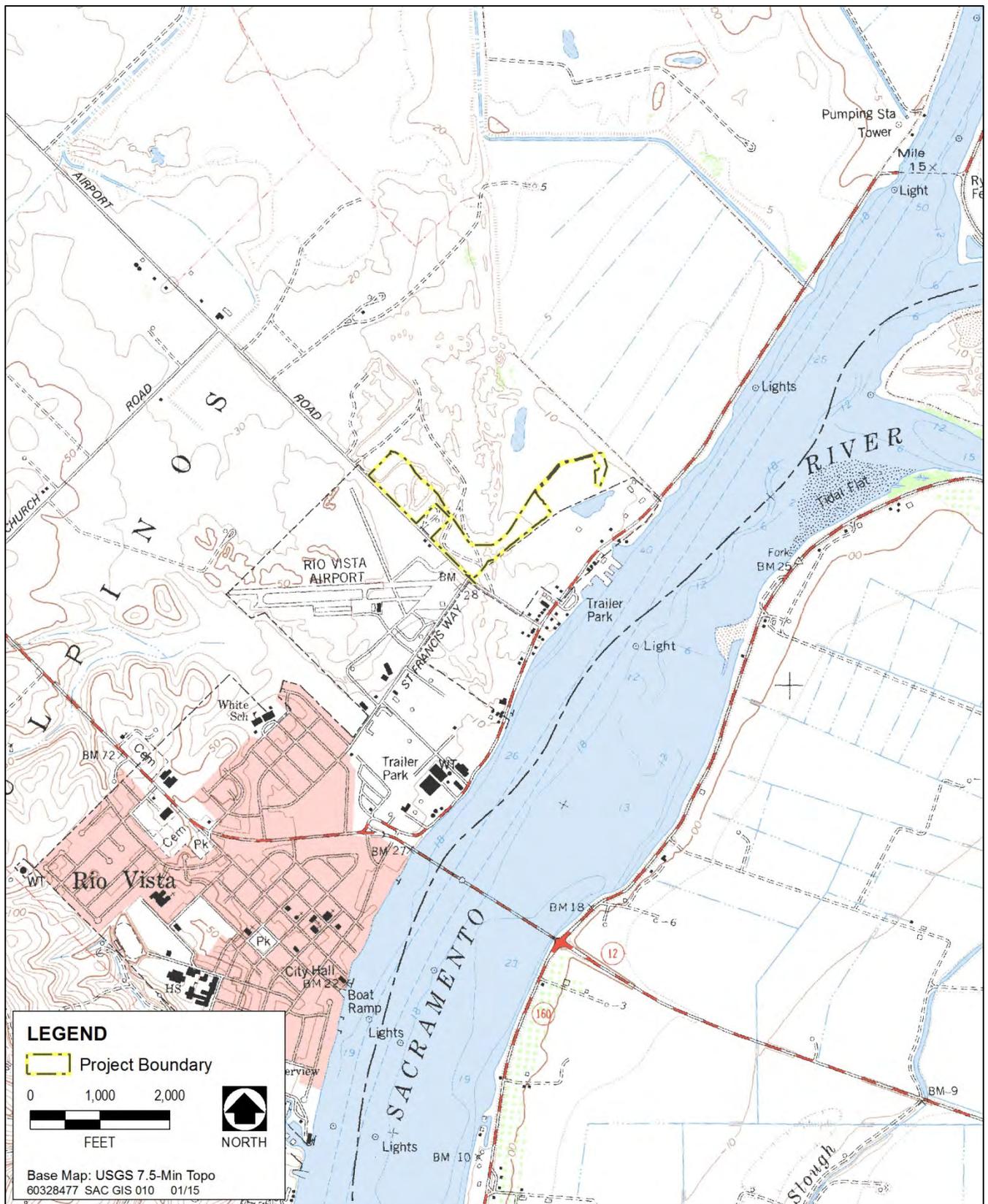
Continuation Form



Source: Compiled by AECOM 2015

Figure 1

Regional Location



Source: Compiled by AECOM 2015

Figure 2

Site Topography

BOX 3: NATURE OF ACTIVITY

The purpose of the FIP is to ensure that the State has the appropriate infrastructure and supplies in the Delta to respond to and recover quickly and effectively from major flood or earthquake disasters in the Sacramento-San Joaquin River Delta. Such disasters could cause multiple levee failures resulting in flooded Delta islands, a loss of lives and property, environmental impacts, impacts on regional and State-wide utilities and transportation corridors, and interruptions in water deliveries from the Delta.

DWR currently has a rock stockpile of approximately 113,000 tons on this project site. In order to transfer stored quarry rock to barges, DWR would need to contract with the Dutra Group for barge-loading services at its established barge-loading facility located along State Route (SR) 84/River Road, which is approximately 1,000 feet southeast of the existing stockpile area. The Dutra Group's facility includes business offices, space for unloading trucks, and a barge-loading facility that is capable of docking and loading several barges concurrently. The site is readily accessible from Interstate (I) 80 via State Route (SR) 12 and SR 113. It is also accessible from I-680 via SR 160 to the south, and from I-5 via SR 12 and SR 160.

Site specific improvements at Rio Vista are summarized below.

- ▶ Site clearing, grubbing, and removal of organic material including approximately 4.0 acres of trees as necessary during project construction.
- ▶ Construct 6,000 square-foot asphalt foundation/pad for two approximately 8-foot by 40-foot temporary office trailers for use as an incidental command post (ICP) during flood emergencies and a pre-fabricated restroom facility. The pad will also encompass Americans with Disabilities Act (ADA) compliant parking stall(s) as required.
- ▶ Establish a 0.75-acre area for vehicle parking.
- ▶ Provide new water connection for the Central Valley Flood Protection Board (CVFPB) lease of the remaining property and develop electrical connections to the site for future temporary office trailers.
- ▶ Widen existing access road(s) to the existing quarry rock stockpile from about 20 feet to 28 feet. Remove at least two and up to approximately 15 trees along the existing access road, as well as numerous woody shrubs.
- ▶ Improve the haul road near the property's southerly boundary with a new ramp from Airport Road near its intersection with St. Francis Way.
- ▶ Place up to five steel storage containers to store flood fight supplies, including bulk bags near the southwestern corner of the property.
- ▶ Improve an existing access ramp at the southwest corner of the property to facilitate access to the Dutra Group's Dock and the steel storage containers.
- ▶ Stockpile up to 20,000 tons of well-drained sand.
- ▶ Stockpile up to 90,000 tons of rock. Rock would be moved from the Port of Stockton to the Rio Vista site.

BOX 6: MEASURES TAKEN TO AVOID IMPACTS TO WATERS OF THE U.S.

HYD-1: Institute Construction Best Management Practices (BMPs) for the Prevention of Erosion and Transport of Soil, Sand, and Silt Offsite during Runoff Events.

DWR shall implement construction Best Management Practices (BMPs) for all land clearing, land leveling, excavation, and fill operations associated with site preparations at the three sites. These measures will be incorporated into the construction plans and specifications. They include avoidance of existing wetlands, including placement of exclusion fencing, creating on site catchments for surface runoff, using coir logs to intercept drainage, and hydroseeding slopes, as appropriate.

Before the start of any construction work, clearing, or site grading associated with preparation, or any stockpiling activities at the sites, measures to control soil erosion and waste discharges will be prepared in accordance with BMPs. DWR will require all contractors conducting work at the sites to implement BMPs to control soil erosion and waste discharges of other construction-related contaminants. The general contractor(s) and subcontractor(s) conducting the work will be responsible for constructing or implementing, regularly inspecting, and maintaining the BMPs in good working order. In addition, the contractors will be required to submit and adhere to the applicable Storm Water Pollution Prevention Plan (SWPPP) associated with site development, preparation, and improvements.

Sufficient buffers from wetlands, riparian habitat, and/or other sensitive areas shall be maintained throughout the construction improvement period(s) of the project.

The plans developed by DWR or its contractor(s) will identify the grading, erosion, and tracking control BMPs and specifications that are necessary to avoid and minimize water quality impacts to the extent practicable. Standard erosion control measures (e.g., management, structural, and vegetative controls) will be implemented for all construction activities that expose soil. Grading operations will be conducted to eliminate direct routes for conveying potentially contaminated runoff to drainage channels. Erosion control barriers such as silt fences and mulching material will be installed, and disturbed areas will be reseeded with native grasses or other plants where necessary. Tracking controls shall be required throughout the construction period, as needed, to reduce the tracking of sediment and debris from the construction site.

At a minimum, entrances and exits shall be inspected daily, and controls implemented as needed.

The following specific BMPs will be implemented, as described in the California BMP Handbook (www.cabmphandbook.com):

- Conduct all work according to site-specific construction plans that identify areas for clearing and grading so that ground disturbance is minimized.
- Avoid riparian vegetation, cover cleared areas with mulches, and install silt fences near riparian areas or streams to control erosion and trap sediment, and reseed cleared areas with native vegetation. Sufficient buffers (minimum 20 feet when possible) from wetlands and/or other sensitive areas shall be maintained throughout the life of the project.

- Stabilize disturbed soils before the onset of the winter rainfall season.
- Stabilize and protect stockpiles from exposure to erosion and flooding.
- Stabilize all construction access by providing a point of entrance/exit to the construction sites that is stabilized to reduce the tracking of mud and dirt onto public roads by construction vehicles.
- Grade each construction entrance/exit to prevent runoff from leaving the construction site, and ensure that all runoff from the stabilized entrances/exits are routed through a sediment-trapping device before discharge.
- Ensure that entry/exit ways are able to support the heaviest vehicles and equipment that will use them.

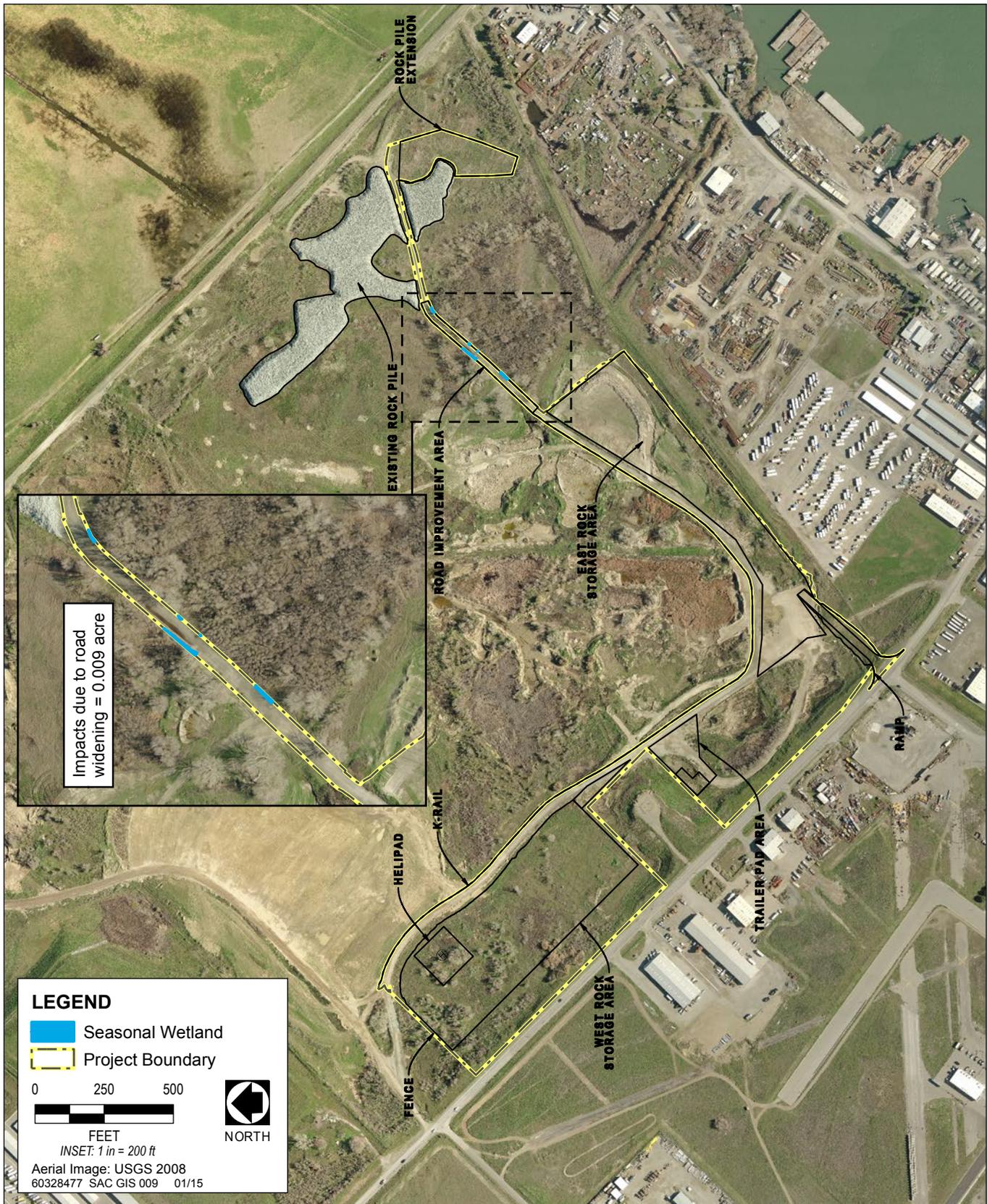
BMPs will also specify appropriate hazardous materials handling, storage, and spill response practices to reduce the possibility of adverse impacts from use or accidental spills or releases of contaminants.

Specific measures applicable to the project include, but are not limited to, the following:

- Develop and implement strict onsite handling rules to keep construction and maintenance materials out of drainages and waterways.
- Conduct all refueling and servicing of equipment with absorbent material or drip pans underneath to contain spilled fuel. Collect any fluid drained from machinery during servicing in leak-proof containers and deliver to an appropriate disposal or recycling facility.
- Maintain controlled construction staging, site entrance, concrete washout, and fueling areas at least 100 feet away from stream channels or wetlands to minimize accidental spills and runoff of contaminants in storm water.
- Prevent raw cement; concrete or concrete washings; asphalt, paint, or other coating material; oil or other petroleum products; or any other substances that could be hazardous to aquatic life from contaminating the soil or entering watercourses.
- Maintain spill cleanup equipment in proper working condition. Clean up all spills immediately according to the spill prevention and response plan, and immediately notify DFW and the Regional Water Quality Control Board (RWQCB) of any spills and cleanup procedures.

ATTACHMENT B

Impact Map



Source: DWR 2014 adapted by AECOM 2014

Rio Vista Impacts to Wetlands Map

ATTACHMENT C

Copy of NOD and Subsequent IS/MND

Notice of Determination, Response to Comments of
Initial Study/Mitigated Negative Declaration, and
Mitigation Monitoring and Reporting Program

Delta Flood Emergency Facilities Improvement Project Refinements

State Clearinghouse (SCH) No 2014112056

A Component of the Delta Flood Emergency Preparedness,
Response, and Recovery Program

February 2015

NOTICE OF DETERMINATION

To:

From:

X Office of Planning and Research
1400 10th Street, Room 121
Sacramento CA, 95814

California Department of Water Resources
Division of Flood Management
I Street, Room 301
Sacramento CA 95814

X County Clerk
County of San Joaquin
County of Solano
County of Sacramento
County of Contra Costa
County of Yolo

Subject: Filing of Notice of Determination

Project Name (if any): Delta Flood Emergency Facilities Improvement Project Refinements

2014112056	Seth Litchney	(916) 445-0613
State Clearinghouse Number	Contact Person	Area Code/Telephone

Project Contact:

Kristin Richmond, P.E.
Division of Flood Management
California Department of Water Resources, Division of Flood Management
3310 El Camino Avenue, Suite 200
Sacramento, CA 95821

Phone: (916) 574-2167
Fax: (916) 574-2767
Email: kristin.richmond@water.ca.gov

Project Location (include County):

The Initial Study/Mitigation Negative Declaration addresses the potential development, improvement, and operation of three permanent rock stockpile and emergency transfer sites in the Sacramento-San Joaquin River Delta area. These sites are located at:

1. 1404, 1541 and 1325 West Weber Avenue, Stockton, CA (Stockton West Weber Avenue).
County of San Joaquin
2. Central Valley Flood Protection Board Dredge Disposal Site, at Airport Road, Rio Vista, CA (Rio Vista). County of Solano.
3. Brannan Island State Recreation Area, CA (Brannan Island). County of Sacramento.

Project Description: Minor refinements to the proposed project have been made since June 2013 and are the focus of this subsequent Initial Study/subsequent proposed MND (IS/MND). Proposed project refinements at the Stockton West Weber site include site clearing, grubbing, and removal of organic material including at least 14 and potentially up to approximately 20 trees during project construction; grading including importing backfill material; constructing 12-inch aggregate base all-weather surfaces above the 100-year flood elevation; improving, extending, or abandoning existing utilities services where required; constructing a new 7,000 square foot steel frame building with concrete foundation for warehouse use; constructing new concrete foundations for two rock conveyors; constructing a 6,500 square foot asphalt foundation/pad for four temporary office trailers and a pre-fabricated restroom facility; construct 4,600 square-foot asphalt ADA parking stalls and pathways for building accessibility; establishing a quarry rock stockpile of up to 150,000 tons of various rock gradations (an increase from 40,000 tons in original project description); installing an additional two spud piles (for a total of eight spud piles) near the toe of bank along the Stockton Deep Water Ship Channel to support two conveyor support barge structures; and installing up to 11 dolphin pile clusters for mooring of up to three transport barges during rock-loading operations.

Proposed project refinements at the Rio Vista site include: site clearing, grubbing, and removal of organic material including approximately 4.0 acres of trees as necessary during project construction; decreasing the acreage for vehicle parking from 1.25 acres to 0.75 acre; providing new water and electrical connections; and widening the existing access road from about 20 feet to 28 feet, including removing at least two and up to approximately 15 trees along the existing access road.

No project refinements are proposed for the Brannan-Andrus site.

This is to advise that the California Department of Water Resources has approved the above described project on February 11, 2015 and has made the following determination regarding the above described project:

1. The project will will not have a significant effect on the environment.
2. An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
 A Mitigated Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation Measures were were not made a condition of the approval of the project.
4. A statement of Overriding Considerations was was not adopted for this project.
5. A Mitigation Monitoring or Reporting Plan was was not adopted for the project.
6. Findings were were not made pursuant to the provisions of CEQA.

This is to certify that the Mitigated Negative Declaration with comments and responses and record of project approval is available to the General Public at:

California Department of Water Resources
Division of Flood Management
Attn: Kristin Richmond, P.E.
3310 El Camino Avenue, Suite 200
Sacramento, CA 95821

Certification by Persons Responsible for Preparation of this Document: The Department of Water Resources, Division of Flood Management Engineering has been responsible for preparation of this Proposed Mitigated Negative Declaration and the incorporated Initial Study. I believe this document meets the requirements of the California Environmental Quality Act, is an accurate description of the proposed project, and that the lead agency has the means and commitment to implement the project design measures that will ensure that project does not have any significant, adverse effects on the environment. I recommend approval of this document.



John Paasch, Chief
Flood Operations Branch
Division of Flood Management Engineering
California Department of Water Resources

2-11-2015

Date

(*To be signed upon completion of the public review process and preparation of a final project approval package, including responses to comments, if any, on the environmental document and any necessary modifications to project design measures.)

Approval of the Project by the Lead Agency: Pursuant to Section 21082.1 of the California Environmental Quality Act, the California Department of Water Resources has independently reviewed and analyzed the Initial Study and Proposed Mitigated Negative Declaration reflect the independent judgment of the California Department of Water Resources. The lead agency finds that the project design features will be implemented as stated in the Mitigated Negative Declaration.

I hereby approve this project:



Keith Swanson, Chief
Flood Operations Branch
Division of Flood Management
California Department of Water Resources

2/11/15

Date

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1.0 INTRODUCTION

1.1 Review of the IS/MND, SCH No. 2014112056

The California Department of Water Resources (DWR), as lead agency under the California Environmental Quality Act (CEQA), prepared a subsequent initial study/mitigated negative declaration (IS/MND) for the Delta Flood Emergency Facilities Improvement Project (State Clearinghouse [SCH] No. 2014112056). A Notice of Completion (NOC) was hand delivered to the SCH and delivered by US Postal Service to appropriate resource agencies. A Notice of Availability (NOA) of the subsequent IS/MND and DWR's Notice of Intent to adopt an MND was published in the Sacramento Bee, Stockton Record, and the Rio Vista Beacon. In addition, an electronic copy was posted on DWR's website: <http://www.water.ca.gov/floodmgmt/hafoo/fob/dfeprrp/facilities.cfm>.

The 32-day public review period began on November 24, 2014, and ended on December 26, 2014. Comment letters were received from the following five entities:

- California Department of Fish and Wildlife (CDFW)
- California State Lands Commission (CSLC)
- Central Valley Regional Water Quality Control Board (CVRWQCB)
- U.S. Coast Guard (USCG)
- San Joaquin Valley Air Pollution Control District (SJVAPCD)

These letters are presented in Section 2.0, "Comment and Responses." In addition, an informal communication was received from the Sacramento Metropolitan Air Quality Management District (SMAQMD).

1.2 Preparation of this Document

Comment letters were reviewed and the responses were prepared as presented in Section 2.0. Based on the comments and recommendations received, minor changes and edits to the Subsequent IS/MND have been identified and reflected in Section 3.0, "Errata." Although CEQA Guidelines Section 15074 only requires that the lead agency "consider" comments received during the public review process, DWR has prepared written responses to comments, and errata and text changes, as specified in this document.

The CDFW and CSLC letters required clarifying language be added to the analysis and mitigation measures in the biological resources and noise analysis sections of the subsequent IS/MND. Text changes are addressed in Section 2.0 in response to each letter and repeated in Section 3.0. Section 4.0, "Mitigation Monitoring and Reporting Program," presents the Mitigation Monitoring and Reporting Program (MMRP) to be implemented by DWR.

No substantive revisions were made to the subsequent IS/MND; therefore, recirculation of the IS/MND is not necessary (CEQA Guidelines Section 15073.5). Minor revisions to clarify the project description and mitigation measures do not meet criteria for recirculation under CEQA Guidelines Section 15073.5. No new mitigation measures are proposed.

2.0 COMMENTS AND RESPONSES

2.1 Letter 1: California Department of Fish and Wildlife

State of California
Department of Fish and Wildlife



Memorandum

Date: December 22, 2014

To: Mr. John Paasch
Division of Flood Management
California Department of Water Resources
3310 El Camino Avenue, Suite 200
Sacramento, CA 95821

From: 
Scott Wilson, Regional Manager
California Department of Fish and Wildlife – Bay Delta Region, 7329 Silverado Trail, Napa, California 94558

Subject: Delta Flood Emergency Facilities Improvement Project Refinements, Initial Study/Mitigated Negative Declaration, SCH #2014112056, San Joaquin County

The California Department of Fish and Wildlife (CDFW) has reviewed the Initial Study/Mitigated Negative Declaration (IS/MND) for the Delta Flood Emergency Facilities Improvement Project Refinements. CDFW is providing comments on the IS/MND as both a Trustee and Responsible Agency. As Trustee for the State's fish and wildlife resources, CDFW has jurisdiction over the conservation, protection, and management of the fish, wildlife, native plants, and the habitat necessary for biologically sustainable populations of such species for the benefit and use by the people of California (Fish and Game Code, § 1802). CDFW is also considered a Responsible Agency if a project would require discretionary approval, such as a California Endangered Species Act (CESA) Incidental Take Permit (ITP) or a Lake and Streambed Alteration Agreement (LSAA).

Please be aware that if CDFW is required to act as a Responsible Agency for issuance of an ITP pursuant to CESA, or an LSAA, the IS/MND must adequately analyze and mitigate impacts on resources subject to CDFW's statutory authority or an additional environmental document may be required [California Environmental Quality Act (CEQA) Guidelines § 15162].

Project Description and Location

The California Department of Water Resources (DWR) proposes to acquire long-term access and improve up to three sites in the Sacramento-San Joaquin Delta. The purpose of the proposed project is to ensure that the State has the appropriate infrastructure and supplies to respond to and recover quickly and effectively from major flood or earthquake disasters in the Delta. The proposed project would establish two new material storage transfer facility sites (one at West Weber Avenue in Stockton and one at Brannan Island State Park), modify an existing material storage facility at Rio Vista, establish new flood fight supply facilities at all three locations, and make site preparations to support incident command posts at Stockton's West Weber Avenue and Brannan Island State Recreation Area (BISRA).

DWR completed compliance with CEQA and approved the project in June 2013. Minor refinements to the proposed project have been made since June 2013 to the Stockton and Rio Vista sites. The refinements are the focus of the subsequent IS/MND.

Comments on the IS/MND

CDFW 1

Burrowing Owl

Mitigation Measure BIO-1: Conduct Burrowing Owl Surveys at all Three of the Project Sites Prior to Development (pages MND-6, 3-29, and B-3), states that "Prior to any land clearing operations, a burrowing owl survey following standard guidelines (The California Burrowing Owl Consortium, CBOC, 1993) shall be conducted by a qualified biologist." CDFW recommends also using the Staff Report on Burrowing Owl Mitigation dated March 7, 2012 that is on the CDFW website at https://www.dfg.ca.gov/wildlife/nongame/survey_monitor.html. The 2012 Staff Report takes into account the California Burrowing Owl Consortium's Survey Protocol and Mitigation Guidelines (CBOC 1993, 1997) and supersedes the survey, avoidance, minimization and mitigation recommendations in the previous 1995 Staff Report.

CDFW 2

Tree Removal at Brannan Island State Recreation Area

Mitigation Measure BIO-2: Retain all Mature Trees at the Proposed BISRA Project Sites (pages MND-6, 3-29, and B-4). DWR plans to keep mature trees that are potential nest trees and native oak trees greater than 8 inches diameter at breast height (dbh) at the proposed BISRA project site.

CDFW recommends mitigation for trees removed that are four inches dbh or larger. The MND should include the number of trees, size, and species of the trees, that are four inches dbh or larger to be removed at BISRA as a part of the proposed project. Mitigation Measure BIO-2 should include how DWR plans to mitigate for the tree removal at BISRA (refer to CEQA Guidelines, § 15370).

Riparian Habitat

Page 3-26 of the MND discusses removal of scattered trees and shrubs along the bank of the Stockton Deep Water Ship Channel, and determines the removal of woody vegetation would constitute a loss of riparian vegetation. The MND also determined that the proposed project removal of riparian vegetation would be a significant impact and refers to mitigation measure BIO-4 as reducing the impact to less-than-significant.

CDFW has the following comments regarding Mitigation Measure BIO-4:

CDFW 3

- BIO-4 includes restoration of riparian habitat on "Brennan" Island or other state-owned property at a 1:1 replacement ratio. Is "Brennan Island" supposed to be "Brannan Island"?

CDFW 4

- BIO-4 is unclear as to whether the replacement riparian habitat is due to riparian habitat impacted on Brannan Island only or if the restoration is for all riparian habitat impacted as a result of the proposed project. The Mitigation Measure BIO-4 could clear up this question by including a statement that all project related riparian impacts will be mitigated on Brannan Island.

Special-Status Birds and Potential Nesting Trees

The discussion in the MND notes that 14 to 20 trees are to be potentially removed at the Stockton West Weber site, two to 15 trees are to be potentially removed for the road improvements at the Rio Vista Site, and 4.0 acres of trees are to be potentially removed at the Rio Vista site (pages MND-2, MND-3, MND-4, 2-3, 2-9, 2-10, 3-25 and 3-26).

CDFW 5

The MND states on page 3-26: "This level of impact to trees at both the Stockton West Weber and Rio Vista sites is not a substantial adverse impact and therefore is a less-than-significant impact that does not require mitigation." The determination of less-than-signification for removal of the trees is unclear, as the size of the trees and whether any are considered to be riparian habitat is not disclosed in the MND.

The MND further provides on page 3-26: "Mature trees can provide nesting habitat for raptors and other species protected under the Migratory Bird Treaty Act. Shrubs primarily provide nesting habitat for songbirds protected under the Migratory Bird Treaty Act. The loss of an active nest due to tree removal would constitute a significant impact. However, implementation of mitigation measure BIO-3 described in Appendix B, "Mitigation Monitoring and Reporting Program," would reduce the impact on special-status birds to ensure that active nests are not impacted if vegetation removal occurs during the active nesting season (typically considered to be February 1 through September 15). The impact to special-status birds at the Stockton West Weber and Rio Vista sites would be less-than-significant with mitigation incorporated."

CDFW 6

There is not enough substantial evidence in the MND to support a less-than-significant determination due to the removal of a significant amount of trees (potentially 35 trees, and 4.0 acres of trees), and the lack of information relative to size of the trees and whether they are potential nesting trees or nesting habitat (refer to CEQA Guidelines, § 15384).

Mitigation Measure BIO-3 in the MND only provides for bird surveys. Even if nesting birds are not found in the trees at the time of the surveys, removing the trees and not replacing them would mean a permanent loss of potential habitat for nesting birds that could be considered significant and require mitigation (refer to CEQA Guidelines, § 15382). Mitigation for the impacts to potential nesting trees may be needed in order to reduce the impact in the MND to less-than-significant (refer to CEQA Guidelines, § 15370).

Fish Habitat

Page 3-26 of the MND states "Implementation of the proposed project and project refinements would result in impacts to special-status fish habitat by removal of vegetation along the banks, placement of eight spud piles near the toe of the bank, and installation of up to 11 dolphin pile clusters for mooring of up to three transport barges during rock loading operations, and the removal of 12 existing wooden piles that are obstructing the foundation and alignment at one of the conveyor locations."

Page 3-27 of the MND states "Implementation of the proposed project at the Stockton West Weber site would result in the installation of a total of eight spud piles near the toe of the bank, below the ordinary high water mark (OHWM), to support two conveyor support barge structures and up to 11 dolphin pile clusters within the Stockton Deep Water Ship Channel.... Installation of the spud and dolphin piles would result in the placement of

structures (i.e., piles) below the OHWM of the Stockton Deep Water Ship Channel on the north shore of the Stockton West Weber site. Approximately 13,000 square feet of rip-rap would be placed along the north shore. Approximately 9,900 square feet would be above the OHWM and approximately 3,600 square feet of rip rap would be placed below the OHWM to stabilize the bank during barge loading during emergency events.”

CDFW 7 Please be advised that CDFW considers shallow water habitat for Delta smelt to be defined as all waters between Mean High Water and 9.84 feet below Mean Lower Low Water. Any impacts to the channel bed or bank from the installation of piles within shallow water habitat should be quantified and mitigated. An additional mitigation measure should be added to the MND to address any impacts to shallow water habitat (refer to CEQA Guidelines, § 15370).

CDFW 8 On page 3-26 of the MND, DWR proposes an in-water work window of July 1 to October 31. Please also be advised that the CDFW recommended in-water work window is August 1 to November 30.

If you have any questions regarding this letter, please contact Ms. Crystal Spurr, Senior Environmental Scientist (Supervisory), at (209) 234-3442 or by email at crystal.spurr@wildlife.ca.gov; or Mr. Jim Starr, Environmental Program Manager, at (209) 234-3440 or by email at jim.starr@wildlife.ca.gov.

cc: State Clearinghouse

CDFW 1 Comment: CDFW recommends using the Staff Report on Burrowing Owl Mitigation dated March 7, 2012 since this guidance supersedes the survey, avoidance and minimization, and mitigation recommendations in The California Burrowing Owl Consortium (CBOC, 1993).

Response: The reference to standard guidelines has been changed in Mitigation Measure BIO-1 from The California Burrowing Owl Consortium (CBOC, 1993) to Staff Report on Burrowing Owl Mitigation dated March 7, 2012. Revisions to pages MND-6, 3-29, and B-3 are shown in Section 3.0, “Errata.”

CDFW 2 Comment: CDFW recommends mitigation for trees removed that are 4 inches diameter at breast height (dbh) or larger. The MND should include the number of trees, size, and species of trees that are 4 inches dbh or larger to be removed at the Brannan Island State Recreation Area (BISRA) as part of the project.

Response: DWR proposes to retain all native oak trees greater than 8 inches in dbh and any mature tree that could provide nesting habitat at Brannan Island. Mitigation Measure BIO-4 addresses impacts associated with riparian trees, which are subject to a 1:1 replacement ratio. Riparian trees are subject to the jurisdiction of CDFW under Section 1600 of the California Fish and Game Code. Removal of riparian trees 4 inches and greater dbh would require compliance with terms specified in the Lake and Streambed Alteration Agreement, which DWR would be required to obtain under Mitigation Measure BIO-6.

CDFW 3 Comment: CDFW requests clarification for “Brennan” Island.

Response: Mitigation Measure BIO-4 contains a spelling error and has been revised to incorporate the correct spelling of Brannan Island.

CDFW 4 Comment: CDFW requests clarification as to whether the replacement riparian habitat is due to riparian habitat impacted on Brannan Island only or if the restoration is for all riparian habitat impacted as a result of the proposed project. CDFW suggests that clarification could be provided in Mitigation Measure BIO-4 by including a statement that all project-related riparian impacts will be mitigated on Brannan Island.

Response: Mitigation Measure BIO-4 states that “DWR will mitigate for impacts through restoration of riparian habitat on the Brennan Island, or other state-owned property based on a replacement ratio of 1:1”. It is the intent of Mitigation Measure BIO-4 that restoration of riparian habitat on Brannan Island, or other state property, will provide compensation for project-related riparian impacts occurring on any of the three proposed project sites. Mitigation Measure BIO-4 has been revised to clarify that all project-related riparian impacts will be mitigated for on Brannan Island, other state-owned property, or a mitigation bank (see Section 3.0, “Errata”).

CDFW 5 Comment: CDFW requests additional information to be provided on the size of trees to be removed and whether any are considered riparian to clarify the determination of a less-than-significant impact for removal of trees at the Stockton West Weber and Rio Vista sites.

Response: Tree removal at the Stockton West Weber site would result in the loss of 10 Siberian elm (*Ulmus pumilia*), three pecan (*Carya illinoensis*), and one California black walnut (*Juglans hindsii*) as noted on page 3-25 of the IS. These species have trunks ranging from approximately 10 to 24 inches at dbh. In addition, a grove of Chinaberry (*Melia azedarach*)

trees would be removed. The trunks of the Chinaberry measure approximately 4 to 8 inches at dbh. All tree removal is located within the interior portion of the Stockton West Weber site, and these trees do not qualify as riparian trees. Also, with the exception of the black walnut tree, all trees identified for removal within the interior of the Stockton West Weber site are not native to California. Mitigation is typically not required for non-native, horticultural tree species. Tree removal at the Stockton West Weber site was determined to be less than significant because these are not riparian trees subject to CDFW jurisdiction under Section 1600 of the California Fish and Game Code, nor is the removal of these species regulated by the City of Stockton.

Tree species common within the Rio Vista site include valley oak (*Quercus lobata*), Fremont's cottonwood (*Populus fremontii*), Oregon ash (*Fraxinus latifolia*), Gooding's black willow (*Salix gooddingii*), and red willow (*S. laevigata*). Shrubs including arroyo willow (*S. lasiolepis*) and narrowleaf willow (*S. exigua*) are common at the Rio Vista site. Implementation of the proposed project and project refinements at the Rio Vista site would remove up to approximately 4.0 acres of trees. Road widening would result in the removal of 2-15 trees. The Rio Vista site is physically separated from the Sacramento River by more than 1,000 linear feet. The tree species present within the Rio Vista site are characteristic of a riparian forest; however, these trees are not located along a waterway nor do the trees have the ability to contribute to debris or other riparian source material to the Sacramento River. Therefore, the trees present on the Rio Vista site do not qualify as riparian habitat subject to CDFW jurisdiction under Section 1600 of the California Fish and Game Code. A formal tree survey to measure dbh has not been conducted at Rio Vista. The majority of the trees present within the Rio Vista site range between 8 and 24 inches dbh based on previous site reconnaissance. Tree removal at the Rio Vista site was determined to be less than significant because these are not riparian trees subject to CDFW jurisdiction under Section 1600 of the California Fish and Game Code, nor does Solano County regulate tree removal.

CDFW 6 Comment: CDFW requests additional information to support the determination of a less-than-significant impact or consideration of mitigation for the removal of trees within the Stockton West Weber and Rio Vista sites because tree removal constitutes a loss of potential nesting habitat.

Response: Upland tree removal at the Stockton West Weber site would remove up to 20 trees. Up to 4.0 acres of trees total at the Rio Vista site would be removed for project refinements such as the expansion of the rock stockpile. Road widening at the Rio Vista site would result in the removal of at least two, but up to 15 trees. The loss of an active nest would constitute a significant impact. However, implementation of Mitigation Measure BIO-3 requires that nesting surveys occur prior to the start of construction to avoid impacts to active nests and prevent take of special-status species and birds protected under the Migratory Bird Treaty Act (MBTA). The permanent loss of potential nesting habitat at the Stockton West Weber and Rio Vista sites as a result of project-related tree removal, described above, would not result in a drop in population levels of any local or regionally occurring bird species below self-sustaining population levels or threaten to eliminate a local or regionally occurring species. Approximately 9.37 acres of tree-dominated habitat that could provide potential nesting habitat would remain on the Rio Vista site after project implementation. All mature tree removal at the Stockton West Weber site would occur within the interior portion of the site and does not constitute removal of riparian trees. Removal of riparian vegetation along the northern site boundary at the Stockton West Weber site is required for the installation of in-

channel dolphins and the placement of rock conveyers to load barges. The northern edge of the Stockton West Weber site is dominated by narrowleaf willow and arundo. Riparian trees located along the west and southern project site boundaries would remain and could provide potential nesting habitat after project implementation. Mitigation for non-riparian trees that could provide potential nesting habitat is not required under CEQA or proposed.

CDFW 7 Comment: CDFW requests a mitigation measure be added for the loss of shallow water habitat, which provides habitat for Delta smelt.

Response: The waterways that surround the Stockton West Weber site are designated as critical habitat for delta smelt under the federal Endangered Species Act (ESA). Implementation of the proposed project and refinements at the Stockton West Weber site would require that DWR obtain a permit from the U.S. Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act. USACE cannot authorize a permit for any activity that is likely to directly or indirectly jeopardize the continued existence of a federally threatened or endangered species, or any activity that would directly or indirectly destroy or modify critical habitat for listed species. DWR is preparing a biological assessment in anticipation of the required Section 7 ESA consultation that USACE will initiate as part of the permit process; the biological assessment will address potential impacts on delta smelt habitat. In accordance with Mitigation Measure BIO-8, “DWR will commit to replace, restore, or enhance on a “no net loss” basis, in accordance with U.S. Army Corps of Engineers (USACE) and CVRWQCB, the acreage of all wetlands and other waters of the United States that would be removed, lost, and/or degraded with implementation of project plans. Wetland habitat shall be restored, enhanced, and/or replaced at an acreage and location and by methods agreeable to USACE and CVRWQCB, as determined during the Section 404 and Section 401 permitting processes. Final mitigation ratios will be determined during the permitting process.” Shallow water habitat is a component of “wetlands and other waters of the United States” included in Mitigation Measure BIO-8; therefore, a new or revised mitigation measure is not necessary.

CDFW 8 Comment: CDFW recommends an in-water work window of August 1 to November 30.

Response: Comment noted. DWR will adhere to the in-water work windows that are issued by USFWS and NMFS as part of formal Section 7 ESA consultation that result from the 404 Clean Water Act permitting process (and included in Mitigation Measure BIO-8).

2.2 Letter 2: Letter from California State Lands Commission

STATE OF CALIFORNIA

EDMUND G. BROWN JR., Governor

CALIFORNIA STATE LANDS COMMISSION
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202



Established in 1938

JENNIFER LUCCHESI, Executive Officer
(916) 574-1800 Fax (916) 574-1810
California Relay Service TDD Phone 1-800-735-2929
from Voice Phone 1-800-735-2922

Contact Phone: (916) 574-1890
Contact FAX: (916) 574-1885

December 22, 2014

File Ref: SCH #2014112056

Mr. John Paasch
Division of Flood Management
California Department of Water Resources
3310 El Camino Avenue, Suite 200
Sacramento, CA 95821

Subject: Mitigated Negative Declaration (MND) for Delta Emergency Facilities Improvement Project Refinements, San Joaquin and Solano Counties

Dear Mr. Paasch:

The California State Lands Commission (CSLC) staff has reviewed the MND for the Delta Emergency Facilities Improvement Project Refinements (Project), which is being prepared by the California Department of Water Resources (DWR). DWR, as a public agency proposing to carry out a project, is the lead agency under the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.). The CSLC is a trustee agency for projects that could directly or indirectly affect sovereign lands and their accompanying Public Trust resources or uses. Additionally, because the Project involves work on sovereign lands, the CSLC will act as a responsible agency.

CSLC Jurisdiction and Public Trust Lands

The CSLC has jurisdiction and management authority over all ungranted tidelands, submerged lands, and the beds of navigable lakes and waterways. The CSLC also has certain residual and review authority for tidelands and submerged lands legislatively granted in trust to local jurisdictions (Pub. Resources Code, §§ 6301, 6306). All tidelands and submerged lands, granted or ungranted, as well as navigable lakes and waterways, are subject to the protections of the Common Law Public Trust.

As general background, the State of California acquired sovereign ownership of all tidelands and submerged lands and beds of navigable lakes and waterways upon its admission to the United States in 1850. The State holds these lands for the benefit of all people of the State for statewide Public Trust purposes, which include but are not limited to waterborne commerce, navigation, fisheries, water-related recreation, habitat preservation, and open space. On tidal waterways, the State's sovereign fee ownership

extends landward to the mean high tide line, except for areas of fill or artificial accretion or where the boundary has been fixed by agreement or a court. On navigable non-tidal waterways, including lakes, the State holds fee ownership of the bed of the waterway landward to the ordinary low water mark and a Public Trust easement landward to the ordinary high water mark, except where the boundary has been fixed by agreement or a court. Such boundaries may not be readily apparent from present day site inspections.

CSLC i After reviewing the information contained in the MND, CSLC staff has determined that portions of the Project will be located along areas of the natural bed of Mormon Slough and the Port of Stockton on State-owned sovereign land under the jurisdiction of the CSLC. Therefore, a lease from the CSLC will be required for DWR to implement the Project on sovereign lands; please contact Al Franzoia (see contact information below) for further information about the extent of the CSLC's sovereign ownership and leasing requirements.

CSLC ii Please also be advised that while some of the waterways involved in the Project may not be under the CSLC's leasing jurisdiction, those waterways are still subject to a public navigational easement. This easement provides that the public has the right to navigate and exercise the incidences of navigation in a lawful manner on State waters that are capable of being physically navigated by oar or motor-propelled small craft. Such uses may include, but are not limited to, boating, rafting, sailing, rowing, fishing, fowling, bathing, skiing, and other water-related public uses. The activities completed under the Project must not restrict or impede the easement right of the public.

These comments are made without prejudice to any future assertion of State ownership or public rights, should circumstances change, or should additional information become available. This letter is not intended, nor should it be construed as a waiver or limitation of any right, title, or interest of the State of California in any lands under its jurisdiction.

Project Description

DWR proposes to improve three transfer facility sites to meet its objectives and needs as follows:

- Expedite levee repairs and facilitate channel closures in the event of a Delta levee breach.
- Enable the sites to serve other emergency response functions needed by DWR to respond rapidly and effectively to significant emergencies in the Delta.

From the Project Description, CSLC staff understands that the current Project is a refinement of the Delta Flood Emergency Facilities Improvement Project, which was analyzed in a MND (SCH 2013042015) and adopted on June 3, 2013. Since the adoption of the 2013 MND, minor refinements have been made to the Delta Flood Emergency Facilities Project. As a result, DWR has prepared this new MND to evaluate the Project refinements in the context of the original Project evaluated in the 2013 MND. The Project refinements would include the following components:

- Inclusion of Sea Level Rise Projections. The Stockton West Weber site (Stockton site) would now include a 12-inch aggregate base to a finished grade of 11-12 feet above the 100-year flood elevation plus freeboard to anticipate the approximated 18 inches of sea level rise.
- Additional Site Clearing, Grubbing and Construction. The Stockton and Rio Vista sites would be cleared and grubbed, including tree removal; grading and construction of various warehouses, offices, stockpile areas and other buildings would occur.
- Rock Conveyors. Two new approximately 600-square-foot concrete foundations supported by piles for two rock conveyors would be constructed at the Stockton site.
- Piles. Twelve existing piles would be removed, and up to eleven dolphin pile clusters and eight spud piles would be installed in the Stockton Deepwater Ship Channel. Pile driving would be conducted with an impact hammer and is anticipated to occur from a barge.
- Riparian Vegetation and Riprap. Riparian vegetation would be removed from up to approximately 700 linear feet along the Stockton Deepwater Ship Channel and approximately 13,000 square feet of riprap would be placed along the channel, with approximately 3,600 square feet of riprap occurring below the ordinary high water mark.

Environmental Review

CSLC staff requests that DWR consider the following comments on the Project's MND.

Biological Resources

- CSLC 1 1. Invasive Species: Although the MND considers the impacts of various aspects of the Project on fish species, such as removing riparian habitat and installing riprap, the MND does not consider the Project's potential to introduce or spread aquatic invasive species to the area. The use of in-water construction equipment at the Stockton site could facilitate the spread or introduction of aquatic invasive species to the Project area. The MND should consider a range of options to slow the introduction of invasive species into sensitive habitats, including hiring construction vessels from nearby, or requiring hull cleaning from contractors prior to Project construction. Please consider current and proposed aquatic invasive species prevention programs in the area as models for invasive species prevention during the Project.

Cultural Resources

- CSLC 2 2. Submerged Resources: The MND should evaluate potential impacts to submerged cultural resources, in addition to terrestrial cultural resources, in the Project area. The CSLC maintains a shipwrecks database that can assist with this analysis. A number of shipwrecks exist in San Joaquin County, and CSLC staff requests that DWR contact Assistant Chief Counsel Pam Griggs (see contact information below) to obtain shipwrecks data from the database and CSLC records for the Project site.

The database includes known and potential vessels located on the State's tide and submerged lands; however, the locations of many shipwrecks remain unknown. Please note that any submerged archaeological site or submerged historic resource that has remained in State waters for more than 50 years is presumed to be significant.

- CSLC 3 3. Title to Resources: The MND should also mention that the title to all abandoned shipwrecks, archaeological sites, and historic or cultural resources on or in the tide and submerged lands of California is vested in the State and under the jurisdiction of the CSLC. CSLC staff requests that the MND consult with Assistant Chief Counsel Pam Griggs (see contact information below) should any cultural resources on State lands be discovered during construction of the proposed Project.

Hydrology and Water Quality

- CSLC 4 4. Spill Prevention and In-Water Construction: Although the MND includes an analysis of the impacts of accidental spills and mitigates this impact using MM HYD-1 on page 3-41, the mitigation measure, as currently written, does not explicitly cover spills for in-water construction equipment. Please include specific best management practices on preventing and containing spills from in-water construction equipment in MM HYD-1.
- CSLC 5 5. Mercury/Methylmercury: The MND study area includes the San Joaquin River and Mormon Slough. The MND does not disclose that the San Joaquin River is listed as impaired for mercury/methylmercury under the Clean Water Act. Mercury is a sediment-associated pollutant and sediment disturbance through piling removal and pile driving may contribute to mercury transport in the Delta. CSLC staff requests that the MND include avoidance and minimization measures to reduce potential release from Project activities of mercury and other toxins into waterways and onto State lands underlying those waterways.

On April 22, 2010, the Central Valley Regional Water Quality Control Board (CVRWQCB) identified the CSLC as both a State agency that manages open water areas in the Sacramento-San Joaquin Delta Estuary and a nonpoint source discharger of methylmercury (Resolution No. R5-2010-0043), because subsurface lands under the CSLC's jurisdiction are impacted by mercury from legacy mining activities dating back to California's Gold Rush. Pursuant to a CVRWQCB Total Maximum Daily Load (TMDL), the CVRWQCB is requiring the CSLC to fund studies to identify potential methylmercury control methods in the Delta and to participate in an Exposure Reduction Program. The goal of the studies is to evaluate existing control methods and evaluate options to reduce methylmercury in open waters under jurisdiction of the CSLC. Any action taken that may result in mercury or methylmercury suspension within the Sacramento-San Joaquin Delta Estuary may affect the CSLC's efforts to comply with the CVRWQCB TMDL.

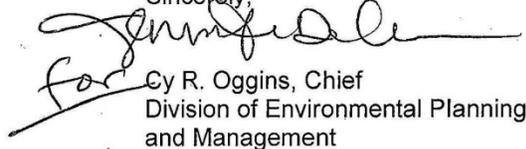
Noise and Vibration

- CSLC 6 6. Pile Driving Analysis: The noise analysis in section 3.14.2(b) and table 3.13-3 omit any mention of pile driving equipment, particularly impact hammers, when assessing ground borne vibration. Please include the pile driving equipment in the table and analysis. If impacts are found to be significant, include mitigation measures that will reduce the impacts to a less than significant level.

Thank you for the opportunity to comment on the MND for the Project. As a responsible and trustee agency, the CSLC will need to rely on the Final MND for the issuance of any new lease as specified above and, therefore, we request that you consider our comments prior to adoption of the MND.

Please send copies of future Project-related documents, including electronic copies of the Final MND, Mitigation Monitoring and Reporting Program (MMRP), Notice of Determination (NOD), when they become available, and refer questions concerning environmental review to Holly Wyer, Environmental Scientist, at (916) 574-2399 or via e-mail at Holly.Wyer@slc.ca.gov. For questions concerning archaeological or historic resources under CSLC jurisdiction, please contact Assistant Chief Counsel Pam Griggs at (916) 574-1854 or via email at Pamela.Griggs@slc.ca.gov. For questions concerning CSLC leasing jurisdiction, please contact Al Franzoia, Public Land Management Specialist, at (916) 574-0992, or via email at Al.Franzoia@slc.ca.gov.

Sincerely,


for Cy R. Oggins, Chief
Division of Environmental Planning
and Management

cc: Office of Planning and Research
H. Wyer, CSLC
A. Franzoia, CSLC
E. Milstein, CSLC

CSLC i Comment: CSLC identifies portions of the proposed project refinements along Mormon Slough and the Port of Stockton that occur on State-owned sovereign lands that would require a lease from CSLC prior to project implementation. CSLC also identifies Al Franzoia as the contact for information about the extent of CSLC’s sovereign ownership and leasing requirements.

Response: DWR will pursue a lease agreement with CSLC if it is determined that in-water construction would result in impacts to state-owned sovereign lands within the Stockton Deepwater Ship Channel. No project construction would occur within Mormon Slough. Consistent with Mitigation Measure BIO-8, “All permits, regulatory approvals, and permit conditions for impacts on wetland habitats shall be secured before implementation of any construction activities within waters of the United States or wetland habitats, including waters of the state.” Additionally, DWR will contact Al Franzoia, or the appropriate successor, with any questions concerning the CLSC lease application process, as necessary.

CSLC ii Comment: CSLC notes that additional waterways in the project area, while not under CSLC’s leasing jurisdiction, are subject to a public navigational easement such that project activities must not restrict or impede the easement right of the public.

Response: DWR will obtain Section 404 Clean Water Act permit and Section 10 authorization from USACE prior to the start of in-water work within the Stockton Deepwater Ship Channel to ensure that the proposed project is in compliance with regulations regarding maintaining the navigability of the channel. The public interest reviews required as part of Section 404 and Section 10 authorizations would address navigation and are therefore covered under Mitigation Measure BIO-8, although not explicitly mentioned.

CSLC 1 Comment: CSLC requests consideration of the project’s potential to introduce or spread aquatic invasive species to the project area as a result of the use of in-water construction equipment at the Stockton site. CLSC recommends using current and proposed aquatic invasive species prevention programs in the area as models for invasive species prevention, and considering a range of options to slow the introduction of invasive species into sensitive habitats, including hiring construction vessels from nearby, or requiring hull cleaning from contractors prior to project construction.

Response: Comment noted. DWR will implement measures such as hiring construction vessels from nearby, or requiring hull cleaning from contractors, prior to project construction as a means to reduce the potential project-related spread of invasive species associated with the use of in-water construction equipment. Implementation of the proposed project at the Stockton West Weber site would require that DWR obtain a permit from USACE under Section 404 of the Clean Water Act and a water quality certification from the CVRWQCB under Section 401 of the Clean Water Act. USACE and CVRWQCB cannot authorize a permit for any activity for which the resultant discharge of dredge or fill materials would have an unacceptable adverse effect on sensitive habitats or water quality associated with waters of the United States or wetland habitats, including waters of the state, such as could be caused by the spread of invasive species. DWR will adhere to any avoidance, minimization, or other permit terms resulting from the 401 and 404 Clean Water Act permitting process.

CSLC 2 Comment: CSLC requests consideration of the proposed project’s potential to impact submerged cultural resources and identifies a shipwreck database maintained by CSLC as a potential resource for the analysis. CSLC also identifies Pam Griggs as the contact for obtaining shipwreck data or other CSLC records of submerged resources on the project site.

CSLC also notes that the locations of many shipwrecks remain unknown, but that any submerged archaeological site or submerged historic resources that has remained in state waters for more than 50 years is presumed to be significant.

Response: A search of the California State Lands Commission Shipwreck Database was conducted on January 12, 2015. There are no recorded shipwrecks in Solano County and no in-water work is proposed at the Rio Vista project site. Twelve shipwrecks have been recorded in Sacramento County, and 19 ship wrecks have been recorded in San Joaquin County; however, there are no recorded shipwrecks in the Stockton West Weber Site or Brannan Island project footprints. On page 3-32, the IS states that the Stockton West Weber site has been subjected to heavy industrial use and has been heavily disturbed, including grading, construction of docks, placement of concrete foundations, trenching for utilities, paving, and placement of aggregate base. There are no prehistoric sites or historic period resources present at the Stockton site. Additionally, the Rio Vista site has been subject to two archeological survey efforts; the surveys resulted in no cultural resources being discovered, and no prehistoric sites or historic period resources have been recorded in or immediately adjacent to this site. Therefore, the likelihood of unknown cultural resources being present in the project area is low. However, DWR will obtain Section 404 Clean Water Act permit and Section 10 authorization from USACE prior to the start of in-water work within the Stockton Deepwater Ship Channel. Prior to the issuance or authorization of any permit under Section 404 of the Clean Water Act, USACE must consider the effect that activities authorized under the permit may have on historic properties as required by Section 106 of the National Historic Preservation Act; this would include consideration of any submerged cultural resources that are included in, or eligible for inclusion in, the National Register for Historic Places. DWR will adhere to any avoidance, minimization, or other permit terms resulting from Section 106 consultation as part of the 404 Clean Water Act permitting process. Additionally, DWR will contact Pam Griggs if it is determined that the scope of analysis under Section 106 consultation requires obtaining shipwreck data or other CSLC records of submerged resources on the project sites.

CSLC 3 Comment: CSLC requests that DWR consult with Assistant Chief Counsel Pam Griggs should any cultural resources on State lands be discovered during construction of the proposed project.

Response: Comment noted. DWR will adhere to all measures required as a result of Section 106 consultation required as part of the Section 404 permit process, including measures related to the discovery of previously unknown cultural resources on State lands (compliance with Section 404 is included in Mitigation Measure BIO-8). Mitigation Measure CUL-3 has been revised to state that DWR will contact Pam Griggs should any reportable cultural resources be discovered on State lands during construction of the proposed project (see Section 3.0, "Errata").

CSLC4 Comment: CSLC requests specific best management practices related to preventing and containing spills from in-water construction equipment be included in Mitigation Measure HYD-1.

Response: Mitigation Measure HYD-1 already includes best management practices to minimize water quality impacts and contaminated runoff, which includes preventing and containing spills from in-water construction equipment. No further mitigation is required. Furthermore, implementation of the proposed project would require that DWR obtain a permit from

USACE under Section 404 of the Clean Water Act and a water quality certification from the CVRWQCB under Section 401 of the Clean Water Act. USACE and CVRWQCB cannot authorize a permit for any activity for which the resultant discharge of dredge or fill materials would have an unacceptable adverse effect on water quality within waters of the U.S. or state. DWR will adhere to any avoidance, minimization, or mitigation measures that result from the 401 and 404 Clean Water Act permitting process.

CSLC 5 Comment: CSLC requests mitigation for the potential release of mercury and other toxins into waterways and onto State lands underlying those waterways as a result of project activities.

Response: Mitigation Measure HYD-1 already includes best management practices to minimize water quality impacts and contaminated runoff, which includes preventing and containing releases of mercury and other toxins into waterways. No further mitigation is required. Furthermore, implementation of the proposed project at the Stockton West Weber site would require that DWR obtain a permit from the USACE under Section 404 of the Clean Water Act and a water quality certification from CVRWQCB under Section 401 of the Clean Water Act. USACE and CVRWQCB cannot authorize a permit for any activity for which the resultant discharge of dredge or fill materials would have an unacceptable adverse effect on water quality associated with waters of the United States or wetland habitats, including waters of the state. DWR will adhere to any avoidance, minimization, or mitigation measures that result from the 401 and 404 Clean Water Act permitting process.

CSLC 6 Comment: CSLC requests potential pile-driving equipment that would be used during project activities to be included in the noise analysis section 3.14.2(b) and Table 3.13-3 of the IS; and requests appropriate mitigation if impacts from ground-borne vibration resulting from pile driving are found to be significant.

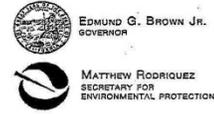
Response: Page MND-3 states that “Pile driving would be conducted with an impact hammer and is anticipated to occur from a barge.” After further consideration, DWR may use an impact or vibratory type hammer for in-water construction at the Stockton West Weber site. Therefore, Table 3.13-3 in the IS has been augmented to include an impact or vibratory pile driver with associated typical noise levels (dBA) at 50 feet from source of 95 dBA according to the Federal Highway Administration Construction Noise Handbook. Text on page MND-3 and page 2-5 in the IS have been augmented to incorporate the potential use of a vibratory hammer for pile-driving activities. Text on page 3-76 in the IS has been modified to include the impact or vibratory hammer when considering potential impacts of noise and vibrations from pile driving on sensitive receptors. Text changes are shown in Section 3.0, “Errata.”

The addition of a vibratory hammer to the noise analysis would not affect the determination that project construction would have a less-than-significant impact because there are no sensitive receptors at or near the Stockton West Weber site, and the site is located in an Industrial Zone bordered on three sides by water and also occurs in proximity to Interstate 5 which generates relatively high ambient noise levels in the project vicinity.

Page 3-76, second paragraph, first sentence has been corrected to identify the correct upper range of noise levels generated by construction equipment and additional analysis regarding construction-related noise levels at the Stockton West Weber site has been added to address “noise levels in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards (see Section 3.0, “Errata”).

Per CSLC 6, (page 3-78 in the IS) analysis of “excessive ground borne vibration or ground borne noise levels” has been expanded to include an impact or vibratory pile driver analysis at Stockton West Weber (see Section 3.0, “Errata”).

2.3 Letter 3: Letter from Central Valley Regional Water Quality Control Board



Central Valley Regional Water Quality Control Board

17 December 2014

John Paasch
Department of Water Resource
Division of Flood Management
1416 9th Street
Sacramento, CA 95814

CERTIFIED MAIL
7014 2120 0001 3978 3675

COMMENTS TO REQUEST FOR REVIEW FOR THE MITIGATED NEGATIVE DECLARATION, DELTA EMERGENCY ROCK AND TRANSFER FACILITIES PROJECT REFINEMENTS PROJECT, SCH# 2014112056, SAN JOAQUIN AND SOLANO COUNTIES

Pursuant to the State Clearinghouse's 24 November 2014 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Request for Review for the Mitigated Negative Declaration* for the Delta Emergency Rock and Transfer Facilities Project Refinements Project, located in San Joaquin and Solano Counties.

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.

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



CVRWQCB 2 **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

CVRWQCB 3 **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.

CVRWQCB 4 **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.

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.

CVRWQCB 5 **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.

CVRWQCB 6 **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.

CVRWQCB 7 **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

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

CVRWQCB 8

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

CVRWQCB 1 Comment: CVRWQCB comments that projects that disturb 1 or more acres or are a part of a larger common plan of development that in total disturbs 1 or more acres, are required to

obtain coverage under the Construction General Permit, which requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP).

Response: The proposed project is subject to regulation under the Construction General Permit, and consistent with Mitigation HYD-1, DWR will prepare a SWPPP to implement Best Management Practices (BMPs) for the prevention of erosion and transport of soil, sand, and silt offsite during runoff events. Furthermore, consistent with Mitigation Measure BIO-8, “All permits, regulatory approvals, and permit conditions for impacts on wetland habitats shall be secured before implementation of any construction activities within waters of the United States or wetland habitats, including waters of the state.”

CVRWQCB 2 Comment: CVRWQCB comments that Phase I and II Municipal Separate Storm Sewer System permits that require the Permittee to reduce pollutants and runoff flows from new development and redevelopment using Best Management Practices may be required for the proposed project.

Response: Mitigation Measure HYD-1 includes best management practices to minimize water quality impacts and contaminated runoff, which includes preventing and containing spills from in-water construction equipment. Furthermore, consistent with Mitigation Measure BIO-8, “All permits, regulatory approvals, and permit conditions for impacts on wetland habitats shall be secured before implementation of any construction activities within waters of the United States or wetland habitats, including waters of the state.” If Phase I and/or II MS4 permits are found to be applicable to the proposed project, DWR will submit applications for and obtain appropriate MS4 permits prior to project implementation.

CVRWQCB 3 Comment: CVRWQCB comments that 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.

Response: Mitigation Measure HYD-1 already includes best management practices to minimize water quality impacts and contaminated runoff, which includes preventing and containing spills from in-water construction equipment. Furthermore, consistent with Mitigation Measure BIO-8 “All permits, regulatory approvals, and permit conditions for impacts on wetland habitats shall be secured before implementation of any construction activities within waters of the United States or wetland habitats, including waters of the state.” The proposed project is classified as an emergency use facility and is therefore not required to submit an application for the Industrial Storm Water General Permit. DWR will comply with regulations contained in the noted Industrial Storm Water General Permit.

CVRWQCB 4 Comment: CVRWQCB comments that a Clean Water Act Section 404 permit may be required for the proposed project if dredged or fill material is discharged into navigable waters or wetlands.

Response: The proposed project would be subject to regulation under the Clean Water Act Section 404. DWR will obtain a Section 404 Clean Water Act permit from USACE prior to project implementation. Consistent with Mitigation Measure BIO-8, “Before the start of any ground-disturbing activity associated with the construction of any project feature that would affect waters of the United States, including wetlands, or waters of the state, DWR will obtain all necessary permits under Sections 404 and 401 of the Clean Water Act or the State’s Porter-Cologne Act for the proposed project and project refinements at the Stockton West Weber

and Rio Vista sites, and Section 10 authorization under Rivers and Harbors Act for work within the Stockton Deep Water Ship Channel at the Stockton West Weber site.”

CVRWQCB 5 Comment: CVRWQCB comments that a Clean Water Act Section 401 permit may be required for the proposed project if a USACE, or any other federal, permit is required for the proposed project due to the disturbance of waters of the United States.

Response: The proposed project would be subject to regulation under Section 401 of the Clean Water Act. DWR will obtain a Section 401 Water Quality Certification for project activities affecting waters of the United States prior to project implementation. Consistent with Mitigation Measure BIO-8, “Before the start of any ground-disturbing activity associated with the construction of any project feature that would affect waters of the United States, including wetlands, or waters of the state, DWR will obtain all necessary permits under Sections 404 and 401 of the Clean Water Act or the State’s Porter-Cologne Act for the proposed project and project refinements at the Stockton West Weber and Rio Vista sites, and Section 10 authorization under Rivers and Harbors Act for work within the Stockton Deep Water Ship Channel at the Stockton West Weber site.”

CVRWQCB 6 Comment: CVRWQCB comments that the proposed project may require a Waste Discharge Requirement (WDR) permit from the CVRWQCB if USACE determines that only nonjurisdictional waters of the state are present in the proposed project area.

Response: It is anticipated that a WDR permit will be unnecessary for the proposed project because the proposed project would be subject to regulation under Section 404 and Section 401 of the Clean Water Act.

CVRWQCB 7 Comment: CVRWQCB comments that the project proponent may be required to obtain regulatory coverage under the Irrigated Lands Regulatory Program if the property will be used for commercial irrigated agriculture.

Response: The proposed project would not involve property that would be used for commercially irrigated agriculture, and therefore project-related discharge would not be subject to regulation under the Irrigated Lands Regulatory Program.

CVRWQCB 8 Comment: CVRWQCB comments if the proposed project includes construction dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project the project will require coverage under a NPDES permit. A complete application must be submitted to the CVRWQCB to obtain coverage under the General NPDES permits.

Response: Consistent with Mitigation Measure BIO-8, “Before the start of any ground-disturbing activity associated with the construction of any project feature that would affect waters of the United States, including wetlands, or waters of the state, DWR will obtain all necessary permits under Sections 404 and 401 of the Clean Water Act or the State’s Porter-Cologne Act for the proposed project and project refinements at the Stockton West Weber and Rio Vista sites, and Section 10 authorization under Rivers and Harbors Act for work within the Stockton Deep Water Ship Channel at the Stockton West Weber site.”

2.4 Letter 4: Letter from United States Coast Guard

U.S. Department of
Homeland Security

United States
Coast Guard



Commander
Eleventh District

U.S. Coast Guard Island,
Building 50-2
Alameda, CA 94501-5100
Staff Symbol: (dpw)
Phone: (510) 437-3514
Fax: (510) 437-5836

16590
Sac & SJ Delta
November 25, 2014

CA Department of Water Resources,
Division of Flood Management
Attn: Mr. John Paasch
3310 El Camino Ave. Suite 200
Sacramento, CA 95821

Dear Sir:

Please refer to the Initial Study/ Proposed Mitigated Negative Declaration, Delta Flood Emergency Facilities Improvement Project and Delta Flood Emergency Preparedness Response, and Recovery Program, dated November 2014.

Waterway traffic has the right of way over all other forms of transportation, including rail, highway, pedestrian, pipeline and others. The Coast Guard permits and regulates all bridges in, over or on navigable waters of the U.S., under the provisions of the General Bridge Act of 1946 (previously Section 9 of the River & Harbor Act of 1899). Bridges are considered legally permitted obstructions to navigation, allowed to exist so long as they provide sufficient clearance for the safe, unimpeded passage of vessels on the waterway, and are used for the intended purpose of land transportation.

As part of our bridge regulatory function (33 CFR 114-118), the Commander, Eleventh Coast Guard District works closely with many federal, state and local agencies, in addition to waterway users and bridge owners, to ensure existing and proposed bridges do not interfere with navigation. We have included the CA Department of Water Resources in our list of customers relative to bridge related projects in California.

USCG 1 Please include my office as your point of contact for the USCG bridge regulatory function in the Eleventh Coast Guard District (CA, AZ, NV & UT). We will ensure your existing and future bridge navigational clearance needs are met in support of emergency and other levee and infrastructure maintenance operations in the California.

I can be contacted by telephone at (510) 437-3516 if additional information is needed. You may also refer to our website at <http://www.uscg.mil/hq/cg5/cg551/>

Sincerely,

A handwritten signature in black ink, appearing to read "D. Sulouff".

DAVID H. SULOUFF
Chief, Bridge Section
Eleventh Coast Guard District
By direction of the District Commander

Copy: USACE Sacramento & San Francisco Districts

USCG 1 Comment: USCG identifies itself as the entity responsible for permitting and regulating all bridges in, over, or on navigable waters of the U.S., under the provisions of the General Bridge Act, to ensure existing and proposed bridges do not interfere with navigation. USCG also identifies the Commander, Eleventh Coast Guard District as the appropriate office point of contact for bridge-related projects in California.

Response: The proposed project does not involve any bridge-related work; however, the project will request Section 10 authorization from USACE.

2.5 Letter 5: Letter from San Joaquin Valley Air Pollution Control District



December 19, 2014

Mr. John Paasch
Division of Flood Management
California Department of Water Resources
3310 El Camino Avenue, Suite 200
Sacramento, CA 95821

Project: Notice of Intent to Adopt an Initial Study/Mitigated Negative Declaration (IS/MND) for the Delta Emergency Rock and Transfer Facilities Refinements

District CEQA Reference No: 20140936

Dear Mr. Paasch:

The San Joaquin Valley Unified Air Pollution Control District (District) has reviewed the Draft IS/MND for the above referenced project proposing to acquire long-term access and improve up to three sites in the Delta including the following: Stockton, Rio Vista, and Brannan-Andrus. The purpose of the proposed project is to ensure that the State of California has the appropriate infrastructure and supplies in the Delta to respond to and recover quickly and effectively from major flood or earthquake disasters in the Delta. The primary objective is to improve three transfer facilities sites where quarry rock, sand, soil, and other flood-fight materials can be effectively transferred from trucks to barges to expedite levee repairs and facilitate channel closures in the event of Delta levee breaches. In addition, the proposed project sites would serve other emergency response functions needed by the California Department of Water Resources (DWR) to respond rapidly and effectively to significant emergencies in the Delta, including storage of repair materials and flood-fight supplies, and Incidental Command Posts. DWR would use existing improvements and construct additional improvements as needed to support the proposed emergency response functions. The District offers the following comments:

- SJAPCD 1 1. Based on the District's review of the Draft IS/MND, project specific emissions of criteria pollutants are not expected to exceed District significance thresholds of 10 tons/year NOX, 10 ton/year ROG, and 15 tons/year PM10. Therefore, the District concludes that project specific criteria pollutant emissions would have no significant adverse impact on air quality.

Seyed Sadredin
Executive Director/Air Pollution Control Officer

Northern Region
4800 Enterprise Way
Modesto, CA 95358-8718
Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
Tel: (559) 230-6000 FAX: (559) 230-6061

Southern Region
34946 Flyover Court
Bakersfield, CA 93308-9725
Tel: 661-392-5500 FAX: 661-392-5585

www.valleyair.org www.healthyairliving.com

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SJAPCD 2 2. Based on the District's review of the Draft IS/MND, the proposed project is not subject to District Rule 9510 (Indirect Source Review).

SJAPCD 3 3. The proposed project may be subject to District Rules and Regulations, including: Regulation VIII (Fugitive PM10 Prohibitions), Rule 4102 (Nuisance), Rule 4601 (Architectural Coatings), and Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations). In the event an existing building will be renovated, partially demolished or removed, the project may be subject to District Rule 4002 (National Emission Standards for Hazardous Air Pollutants). The above list of rules is neither exhaustive nor exclusive. To identify other District rules or regulations that apply to this project or to obtain information about District permit requirements, the applicant is strongly encouraged to contact the District's Small Business Assistance Office at (559) 230-5888. Current District rules can be found online at: www.valleyair.org/rules/1ruleslist.htm.

SJAPCD 4 4. The District recommends that a copy of the District's comments be provided to the project proponent.

If you have any questions or require further information, please call Mark Montelongo, at (559) 230- 5905.

Sincerely,

Arnaud Marjollet
Director of Permit Services



For: Chay Thao
Program Manager

AM: mm

SJVAPCD 1 Comment: The SJVAPCD review concurs that project specific emissions of criteria pollutant are not expected to exceed its significance thresholds and would have not significant impact on air quality.

Response: Comment noted, no response required.

SJVAPCD 2 Comment: SJVAPCD has determined that the project is not subject to its Rule 9510 (Indirect Source Review).

Response: Comment noted, no response required.

SJVAPCD 3 Comment: SJVAPCD notes that the proposed project may be subject to other district rules and regulations and suggest that the applicant contact its Small Business Assistance Office.

Response: Comment noted, DWR will contact the SJVAPCD's Small Business Assistance Office.

SJVAPCD4 Comment: SJVAPCD requests that a copy of its comments be provided to the project proponent.

Response: Comment noted, no response required, as the SJVAPCD comment letter was sent directly to and reviewed the project proponent, Division of Flood Management (DFM) of the California Department of water Resources (DWR).

2.6 Letter 6: Letter from Maria Rea, National Marine Fisheries Service



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
West Coast Region
650 Capitol Mall, Suite 5-100
Sacramento, California 95814-4700

THIS IS BEING SENT
TO REPLACE
THE INITIAL MAILING
WITH THE WRONG
DATE STAMP (2014).





UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
West Coast Region
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Sacramento, CA 95814-4700

January 14, 2015

Mr. John Paasch
Division of Flood Management
California Department of Water Resources
3310 El Camino Avenue, Suite 200
Sacramento, CA 95821

Dear Mr. Paasch:

This letter responds to your November 24, 2014, request for comments regarding the California Department of Water Resources' (DWR) *Notice of Intent to Adopt an Initial Study/ Mitigated Negative Declaration for the Delta Emergency Rock and Transfer Facilities Project Refinements (IS/MND)*, prepared by AECOM, Incorporated. These comments are not to be considered a consultation under section 7 of the Endangered Species Act.

Project Background

DWR has stated that the purpose of the Delta Flood Emergency Facilities Improvement Project (Project), a component of the Delta Flood Emergency Preparedness, Response, and Recovery Program, is to ensure that the State has the appropriate infrastructure and supplies in the Delta to respond to and recover quickly and effectively from major flood or earthquake disasters in the Sacramento-San Joaquin River Delta. Detailed information and a comprehensive Project description is contained in the IS/MND.

The primary objective of the proposed Project is to improve three transfer facilities sites where quarry rock, sand, soil, and other flood-fight materials can be efficiently transferred from trucks to barges to expedite levee repairs and facilitate channel closures in the event of Delta levee breaches. These locations are the Stockton West Weber Avenue site (Stockton West Weber site), the Rio Vista site, and the Brannan Island State Recreation Area site (BISRA site). In addition, the proposed Project sites would serve other emergency response functions needed by DWR to respond rapidly and effectively to significant emergencies in the Delta, including storage of repair materials and flood-fight supplies, and as locations of Incident Command Posts.

The Project will entail clearing, grubbing, and leveling of the project sites to accommodate new structures, flood fight material storage areas, roadways and parking facilities, and utilities. In-water work will occur at the Stockton West Weber site, situated on the Stockton Deep Water Ship Channel (SDWSC). The Rio Vista site is located in an upland area that does not drain to the Sacramento River or surrounding waterways. It is located behind the protective levee adjacent to the Sacramento River. The BISRA site does not include any changes to the actions that have previously been the subject of environmental review and the current IS/MND does not address this site further.



Specific Comments to proposed Project

NMFS makes these specific comments to the proposed construction and operations at the Stockton West Weber site that may affect adjacent water bodies (*i.e.*, SDWSC).

- NMFS 1 1) DWR has indicated that it will attempt to avoid and minimize the effects of underwater sound pressure (*i.e.*, underwater noise) during the installation of the 8 spud pilings and 33 dolphin piles by implementing mitigation measure Biol-7 and conducting the in-water pile driving activities during the period between August 1 and November 30 to avoid listed aquatic species. DWR has identified the following methods to minimize or mediate the magnitude of the noise generated during pile driving: (a) use of impact hammer cushion blocks; (b) day time pile driving; (c) de-watered pipe caissons or bubble curtains to surround the pile and contain the noise source, thereby reducing its transmission to the surrounding water column; or (d) gradually increasing the power and frequency of the pile strikes as the pile is driven into the substrate. While these can be effective tools to reduce the noise energy generated by pile driving in some instances, NMFS recommends that a vibratory pile driving hammer be used to drive the piles to approximately their final design depth and then use the impact pile driver to set each individual pile to its final depth and load design. Vibratory hammers generate sound energy which has better characteristics for the safety of exposed fish in comparison to the characteristics of sound energy generated by impact pile driving hammers. This becomes particularly relevant during the later portion of DWR's proposed work window (*i.e.*, October and November) when listed adult California Central Valley steelhead (*Oncorhynchus mykiss*) may be present in the proposed Project's action area. Furthermore, there is always the potential that Southern Distinct Population Segment green sturgeon (*Acipenser medirostris*) may be in the vicinity of the pile driving activity in the SDWSC at any time of the year, as juvenile sturgeon rear in Delta waters for up to the first three years of their life.
- NMFS 2 2) As part of the proposed Project, DWR intends to remove 12 wooden pilings that are currently located in the SDWSC adjacent to the Stockton West Weber site and are interfering with the placement of the piles for one of the rock conveyors. DWR has not indicated whether these piles are treated wood, and if so, whether they are treated with creosote. Assuming that the piles are creosote treated, what methods are being considered by DWR for the safe removal of these piles? NMFS recommends that the piles be removed using a vibratory pile driver to remove the entire piling in one piece. Each pile should be disposed of in an appropriate upland disposal site that is designated to receive hazardous materials such as creosote treated lumber. If the pile breaks off while being extracted, attempts should be made to remove the remaining section of piling from the channel bottom in its entirety. If such attempts fail to remove the piling, the piling should be cut off below the mudline and the hole covered in clean sand or fill. NMFS recommends applying one of the best management practices (BMP) guidelines from the United States Environmental Protection Agency or the United States Army Corps of Engineers for piling removal from aquatic sites (or any similar BMPs with equivalent protective attributes). Useful information can be obtained from the following sites:

<http://www.nwp.usace.army.mil/Missions/Environment/SLOPES.aspx>

http://www.nws.usace.army.mil/Portals/27/docs/regulatory/forms/Revised_EPA_Piling_Removal_BMP's_3_01_07.pdf

- NMFS 3 3) DWR intends to place approximately 3,600 ft² (400 lineal feet of shoreline with an effective width of 9 feet below the OHWM) of rock rip rap below the OHWM in the SDWSC at the Stockton West Weber site. Rock riprap is known to negatively impact intertidal and riparian habitat. DWR has not explained how the placement of this rock riprap impacts aquatic habitat below the OHWM. Given the loss of this intertidal and riparian habitat by permanently armoring the bank with riprap, DWR should indicate how it will compensate for the loss of this habitat in the Delta.
- NMFS 4 4) While DWR has indicated that it will implement BMPs for the construction phase of the project to control stormwater runoff, the lack of stormwater control management plans for the ongoing operations of the Stockton West Weber site needs to be addressed. On page 3-37 of the IS/MND, section 3.6 Hydrology and Water Quality, the Stockton West Weber site is described as having:

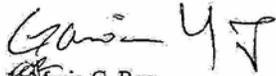
“existing drainage facilities including storm drain inlets and a detention pond on the parcel south of West Weber Avenue; and the parcel north of West Weber has a small network of storm drain pipes that will discharge directly into the Stockton Deep Water Ship Channel. Site drainage facilities would likely require improvements on both parcels, with more drainage facility improvements likely required on the north parcel.”

Although DWR has acknowledged that there are likely to be improvements made to the drainage facilities at the Stockton West Weber site, it provided no details of what these may be or to what extent the future stormwater runoff from the site will be treated. This is a concern for NMFS given the proposed use of the site for the storage of flood fight materials such as sand, gravel, and rocks in stockpiles exposed to the elements and the high potential for heavy equipment operation in the Stockton West Weber site to move and load flood fight materials. At a minimum, DWR should provide information regarding the proposed treatment train for controlling surface runoff from the site and how silt and suspended materials will be managed in that runoff. DWR should indicate whether stormwater will be discharged to the surrounding waterways or will be held in retention ponds on site. If DWR decides to construct retention ponds to hold stormwater runoff, what will be the design volume for the ponds and the period of retention for this runoff before discharge to surrounding waterways? In addition, DWR should describe how any contaminants contained in the surface runoff from the Stockton West Weber site will be treated and if this runoff will be eventually discharged to the surrounding waterways. The final disposition of the stormwater runoff, *i.e.*, whether it is held on site in retention ponds or discharged to surface waters, will determine the appropriate design for the stormwater treatment train. Similar concerns regarding stormwater management plans for continuing operations also apply to the additional flood materials storage sites described by DWR in its IS/MND document (*i.e.*, Rio

Vista and BISRA sites), and DWR should elaborate on their plans for long term management of stormwater runoff at these sites.

NMFS appreciates the opportunity to offer comments and suggestions on this IS/MND for the Delta Flood Emergency Facilities Improvement Project. Please contact Jeffrey Stuart at (916) 930-3607, or via email at J.Stuart@noaa.gov, if you have any questions regarding this letter.

Sincerely,



Maria C. Rea
Assistant Regional Administrator

cc: Copy to File – ARN151422WCR2014SA00313

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NMFS 1 Comment: NMFS recommends using a vibratory pile driving hammer to drive spud piles and dolphin piles into the Stockton Deep Water Ship Channel and an impact hammer to set each individual pile to its final depth and load design. NMFS makes this recommendation based on the potential presence of listed Central Valley Steelhead in the Stockton Deep Water Ship Channel during the later portion of DWR's work window (i.e., October and November) and the potential presence of the Southern Distinct Population Segment of green sturgeon in the Ship Channel year round.

Response: Mitigation Measure Bio-7 requires that a biological construction monitor be present to monitor construction activities and compliance with terms and conditions of permits, including threshold sound levels established by USFWS and NMFS. Further, DWR is currently preparing a biological assessment to address potential adverse impacts to special-status fish species and anticipated Section 7 ESA consultation with both USFWS and NMFS. DWR will incorporate and implement all practicable best management practices obtained through ESA consultation. Clarifying language has been added to Section 3.4, "Errata and Text Changes."

NMFS 2 Comment: NMFS requests clarification on the removal methods of the 12 existing wooden pilings currently located adjacent to the Stockton West Weber site and adjacent to the Stockton Deep Water Ship Canal.

Response: DWR assumes that the 12 existing wooden pilings are creosote treated and will therefore be handled appropriately and disposed of in a landfill authorized for receiving hazardous materials. DWR is pursuing a Section 404 Clean Water Act and Section 10 River and Harbors Act Authorization from USACE. DWR is also preparing a biological assessment to address adverse impacts to special-status fish species as part of Section 7 ESA consultation with USFWS and NMFS. DWR will incorporate and implement all practicable best management practices obtained through ESA consultation.

NMFS 3 Comment: NMFS requests clarification on how DWR will compensate for the loss of intertidal and riparian habitat as a result of development of the northern shore along the Stockton Deep Water Ship Channel, including placement of rock rip rap along 400 linear feet of shoreline.

Response: The existing conditions along the north shore of the Stockton Deep Water Ship Channel are characterized by large pieces of broken concrete and broken brick masonry. Nonnative giant reed is abundant along the eastern portion of the northern shore. The northern shore is also characterized by a narrowleaf willow thicket adjacent to the monoculture stand of giant reed. In addition, approximately three mature non-native Siberian elm trees would be removed to develop the north shore. Placement of riprap along the northern shore will not substantially alter the intertidal habitat; however, DWR will mitigate for the loss of waters of the United States and for impacts to species habitat. Specific compensatory mitigation, if needed, will be determined through the Section 404 Clean Water Act and Section 10 River and Harbors Act Authorization from USACE, and the ESA permitting processes.

NMFS 4 Comment: NMFS requests clarification on the drainage facilities proposed for the northern parcel of the Stockton West Weber Rio Vista and BISRA sites.

Response: As mentioned in the IS/MND, DWR will use the existing storm drain systems on both parcels at the Stockton West Weber site to the maximum extent feasible. The south parcel will use

the existing storm drain pipes and detention pond system. If feasible, the north parcel will tie into the City of Stockton's storm drain system, but will still likely require improvements. If tying into the City's storm drain system is not feasible, alternate design options such as detention basins and drainage ditches will be evaluated. The amount and type of improvements pertaining to the North parcel are still being determined by DWR, and the level of design is too premature and speculative to evaluate in the IS/MND. However, DWR is currently developing a biological assessment as part of required Section 7 ESA consultation, and the biological assessment will address long-term stormwater runoff management plans for the West Weber site in greater detail. Furthermore, mitigation for stormwater runoff and contaminants is covered in Mitigation Measure HYD-1, "Institute Construction Best Management Practices (BMPs) for the Prevention of Erosion and Transport of Soil, Sand, and Silt Offsite During Runoff Events."

The Rio Vista site does not have an existing storm drain pipe system. The site is physically separated from the Sacramento River by more than 1,000 linear feet, and sits behind multiple levees. Current stormwater runoff settles in adjacent areas, and no alternative plan has been proposed for this project. Should stormwater pollution concerns arise, DWR will likely explore re-vegetation measures such as incorporating native grass seed mixtures or willow pole cuttings in adjacent areas. Furthermore, mitigation for stormwater runoff and contaminants is covered in Mitigation Measure HYD-1, "Institute Construction Best Management Practices (BMPs) for the Prevention of Erosion and Transport of Soil, Sand, and Silt Offsite During Runoff Events."

At this time, the Brannan Island site is anticipated to be the final project to be completed. An inaugural design date has yet to be scheduled. As such, DWR has yet to determine specific long-term stormwater management needs, and is unable to provide details within the current IS/MND.

3.0 ERRATA AND TEXT CHANGES

Errata and text changes are shown below in strikethrough and underlined text. For changes to mitigation measures that already have strikethrough and underlined text as part of the original text in the subsequent IS/MND, the text changes are highlighted in gray.

3.1 Air Quality

Per an informal comment received from SMAQMD, there was an error in the units reported in Table 3.2-5 (pages 3-14 and 3-15).

Sites and Parameters	Pollutant		
	ROG	NO _x	PM ₁₀
Table 3.2-5. Summary of Modeled Project-Generated Construction-Related Emissions of Criteria Air Pollutants and Precursors¹ NO_x Emissions			
Emissions in San Joaquin Valley-SJVAPCD (Tons/Year)			
Stockton West Weber Avenue			
Site Preparation Emissions	0.01	0.14	0.01
Stockpiling On-Site Emissions	0.01	0.08	0.21
On-road Emissions - Rock delivered from Jackson Valley Quarry	0.17	2.73	0.12
On-road Emissions - Rock delivered from Hogan Quarry	0.19	2.97	0.13
Rio Vista			
None	0.00	0.00	0
Brannan Island			
On-road Emissions - Rock delivered from Jackson Valley Quarry	0.14	1.85	0.09
On-road Emissions - Rock delivered from Hogan Quarry	0.15	1.99	0.10
Total Unmitigated (Tons/Year)-Worst Case	0.36	5.18	0.44
SJVAPCD Thresholds (Tons/Year)	10	10	-
Significant?	No	No	No
Emissions in Sacramento Valley-SMAQMD(lb./day)			
Rio Vista			
None	0.00	0.00	0.00
Brannan Island			
Site Preparation Emissions	0.22	2.41	45.16
Stockpiling On-Site Emissions	0.07	0.35	11.31
On-road Emissions - Rock delivered from Jackson Valley Quarry	1.45	18.80	0.94

Table 3.2-5. Summary of Modeled Project-Generated Construction-Related Emissions of Criteria Air Pollutants and Precursors¹ NO_x Emissions			
Sites and Parameters	Pollutant		
	ROG	NO _x	PM ₁₀
On-road Emissions - Rock delivered from Hogan Quarry	1.29	16.70	0.83
Total Unmitigated (lb./day Tons/Year)-Worst Case	1.45	18.80	45.16
SMAQMD Thresholds(lb./day)	-	85	-
Significant?	No	No	No
Emissions in Solano County-YSAQMD			
Rio Vista	ROG (tons/year)	NO_x (tons/year)	PM₁₀ (lb./day)
Site Preparation Emissions	0.04	0.44	45.16
Total Unmitigated (Tons/Year)-Worst Case	0.04	0.44	45.16
YSAQMD Thresholds(tons/year and lb./day)	10	10	80
Significant?	No	No	No
Emissions in Amador County-ACAPCD (lb./day)			
Stockton West Weber Avenue			
On-Road Emissions-Rock Delivered from Jackson Valley Quarry	1.25	19.73	0.87
Brannan Island			
On-Road Emissions-Rock Delivered from Jackson Valley Quarry	1.45	18.80	0.94
Total Unmitigated (Tons/Year)-Worst Case	1.45	19.73	0.94
ACAPCD Thresholds(lb./day)	274	274	383
Significant?	No	No	No
Emissions in Calaveras County - CCAPCD (Tons/Year)			
Stockton West Weber Avenue			
On-Road Emissions-Rock Delivered from Hogan Quarry	0.19	2.97	0.13
Brannan Island			
On-Road Emissions-Rock Delivered from Hogan Quarry	0.15	1.99	0.10
Total Unmitigated (Tons/Year)-Worst Case	0.34	4.96	0.23
CCAPCD Thresholds (Tons/Year)	10	10	-
Significant?	No	No	No
Notes:			
¹ Based on EMFAC2007 and OFFROAD2007 emission factors contained in URBEMIS V. 9.2.2, using general information provided in the project description (e.g., equipment list, stockpiling volumes and area, number of truck trips), and default model settings and parameters. Stockpiling is assumed to take place at one site at a time, i.e., trucks deliver the rock to only one site at a given time.			

3.2 Biological Resources

Per CDFW 1, text of Mitigation Measure BIO-1 (pages MND-6, 3-29, and B-3) have been clarified so that the reference to standard guidelines has been changed from The California Burrowing Owl Consortium (CBOC, 1993) to Staff Report on Burrowing Owl Mitigation dated March 7, 2012. Mitigation Measure BIO-1 has been clarified as follows in gray-highlighted text:

BIO-1: Conduct Burrowing Owl Surveys at all Three of the Project Sites Prior to Development.

Prior to any land clearing operations, a burrowing owl survey following standard guidelines developed by the staff of the California Burrowing Owl Consortium (March 7, 2012) ~~(The California Burrowing Owl Consortium, CBOC, 1993)~~ shall be conducted by a qualified biologist. The survey shall entail walking throughout the entire site, including a 500-foot buffer, to identify adjacent suitable habitat that could be affected by noise and vibration from heavy equipment operation. If no burrows are observed, no impact is expected and results of the survey shall be submitted to the California Department of Fish and Wildlife (DFW). If burrows or owls are observed, a nesting season (15 April – 15 July) survey shall also be conducted, the results of which shall determine whether a winter survey will be further required or whether the results of the survey can be submitted to the DFW following the nesting survey. If the surveys confirm occupied burrowing owl habitat, the Incidental Take Minimization Measure for Burrowing Owls (Measure 5.2.4.15) in the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (November 14, 2000) will be implemented.

Per CDFW 3, text of Mitigation Measure Bio-4 (pages MND-7, 3-30, and B-5) contained a spelling error of Brannan Island (e.g., Brennan Island). Mitigation Measure BIO-4 has been clarified as follows in gray-highlighted text:

Mitigation Measure BIO-4: Conduct Pre-Construction Riparian Habitat Surveys at All Three of the Project Sites Prior to Development.

Prior to any land clearing operations, riparian habitat surveys shall be conducted by a qualified biologist. ~~to confirm that construction activities will not impact riparian habitat.~~ The survey shall entail walking throughout the entire site, including a 100-foot buffer, to identify ~~adjacent suitable~~ riparian habitat that could be affected by construction activities, particularly along the top of waterside banks or slopes. ~~or low-lying areas.~~ Riparian habitat shall be avoided, if feasible. If it is determined that construction would result in the removal of ~~The~~ riparian habitat, surveys shall be submitted to DFW, along with ~~each of the site development plans to confirm that isolated project activities, inclusive of piling installations, utility installations and road/ramp improvements near or adjacent to riparian habitat or other sensitive natural communities will not result in a significant impact to riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service.~~ DWR will mitigate for impacts through restoration of riparian habitat on the Brennan Brannan Island, ~~similar of~~ other state-owned property, or a mitigation bank based on a replacement ratio of 1:1.

Per CDFW 5, Section 3.4.2, second paragraph under “Special-status Birds” (page. 3-25), size classes of trees to be removed on the Stockton West Weber site have been added.

Implementation of the proposed project and project refinements at the Stockton West Weber site would result in the removal of at least 14 trees, with the possibility of removing up to approximately 20 trees. Tree removal within the interior portion of the site would result in the

loss of 10 Siberian elm (*Ulmus pumilia*), three pecan (*Carya illinoensis*), and one California black walnut (*Juglans hindsii*). These species have trunks ranging from approximately 10 to 24 inches at diameter breast height (dbh). A grove of Chinaberry (*Melia azedarach*) trees would also be removed along the northeastern portion of the project site. The trunks of the Chinaberry measure approximately 4 to 8 inches in diameter at dbh. With the exception of the California black walnut, all trees proposed for removal within the interior portion of the site are not native. Tree removal within the interior portion of the project site is required for the placement of the rock stockpile and haul road.

Per CDFW 5, Section 3.4.2, last paragraph on page 3-25, size classes of trees to be removed on the Rio Vista site have been added.

Approximately 13.37 acres of trees are present within the Rio Vista project site. Tree species common within the Rio Vista site include valley oak, Fremont's cottonwood (*Populus fremontii*), Oregon ash (*Fraxinus latifolia*), Gooding's black willow (*Salix gooddingii*), and red willow (*S. laevigata*). The majority of the trees present within the Rio Vista site range between 8 and 24 inches dbh based on previous site reconnaissance. Shrubs including arroyo willow (*S. lasiolepis*) and narrowleaf willow are common at the site. Implementation of the proposed project and project refinements at the Rio Vista site would result in the removal of up to approximately 4.0 acres of trees. Tree removal would be required for project refinements such as the expansion of the rock stockpile, and widening the access road to 28 feet.

3.3 Cultural Resources

Per CSLC 3, text of Mitigation Measure CUL-3 (pages MND-10, 3-34, and B-9) states that CSLC Assistant Chief Counsel Pam Griggs will be notified should any reportable cultural resources be discovered on State lands during construction. Mitigation Measure CUL-3 has been clarified as follows in gray-highlighted text:

CUL-3: Immediately Halt Construction if any Cultural Resources are Discovered.

DWR shall implement the following mitigation measure to reduce the potential impacts to buried historic cultural resources to a less-than-significant level. If cultural materials (e.g., unusual amounts of shell, animal bone, glass, ceramics, etc.) are discovered during project-related construction activities, ground disturbances in the area of the find shall be halted and a qualified professional archaeologist shall be notified regarding the discovery. The archaeologist, to be retained by DWR, shall determine whether the resource is potentially significant per the CRHR and develop appropriate mitigation. Mitigation may include, but not be limited to, in-field documentation, archival research, archaeological testing, data recovery excavations, or recordation, and shall be implemented before resuming construction in the immediate vicinity. DWR will contact Pam Griggs at (916) 574-1854 or via email at Pamela.Griggs@slc.ca.gov should any reportable cultural resources be discovered on State lands during construction of the proposed project.

3.4 Noise

Per CSLC 6, Table 3.13-3 (page 3-77) has been augmented to include an impact or vibratory pile driver with associated typical noise levels (dBA) at 50 feet from source of 95 dBA according to the Federal Highway Administration Construction Noise Handbook.

Table 3.13-3. FHA Construction Equipment Noise Emission Levels

Equipment	Typical Noise Level (dBA) 50 ft. from Source*
Air Compressor	81
Backhoe	80
Compactor	82
Concrete Mixer	85
Concrete Pump	82
Concrete Vibrator	76
Crane Derrick	88
Crane Mobile	83
Dozer	85
Generator	81
Grader	85
<u>Impact Pile Driver</u>	<u>95</u>
Impact Wrench	85
Jack Hammer	88
Loader	85
Paver	89
Pneumatic Tool	85
Pump	76
Rail Saw	90
Rock Drill	98
Roller	74
Saw	76
Scarifier	83
Scraper	89
Shovel	82
Spike Driver	77
Tie Cutter	84
Tie Handler	80
Tie Inserter	85
Truck	88
<u>Vibratory Pile Driver</u>	<u>95</u>

Page MND-3 states that “Pile driving would be conducted with an impact hammer and is anticipated to occur from a barge”. DWR has indicated, however, that they may use an impact or vibratory type hammer for in-water construction at the Stockton West Weber site.

Pages MND-3 and 2-5 have been modified as follows:

- ▶ Install up to 11 dolphin pile clusters for mooring of up to three transport barges during rock-loading operations. The dolphin pile clusters would likely be constructed with three 24-inch-diameter steel pipe piles each (one vertical and two battered) for a total of about 33 piles in the Stockton Deep Water Ship Channel. Each dolphin pile cluster affects approximately 12 square feet at the bottom of the channel. Pile driving would be conducted with an impact hammer or vibratory type hammer and is anticipated to occur from a barge or land. An impact cushion shall be installed on the top of piles prior to impact driving.

Page 3-76, first sentence of the first paragraph, has been modified to specify pile driving as follows:

Project-generated noise levels would be primarily associated with construction activities including site preparation, installation of concrete pads and foundations, material transport (e.g., hauling of riprap to the stockpile areas), stockpile construction, pile driving, and other miscellaneous construction activities.

Page 3-76, second paragraph, first sentence has been corrected to identify the correct upper range of noise levels generated by construction equipment and additional analysis regarding construction related noise levels at Stockton West Weber has been added to address “noise levels in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards:

According to the Federal Highway Administration, the noise levels typically associated with the activities above can range from 79 to ~~91~~95 dBA at 50 feet (Table 3.13-3). The simultaneous operation of on-site construction equipment associated with the proposed project and project refinements could result in combined intermittent noise levels higher than the noise level of the individual pieces of equipment. However, the noise levels would be expected to be below the thresholds set by both the City of Rio Vista and by Solano County for the sensitive receptors located along the waterfront south of the Dutra Group’s dock facilities. Construction of site improvements ~~at the Stockton West Weber site would temporarily and operation of the Stockton West Weber site would not~~ increase noise levels above current uses. The Stockton West Weber site is located near the intersection of Interstate 5 and State Route 4 and near the Port of Stockton, ~~these areas experience~~ of significant truck and transportation traffic within the City of Stockton. ; and San Joaquin County experiences significant noise levels from heavy vehicular and truck traffic passing through the Delta along Scenic SR 160. Construction-related noise associated with pile driving at the Stockton West Weber site would be 85 dBA at 50 feet (with impact cushion block that provides a minimum of 10 dB reduction [Caltrans 2009]), and by reducing 6 dB per doubling of the distance, this noise level would reach 65 dB at a distance of 600 feet, and 75 dB at a distance of 200 feet. There are no commercial uses within 200 feet of the pile driving location, and also there are no residential uses within 600 feet of pile driving location. Therefore, noise levels from pile driving would be less than significant within 200 feet of commercial uses (based on the threshold of 75 dB for commercial and industrial uses), and within 600 feet of residential uses (based on the threshold of 65 dB for residential uses). Thus, construction of site improvements at both Rio Vista and Stockton West Weber sites would be **less than significant**.

Per CSLC 6, (page 3-78) analysis of “excessive ground borne vibration or ground borne noise levels” has been clarified with respect to an impact or vibratory pile driver analysis at Stockton West Weber as follows:

With respect to the proposed project and project refinements, impact pile driving at the Stockton West Weber site would generate the maximum ground borne vibration in comparison to the other equipment mentioned. According to the Federal Transit Administration (FTA), vibration levels associated with impact pile driving is 0.644 inch per second (in/sec) peak particle velocity (PPV) and 104 vibration decibels VdB referenced to 1 microinch per second (μ in/sec) and based on the root mean square (RMS) velocity amplitude] at 25 feet (FTA 2006). Vibration levels decrease with distance from the source to receptor. Vibration levels from pile driving up to a distance of 300 feet would exceed Caltrans' recommended standards with respect to the prevention of structural building damage (0.2 and 0.08 in/sec PPV for normal and historical buildings) or FTA's maximum acceptable vibration standard with respect to human response (80 VdB for residential uses) at nearby existing vibration-sensitive land uses. However, there are no vibration sensitive uses (structures or residences) within 300 feet from the Stockton West Weber project site. In addition, the long-term operation of the proposed project and project refinements would not include any major sources of vibration. Thus, project implementation would not result in the exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels. Therefore, vibration and noise levels from the proposed project and project refinements would be **less than significant**.

In Section 3.14.2 (page 3-78) the phrase "analysis of a substantial temporary of periodic increase in ambient noise level in the project vicinity above levels existing without the project" has been clarified to include an impact pile driver or vibratory pile driver analysis at the Stockton West Weber site as follows:

Ambient noise levels at the nearest noise sensitive uses in the project vicinity would be influenced by freeway traffic noise. Typically, freeway traffic noise would be 70 dB to 80 dB at 50 feet (FHWA 2003). The nearest residences to the project site are located to the east of Interstate 5 (I-5), approximately 1,200 feet from the project site, and 550 feet from (I-5). Assuming (conservatively) minimum noise level of 70 dB at 50 feet from the freeway, and a 3 dB reduction per doubling of the distance from line source or highway (FHWA 2011), the ambient noise level at 550 feet would be 60 dBA. This level of ambient noise would be a conservative assumption, because in addition to the freeway traffic noise, there would also be other noise source such as industries and commercial uses in the area. Project noise level of 95 dBA at 50 feet would reach 68 dBA at a distance of 1,200 feet (assuming a 6 dB reduction per doubling of the distance from a point source or construction site [FHWA 2011]), which would be above the ambient noise level of 60 dBA. Therefore, temporary increase of noise level above ambient due to the construction activities at Stockton West Weber would be potentially significant without mitigation. Implementation of construction Best Management Practices (BMPs) described in Mitigation Measure NOI-1 in Section 4.0, "Mitigation Monitoring and Reporting Program," would mitigate short-term construction noise impacts at Stockton West Weber to **less than significant with mitigation incorporated**.

Per modification of Section 3.14.2, (page 3-78), Mitigation Measure NOI-1 has been clarified as follows:

Mitigation Measure NOI-1: Implement Measures to Control Construction Equipment Noise Levels.

The contractor and/or DWR shall properly maintain construction equipment and equip it with noise control devices, such as exhaust mufflers or engine shrouds, in accordance with manufacturers' specifications. For pile driving, acoustical blanked shrouds will be used to enclose the hammer, pile, and engines, when feasible. Noise monitoring during pile driving shall be conducted at 50 to 100 feet from pile driving locations and at the closest noise sensitive use during pile driving to ensure project noise would not exceed 65 dB at the property lines of the

nearest noise sensitive uses. For non-emergency activities such as site construction and stockpiling quarry rock, operations will be limited to the periods 7:00 AM to 7:00 PM, Mondays through Saturdays.

4.0 MITIGATION MONITORING AND REPORTING PROGRAM

4.1 Introduction

In accordance with the California Environmental Quality Act (CEQA), the California Department of Water Resources (DWR) has prepared an initial study/proposed mitigated negative declaration (IS/MND) that identifies potential adverse environmental impacts related to the Delta Flood Emergency Facilities Improvement Project (proposed project) and project refinements. The IS/MND also identifies mitigation measures that would be implemented to reduce potential significant impacts to a less-than-significant level.

Section 21081.6 of the California Public Resources Code, and Sections 15091(d) and 15097 of the State CEQA Guidelines, require public agencies “to adopt a reporting and monitoring program for changes to the project which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment.” A Mitigation Monitoring and Reporting Program (MMRP) is required for the proposed project refinements because the IS/MND identifies potentially significant adverse impacts related to the proposed project refinements, and mitigation measures have been identified to mitigate those impacts.

DWR is the lead agency that must adopt the MMRP for the proposed project refinements. Adoption of this MMRP would occur along with approval of the proposed project refinements.

4.2 Purpose of Mitigation Monitoring and Reporting Program

This MMRP has been prepared to ensure that all required mitigation measures are implemented and completed according to schedule and maintained in a satisfactory manner during implementation of the proposed project and project refinements. The MMRP may be modified by DWR during project implementation, as necessary, in response to permit conditions by regulatory and permitting agencies, changing conditions, or other refinements. Table 4.0 has been prepared to assist the responsible parties in implementing the MMRP. The table identifies individual mitigation measures, the person and/or agency responsible for implementing the measure, and monitoring and mitigation timing.

4.3 Roles and Responsibilities

DWR is responsible for taking all actions necessary to implement the mitigation measures according to the specifications provided for each measure and for demonstrating that the action has been successfully completed. DWR, at its discretion, may delegate implementation responsibility or portions thereof to a licensed contractor or other designated agent as long as DWR maintains final responsibility for ensuring that the actions are taken.

DWR will be responsible for overall administration of the MMRP and for verifying that DWR staff members and/or the construction contractor has completed the necessary actions for each measure.

4.4 Reporting

DWR staff or assigned personnel shall prepare a monitoring report upon completing construction of the proposed project and project refinements addressing compliance with the required mitigation measures.

Information regarding inspections and other requirements shall be compiled and explained in the report. The report shall be designed to simply and clearly describe whether mitigation measures have been adequately implemented. At a minimum, the report shall identify the mitigation measures or conditions monitored for implementation, whether compliance with the mitigation measures or conditions has occurred, the procedures used to assess compliance, and whether further action is required.

Table 4.0 presents the final MMRP for the Delta Flood Emergency Facilities Improvement Project and project refinements. This MMRP updates and replaces the MMRP adopted by DWR in June 2013 for the original proposed project, addresses the original proposed project and project refinements, and incorporates all clarifications to mitigation measures presented in Section 3.0, "Errata."

Mitigation Measure(s)	Mitigation Description	Timing, Milestone	Responsible Entity	Monitoring and Enforcement Responsibility
AES-1: Design BISRA Joint Use Facility with DPR Incorporating Architectural and Landscaping Technics to Minimize Impacts to Scenic Vistas and Visual Resources.	DWR will consult and coordinate with DPR staff and architect to facilitate the location and design of the joint use facility and steel warehouse within the BISRA so as not to harm the natural aesthetics, scenic vistas, and visual character available within the BISRA and from the nearby Scenic SR 160. Potential design measures may include utilizing natural earth tones for building exteriors, incorporating earthen berms and planting native plants to help screen project building features from recreational areas and from Scenic SR 160.	Design, Pre-construction	DWR	DPR
AES-2: Locate and Design Quarry Rock Stockpile(s) at BISRA to Minimize Impacts to Scenic Vistas and Visual Resources.	DWR will consult and coordinate with DPR staff to facilitate the location, placement, shape, and visual treatment of quarry rock stockpile(s) that will be located near the southern tip of the BISRA peninsula. The quarry rock stockpiles will be located and configured so as not to harm the natural aesthetics, scenic vistas, and visual character available within and adjacent to the BISRA and from the nearby river, sloughs and Scenic SR 160. Potential visual treatments may include screening by natural, native vegetation of trees and shrubs, utilizing natural berms, or covering the rock stockpiles with a layer of native soil and sand materials from nearby within the BISRA.	Pre-construction	DWR	DPR
AES-3: Locate and Treat Exterior of Warehouse and Cargo Storage Containers at BISRA to Minimize Light and Glare Impacts to Day and Nighttime Views.	DWR will consult and coordinate with DPR staff to facilitate the location and exterior visual treatment of the project warehouse on BISRA to minimize light and glare impacts to day and nighttime views, and not to harm the natural aesthetics, scenic vistas, and visual character available within and adjacent to the BISRA and from Scenic SR 160. Potential visual treatments may include treating the exterior of the warehouse walls and roof in natural earth tones and screening by natural, native vegetation of trees and shrubs.	Design, Pre-construction	DWR	DPR
BIO-1: Conduct Burrowing Owl Surveys at all Three of the Project Sites Prior to Development.	Prior to any land clearing operations, a burrowing owl survey following standard guidelines <u>developed by the staff of the California Burrowing Owl Consortium</u> (March 7, 2012) shall be conducted by a qualified biologist. The survey shall entail walking	Pre-construction	DWR	DFW

Mitigation Measure(s)	Mitigation Description	Timing, Milestone	Responsible Entity	Monitoring and Enforcement Responsibility
	throughout the entire site, including a 500-foot buffer, to identify adjacent suitable habitat that could be affected by noise and vibration from heavy equipment operation. If no burrows are observed, no impact is expected and results of the survey shall be submitted to the California Department of Fish and Wildlife (DFW). If burrows or owls are observed, a nesting season (15 April – 15 July) survey shall also be conducted, the results of which shall determine whether a winter survey will be further required or whether the results of the survey can be submitted to the DFW following the nesting survey. If the surveys confirm occupied burrowing owl habitat, the Incidental Take Minimization Measure for Burrowing Owls (Measure 5.2.4.15) in the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (November 14, 2000) will be implemented.			
BIO-2: Retain all Mature Trees on the Proposed Brannon Island State Recreation Area Project Sites.	Mature trees that are potential nest trees and native oak trees greater than 8 inches diameter at breast height will not be removed at the proposed Brannon Island State Recreation Area project site. If a nest tree becomes occupied during stockpiling and site development activities, then depending upon the bird species involved, appropriate monitoring and mitigation measures as specified by the California Department of Fish and Wildlife will be instituted. At a minimum, all construction activities shall remain a distance of at least two times the drip line radius of active nest trees, as measured from the nest.	Pre-construction, Construction	DWR	DFW
BIO-3: Conduct Special Status Surveys.	DWR will consult with DFW prior to project construction to determine the extent for pre-construction sensitive species survey on the proposed project sites. For those sites determined for specific surveys, a qualified biologist shall conduct the sensitive species survey on the sites and within buffer areas of the sites. Special status bird species that could potentially nest in trees in or near the project area include Swainson's hawk, tricolored blackbird, white-tailed kite, double-crested cormorant, California black rail, saltmarsh common yellowthroat, song sparrow, Cooper's	Pre-construction	DWR	DFW

Mitigation Measure(s)	Mitigation Description	Timing, Milestone	Responsible Entity	Monitoring and Enforcement Responsibility
	hawk, ferruginous hawk, merlin, yellow-headed blackbird, and western yellow-billed cuckoo. Potential habitat for special status reptiles/amphibians including the giant garter snake (GGS) and the western pond turtle exists at all three sites necessitating the need to conduct pre-construction surveys at all three sites. In addition, the western red bat could potentially roost in trees in or near the Rio Vista site and the Brannan Island site. The surveys shall be conducted no more than two weeks prior to the start of operations and depending on the expected duration of the activities a follow-up survey may also be required. All observed sensitive species shall be reported to the DFW. The proposed project will be adjusted to avoid impacting these species, or to relocate the individuals under the guidance of the DFW. Preconstruction surveys will also include botanical survey to identify the presence of elderberry shrubs and Antioch dunes evening primrose.			
BIO-4: Conduct Pre-Construction Riparian Habitat Surveys at All Three of the Project Sites Prior to Development.	Prior to any land clearing operations, riparian habitat surveys shall be conducted by a qualified biologist. The survey shall entail walking throughout the entire site, including a 100-foot buffer, to identify riparian habitat that could be affected by construction activities, particularly along the top of waterside banks or slopes. Riparian habitat shall be avoided, if feasible. If it is determined that construction would result in the removal of riparian habitat, surveys shall be submitted to DFW, along with the site development plan. DWR will mitigate for impacts through restoration of riparian habitat on the Brannan Island, other state-owned property, or mitigation bank based on a replacement ratio of 1:1.	Pre-construction	DWR	DFW
BIO-5: Conduct Pre-Design Wetlands and Riparian Habitat Surveys for each of the Sites and Install and Maintain Exclusionary Fencing at the Sites to Ensure Full Avoidance of Seasonal and Permanent Wetlands and Jurisdictional Riparian Habitat.	<p>a) DWR shall retain a qualified biologist to conduct a wetland delineation of the project sites. This delineation shall be submitted to the Corps, and verification received prior to any ground disturbing activities beyond the existing on-site roadways.</p> <p>b) DWR, will preserve, and not disturb the existing wetlands, and wherever possible, establish 25-foot minimum buffers around all</p>	Predesign, Pre-construction	DWR	DFW

Table 4.0. Mitigation Monitoring and Reporting Program: Delta Flood Emergency Facilities Improvement Project				
Mitigation Measure(s)	Mitigation Description	Timing, Milestone	Responsible Entity	Monitoring and Enforcement Responsibility
	<p>sides of these features. In addition, the final project design shall not cause significant changes to the pre-project hydrology, water quality or water quantity in any wetland that is to be retained on site.</p> <p>c) DWR, prior to construction activities, shall install silt fence or exclusion fencing around wetlands to be retained on-site where wetlands are adjacent to construction activities. Wherever possible, a 25-foot buffer adjacent to seasonal and permanent wetlands shall be established. The fencing shall be maintained for the duration of the site work.</p>			
BIO-6: Secure Section 1600 Lake or Streambed Alteration (LSA) Agreement from DFW.	Prior to any ground-disturbing site improvements, DWR shall consult with DFW and secure any applicable Section 1600 Lake or Streambed Alteration (LSA) agreement(s) for any permanent site improvements waterward of the top of bank at Threemile Slough for the BISRA site or at the Stockton Deep Water Ship Channel or Mormon Slough at the Stockton West Weber Avenue site.	Predesign, Pre-construction,	DWR	DFW
BIO-7: Avoid and Minimize Underwater Sound Pressure due to Pile Driving	<p>Underwater sound monitoring shall be performed during pile-driving activities. A qualified biologist/natural resource specialist shall be present during such work to monitor construction activities and compliance with terms and conditions of permits.</p> <p>Underwater sound reduction measures shall be employed, as needed, to ensure that levels do not exceed the threshold levels established by USFWS and NMFS (for fish greater than 2 grams):</p> <ul style="list-style-type: none"> • Peak Pressure – 206 decibels • Accumulated Sound Exposure Level (SEL) – 187 decibels <p>These underwater sound reduction measures shall include use of an impact hammer cushion block. Additionally, hammers shall be used only during daylight hours and initially shall be used at low energy levels and reduced impact frequency. Applied energy and frequency shall be gradually increased until necessary full force and frequency are achieved.</p> <p>If necessary, one or more of the following shall be implemented to</p>	Pre-construction	DWR	DFW

Table 4.0. Mitigation Monitoring and Reporting Program: Delta Flood Emergency Facilities Improvement Project				
Mitigation Measure(s)	Mitigation Description	Timing, Milestone	Responsible Entity	Monitoring and Enforcement Responsibility
	<p>further reduce sound:</p> <ul style="list-style-type: none"> • Pipe caissons shall be used to isolate the piles from waters to buffer underwater sound pressure levels if underwater sound monitoring indicates that underwater sound levels exceed threshold levels. The caissons shall be driven below the mud line using vibratory or hydraulic methods and the interior area dewatered before pipe piles are installed using impact methods. • The use of a bubble curtain surrounding the pile to be driven. 			
BIO-8: Ensure No Net Loss of Functions and Values of Wetlands, other Waters of the United States, and Waters of the State at the Stockton West Weber and Rio Vista sites.	<p>Before the start of any ground-disturbing activity associated with the construction of any project feature that would affect waters of the United States, including wetlands, or waters of the State, DWR will obtain all necessary permits under Sections 404 and 401 of the Clean Water Act or the State’s Porter-Cologne Act for the proposed project and project refinements at the Stockton West Weber and Rio Vista sites, and Section 10 authorization under Rivers and Harbors Act for work within the Stockton Deep Water Ship Channel at the Stockton West Weber site.</p> <p>All permits, regulatory approvals, and permit conditions for impacts on wetland habitats shall be secured before implementation of any construction activities within waters of the United States or wetland habitats, including waters of the State. DWR will commit to replace, restore, or enhance on a “no net loss” basis, in accordance with U.S. Army Corps of Engineers (USACE) and the Central Valley Regional Water Quality Control Board (RWQCB), the acreage of all wetlands and other waters of the United States that would be removed, lost, and/or degraded with implementation of project plans. Wetland habitat shall be restored, enhanced, and/or replaced at an acreage and location and by methods agreeable to USACE and the Central Valley RWQCB, as determined during the Section 404 and Section 401 permitting processes. Final mitigation ratios will be determined during the permitting process.</p>	Pre-construction	DWR	DFW

Mitigation Measure(s)	Mitigation Description	Timing, Milestone	Responsible Entity	Monitoring and Enforcement Responsibility
CUL-1: Pre-construction Field Survey.	Prior to ground disturbing activities, a field survey will be conducted by a qualified archeologist to identify any prehistoric or historic cultural resources within the project site areas. The survey may reveal a lack of resources. No further identification effort will need to be made. If resources are found in one of the selected sites during the survey, it will be necessary to determine whether the resource is an important resource. This determination will be made by a qualified archeologist based upon surface evidence, if possible. If surface evidence is not conclusive, additional studies, including archival research or subsurface testing, will be conducted. If the additional studies are undertaken and a resource is found to be important under the criteria of the California Register of Historical Resources (CRHR), avoidance will be the preferred method of mitigation. The use of the site with the significant resource might need to be limited to a smaller portion of the site, with protective measures designed for the resource, such as fencing or monitoring site use. The determination of appropriate mitigation will be made by DWR.	Pre-construction	DWR	DWR
CUL-2: Worker Cultural Resource Awareness.	Construction personnel will be informed of the potential for encountering significant archaeological resources and instructed in the identification of artifacts, bone, and other potential resources. All construction personnel will be informed of the need to stop work on the project site if cultural resources are found, and until a qualified archaeologist has been provided the opportunity to assess the significance of the find and implement appropriate measures to protect or scientifically remove the find. Construction personnel will also be informed of the requirement that unauthorized collection of cultural resources is prohibited.	Pre-construction, Construction	DWR	DWR
CUL-3: Immediately Halt Construction if any Cultural Resources are Discovered.	DWR shall implement the following mitigation measure to reduce the potential impacts to buried historic cultural resources to a less-than-significant level. If cultural materials (e.g., unusual amounts of shell, animal bone, glass, ceramics, etc.) are discovered during project-related construction activities, ground disturbances in the	Construction	DWR	DWR

Table 4.0. Mitigation Monitoring and Reporting Program: Delta Flood Emergency Facilities Improvement Project				
Mitigation Measure(s)	Mitigation Description	Timing, Milestone	Responsible Entity	Monitoring and Enforcement Responsibility
	<p>area of the find shall be halted and a qualified professional archaeologist shall be notified regarding the discovery. The archaeologist, to be retained by DWR, shall determine whether the resource is potentially significant per the CRHR and develop appropriate mitigation. Mitigation may include, but not be limited to, in-field documentation, archival research, archaeological testing, data recovery excavations, or recordation, and shall be implemented before resuming construction in the immediate vicinity. DWR will contact Pam Griggs at (916) 574-1854 or via email at Pamela.Griggs@slc.ca.gov should any reportable cultural resources be discovered on State lands during construction of the proposed Project.</p>			
<p>CUL-4: Immediately Halt Construction if any Human Remains are Discovered.</p>	<p>DWR shall implement the following mitigation measure to reduce the potential impacts to human remains to a less-than-significant level. In accordance with the California Health and Safety Code, if human remains are uncovered during ground-disturbing activities, the contractor and/or DWR shall immediately halt potentially damaging excavation in the area of the burial and notify the County Coroner and a professional archaeologist to determine the nature of the remains. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or State lands (Health and Safety Code Section 7050.5[b]).</p> <p>If the coroner determines that the remains are those of a Native American, he or she must contact the Native American Heritage Commission (NAHC) by phone within 24 hours of making that determination (Health and Safety Code Section 7050[c]). Following the coroner's findings, DWR, an archaeologist, and the NAHC designated Most Likely Descendent (MLD) shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments are not disturbed. The responsibilities for acting upon notification of a discovery of Native American human remains are identified in California Public Resources Code Section (PRC) 5097.9.</p>	Construction	DWR	DWR

Table 4.0. Mitigation Monitoring and Reporting Program: Delta Flood Emergency Facilities Improvement Project				
Mitigation Measure(s)	Mitigation Description	Timing, Milestone	Responsible Entity	Monitoring and Enforcement Responsibility
CUL-5: Determination of Significance of Cultural Resources.	If previously unknown cultural resources are discovered during project construction, all work in the area of the find should cease and a qualified archaeologist should be retained by DWR or consultant to assess the significance of the find, make recommendations on its disposition, and prepare appropriate field documentation, including verification of the completion of required mitigation. If archaeological or paleontological resources are discovered during earth moving activities, all construction activities within 50 feet of the find should cease until the archaeologist evaluates the significance of the resource. In the absence of a determination, all archaeological and paleontological resources should be considered significant. If the resource is determined to be significant, the archaeologist, as appropriate, should prepare a research design for recovery of the resources in consultation with the State Office of Historic Preservation that satisfies the requirements of Public Resources Code, Section 21083.2. The archaeologist should complete a report of the excavations and findings. Upon approval of the report, the project proponent should submit the report to the regional office of the California Historic Resources Information System.	Construction	DWR	DWR
HYD-1: Institute Construction Best Management Practices (BMPs) for the Prevention of Erosion and Transport of Soil, Sand, and Silt Offsite During Runoff Events.	DWR shall implement construction Best Management Practices (BMPs) for all land clearing, land leveling, excavation, and fill operations associated with site preparations at the three sites. These measures will be incorporated into the construction plans and specifications. They include avoidance of existing wetlands, including placement of exclusion fencing, creating on site catchments for surface runoff, using coir logs to intercept drainage, and hydroseeding slopes, as appropriate. Before the start of any construction work, clearing, or site grading associated with preparation, or any stockpiling activities at the sites, measures to control soil erosion and waste discharges will be prepared in accordance with BMPs. DWR will require all contractors conducting work at the sites to implement BMPs to control soil erosion and waste discharges of other construction-	Pre-construction, Construction	DWR, Contractor	County of Record

Table 4.0. Mitigation Monitoring and Reporting Program: Delta Flood Emergency Facilities Improvement Project

Mitigation Measure(s)	Mitigation Description	Timing, Milestone	Responsible Entity	Monitoring and Enforcement Responsibility
	<p>related contaminants. The general contractor(s) and subcontractor(s) conducting the work will be responsible for constructing or implementing, regularly inspecting, and maintaining the BMPs in good working order. In addition, the contractors will be required to submit and adhere to the applicable Storm Water Pollution Prevention Plan (SWPPP) associated with site development, preparation, and improvements.</p> <p>Sufficient buffers from wetlands, riparian habitat, and/or other sensitive areas shall be maintained throughout the construction improvement period(s) of the project.</p> <p>The plans developed by DWR or its contractor(s) will identify the grading, erosion, and tracking control BMPs and specifications that are necessary to avoid and minimize water quality impacts to the extent practicable. Standard erosion control measures (e.g., management, structural, and vegetative controls) will be implemented for all construction activities that expose soil. Grading operations will be conducted to eliminate direct routes for conveying potentially contaminated runoff to drainage channels. Erosion control barriers such as silt fences and mulching material will be installed, and disturbed areas will be reseeded with native grasses or other plants where necessary. Tracking controls shall be required throughout the construction period, as needed, to reduce the tracking of sediment and debris from the construction site.</p> <p>At a minimum, entrances and exits shall be inspected daily, and controls implemented as needed. The following specific BMPs will be implemented, as described in the California BMP Handbook (www.cabmphandbook.com):</p> <ul style="list-style-type: none"> • Conduct all work according to site-specific construction plans that identify areas for clearing and grading so that ground disturbance is minimized. • Avoid riparian vegetation, cover cleared areas with mulches, and install silt fences near riparian areas or streams to control erosion and trap sediment, and reseed cleared areas with native 			

Table 4.0. Mitigation Monitoring and Reporting Program: Delta Flood Emergency Facilities Improvement Project

Mitigation Measure(s)	Mitigation Description	Timing, Milestone	Responsible Entity	Monitoring and Enforcement Responsibility
	<p>vegetation. Sufficient buffers (minimum 20 feet when possible) from wetlands and/or other sensitive areas shall be maintained throughout the life of the project.</p> <ul style="list-style-type: none"> • Stabilize disturbed soils before the onset of the winter rainfall season. • Stabilize and protect stockpiles from exposure to erosion and flooding. • Stabilize all construction access by providing a point of entrance/exit to the construction sites that is stabilized to reduce the tracking of mud and dirt onto public roads by construction vehicles. • Grade each construction entrance/exit to prevent runoff from leaving the construction site, and ensure that all runoff from the stabilized entrances/exits are routed through a sediment-trapping device before discharge. • Ensure that entry/exit ways are able to support the heaviest vehicles and equipment that will use them. <p>BMPs will also specify appropriate hazardous materials handling, storage, and spill response practices to reduce the possibility of adverse impacts from use or accidental spills or releases of contaminants. Specific measures applicable to the project include, but are not limited to, the following:</p> <ul style="list-style-type: none"> • Develop and implement strict onsite handling rules to keep construction and maintenance materials out of drainages and waterways. • Conduct all refueling and servicing of equipment with absorbent material or drip pans underneath to contain spilled fuel. Collect any fluid drained from machinery during servicing in leak-proof containers and deliver to an appropriate disposal or recycling facility. • Maintain controlled construction staging, site entrance, concrete washout, and fueling areas at least 100 feet away from 			

Table 4.0. Mitigation Monitoring and Reporting Program: Delta Flood Emergency Facilities Improvement Project				
Mitigation Measure(s)	Mitigation Description	Timing, Milestone	Responsible Entity	Monitoring and Enforcement Responsibility
	<p>stream channels or wetlands to minimize accidental spills and runoff of contaminants in storm water.</p> <ul style="list-style-type: none"> Prevent raw cement; concrete or concrete washings; asphalt, paint, or other coating material; oil or other petroleum products; or any other substances that could be hazardous to aquatic life from contaminating the soil or entering watercourses. <p>Maintain spill cleanup equipment in proper working condition. Clean up all spills immediately according to the spill prevention and response plan, and immediately notify DFW and the Regional Water Quality Control Board (RWQCB) of any spills and cleanup procedures.</p>			
HAZ-1: Develop and Implement Environmental Remediation Plans	DWR has entered into an interagency agreement with the State Department of Toxic Substances Control (DTSC) and has conducted applicable supplemental site investigations (SSIs), and has developed Soil Management Plans (SMPs) and Health and Safety Plans (HASPs) approved by DTSC for the Stockton West Weber site parcels. The noted SMPs and HASPs must be implemented prior to and during any ground-disturbing activities that may pose a toxic substance hazardous risk during construction of site improvements and subsequent ground-disturbing operations that will remain consistent with current commercial and industrial zoning land uses.	Pre-construction	DWR	DTSC
NOI-1: Implement Measures to Control Construction Equipment Noise Levels	The contractor and/or DWR shall properly maintain construction equipment and equip it with noise control devices, such as exhaust mufflers or engine shrouds, in accordance with manufacturers' specifications. For pile driving, acoustical blanked shrouds will be used to enclose the hammer, pile, and engines, when feasible. Noise monitoring during pile driving shall be conducted at 50 to 100 feet from pile driving locations and at the closest noise sensitive use during pile driving to ensure project noise would not exceed 65 dB at the property lines of the nearest noise sensitive uses. For non-emergency activities such as site construction and stockpiling	Construction	Contractor	DWR

Table 4.0. Mitigation Monitoring and Reporting Program: Delta Flood Emergency Facilities Improvement Project				
Mitigation Measure(s)	Mitigation Description	Timing, Milestone	Responsible Entity	Monitoring and Enforcement Responsibility
	quarry rock, operations will be limited to the periods 7:00 AM to 7:00 PM, Mondays through Saturdays.			
REC-1: Implement Measures to Minimize Impacts on Recreation within Brannan Island State Recreation Area (BISRA)	DWR shall enter into a Memorandum of Understanding with the State Department of Parks and Recreation (DPR) to design project elements in coordination with DPR to minimize impacts on recreational quality and visual resources within the BISRA, and to improve facilities that could jointly benefit recreational services and emergency response capabilities. These include potential features such as developing architectural treatments to blend new structures (multi-use and warehouse facilities) within the park setting, screening the placement and storage of quarry rock stockpiles with vegetation, earthen berms, and/or placing a layer of sand over the quarry rock stockpile, planting native plants to help screen project features, improving service facilities such as restrooms and roads, and collectively implement a 2,500-5,000 sf. joint use facility within the BISRA that could serve as Multi-Agency Center (MAC).	Pre-construction	DWR	DPR
TRANS-1: DWR, in Consultation with Caltrans Regional Offices, will Prepare a Traffic Management Plan (TMP) to Guide Activities during Construction Phase and Restocking Phase of the Proposed Project.	This plan will be prepared and support procurement of necessary Caltrans permits for the transport of heavy construction equipment and/or materials to/from the projects site, or any movement of oversized or excessive load vehicles on the State Highway System. At a minimum this plan shall define how to minimize the amount of time spent on construction transportation activities; how to minimize disruption of vehicle and alternative modes of traffic at all times, but particularly during periods of high traffic volumes; adequate signage and other controls, including flag persons, to ensure that traffic can flow adequately during construction; the identification of alternative routes that can meet the traffic flow requirements of a specific area, including communication (signs, webpages, etc.) with drivers and neighborhoods where construction activities will occur; and at the end of each construction day roadways shall be prepared for continued utilization without any significant roadway hazards remaining.	Pre-construction	DWR	Caltrans

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State of California

John Laird

Secretary
California Natural Resources Agency

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Director
Department of Water Resources

Initial Study/Proposed Mitigated Negative Declaration,
Mitigation Monitoring and Reporting Program

Delta Flood Emergency Facilities Improvement Project Refinements

State Clearinghouse (SCH) No 2014112056

A Component of the Delta Flood Emergency Preparedness,
Response, and Recovery Program

November 2014



Date: November 24, 2014

To: Responsible and Trustee Agencies, Interested Parties, and Organizations

Subject: Notice of Intent to Adopt an Initial Study/Mitigated Negative Declaration for the Delta Emergency Rock and Transfer Facilities Project Refinements

The California Department of Water Resources (DWR) has directed the preparation of and intends to adopt a Mitigated Negative Declaration (MND) for the proposed project in compliance with the California Environmental Quality Act (CEQA) and State CEQA Guidelines.

Project Title: Delta Emergency Rock and Transfer Facilities Project Refinements

Lead Agency: Department of Water Resources, Division of Flood Management

Project Location: The Stockton West Weber Avenue site is located near the Port of Stockton, which is located along the eastern edge of the Sacramento-San Joaquin Delta (Delta) approximately 50 miles south of Sacramento. It is located between the East Complex of the Port of Stockton and near the intersections of Interstate 5 (I-5) and State Route 4 (SR-4), and just south of the Stockton Deep Water Ship Channel. The Rio Vista site is strategically located in the West Delta, readily accessible from the I-80 corridor via Highway 12 and Highway 113, and accessible from I-680 via Highway 160 to the south, and from I-5 via Highway 12 and Highway 160.

Project Description: Under the facilities implementation component of the Delta Flood Emergency Preparedness, Response, and Recovery Program, the California Department of Water Resources proposes to acquire long-term access and improve up to three sites in the Delta; these sites are located in Stockton, Rio Vista, and Brannan-Andrus. The purpose of the proposed project is to ensure that the State has the appropriate infrastructure and supplies in the Delta to respond to and recover quickly and effectively from major flood or earthquake disasters in the Delta. The primary objective of the proposed project is to improve three transfer facilities sites where quarry rock, sand, soil, and other flood-fight materials can be efficiently transferred from trucks to barges to expedite levee repairs and facilitate channel closures in the event of Delta levee breaches. In addition, the proposed project sites would serve other emergency response functions needed by DWR to respond rapidly and effectively to significant emergencies in the Delta, including storage of repair materials and flood-fight supplies, and Incident Command Posts. DWR would use existing improvements and construct additional improvements as needed to support the proposed emergency response functions. DWR completed CEQA compliance and approved the proposed project in June 2013 (State Clearinghouse No. 2013042015).

Minor refinements to the proposed project have been made since June 2013 and are the focus of this subsequent Initial Study/subsequent proposed MND (IS/MND). Proposed project refinements at the Stockton West Weber site include site clearing, grubbing, and removal of organic material including at least 14 and potentially up to approximately 20 trees during project construction; grading including importing backfill material; constructing 12-inch aggregate base all-weather surfaces above the 100-year flood elevation; improving, extending, or abandoning existing utilities services where required; constructing a new 7,000 square foot steel frame building with concrete foundation for warehouse use; constructing new concrete foundations for two rock conveyors; constructing a 6,500 square foot asphalt foundation/pad for four temporary office trailers and a pre-fabricated restroom facility; construct 4,600 square-foot asphalt ADA parking stalls and pathways for building accessibility;

establishing a quarry rock stockpile of up to 150,000 tons of various rock gradations (an increase from 40,000 tons in original project description); installing an additional two spud piles (for a total of eight spud piles) near the toe of bank along the Stockton Deep Water Ship Channel to support two conveyor support barge structures; and installing up to 11 dolphin pile clusters for mooring of up to three transport barges during rock-loading operations.

Proposed project refinements at the Rio Vista site include: site clearing, grubbing, and removal of organic material including approximately 4.0 acres of trees as necessary during project construction; decreasing the acreage for vehicle parking from 1.25 acres to 0.75 acre; providing new water and electrical connections; and widening the existing access road from about 20 feet to 28 feet, including removing at least two and up to approximately 15 trees along the existing access road.

No project refinements are proposed for the Brannan-Andrus site.

Environmental Review Process: DWR has directed the preparation of an IS/MND on the proposed project refinements in accordance with the requirements of CEQA. The IS/MND describes the proposed Delta Flood Emergency Facilities Improvement Project Refinements and provides an assessment of the undertaking's potential impacts on the environment. The IS/MND concludes that any potentially significant impacts that may result from the proposed project refinements can be avoided, eliminated, or reduced to a level that is less than significant by the adoption and implementation of specified mitigation measures.

Public Review Period: The IS/MND is being circulated for public review and comment for a review period of at least 30 days starting November 24, 2014. Written comments should be submitted and received at the following address, fax, or email no later than close of business (5:00 p.m.) on December 26, 2014.

Mr. John Paasch
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To Review or Obtain a Copy of the Environmental Document: Copies of the draft IS/MND may be reviewed at the following locations:

- ▶ Port of Stockton Administration Building, at 2203 W. Washington Street Stockton, California
- ▶ Sacramento County, County Clerk's Office, 600 8th Street, Sacramento, California
- ▶ Rio Vista City Hall, One Main Street, Rio Vista, California.

Copies of this document are also available for download and review from the Department of Water Resources' website at <http://www.water.ca.gov/floodmgmt/hafoo/fob/dfeprrp/facilities.cfm>.

Your views and comments on how the project may affect the environment will be welcomed.

PROPOSED MITIGATED NEGATIVE DECLARATION

Project: Delta Flood Emergency Facilities Improvement Project Refinements, a Component of the Delta Flood Emergency Preparedness, Response, and Recovery Program

Lead Agency: Department of Water Resources, Division of Flood Management (DWR)

PROJECT DESCRIPTION AND REFINEMENTS

The California Environmental Quality Act (CEQA) requires that state agencies consider the environmental consequences of projects over which they have discretionary authority before taking action on those projects. The California Department of Water Resources (DWR) has complied with CEQA by approving an Initial Study (IS), adopting a Mitigated Negative Declaration (MND) and Mitigation Monitoring and Reporting Program (MMRP), and approving the proposed Delta Flood Emergency Facilities Improvement Project (proposed project), a component of the Delta Flood Emergency Preparedness, Response, and Recovery Program (DFEPRRP). These actions were taken by DWR on June 3, 2013, and a Notice of Determination was filed by DWR on June 5, 2013. The State Clearinghouse number for the proposed project was No. 2013042015.

Minor refinements to the proposed project have been made since DWR adopted the MND and MMRP, approved the proposed project, and filed the Notice of Determination in June 2013. As a result, DWR has prepared this new IS/MND to evaluate the potential impacts on the environment from these project refinements. While typically an addendum is completed to cover minor project refinements (CEQA Guidelines Section 15164), DWR chose to prepare this new IS/MND to evaluate the proposed project refinements in the context of the original proposed project evaluated by DWR in June 2013 (DWR 2013). The information contained herein focuses primarily on project refinements and supplements the IS/MND and MMRP that were completed for the proposed project in June 2013 (DWR 2013). Information from the original IS/MND is included in this subsequent IS/MND when necessary to provide context and evaluate the full project impacts of the whole of the action.

Project Purpose: The purpose of the Delta Flood Emergency Facilities Improvement Project, a Component of the Delta Flood Emergency Preparedness, Response, and Recovery Program (DFEPRRP) <http://www.water.ca.gov/floodmgmt/hafoo/fob/dfeprrp/> is to ensure that the State has the appropriate infrastructure and supplies in the Delta to respond to and recover quickly and effectively from major flood or earthquake disasters in the Sacramento-San Joaquin River Delta.

The primary objective of the proposed project is to improve three transfer facilities sites where quarry rock, sand, soil, and other flood-fight materials can be efficiently transferred from trucks to barges to expedite levee repairs and facilitate channel closures in the event of Delta levee breaches. In addition, the proposed project sites would serve other emergency response functions needed by DWR to respond rapidly and effectively to significant emergencies in the Delta, including storage of repair materials and flood-fight supplies, and Incident Command Posts (ICPs).

Original Project Locations and Site-Specific Improvements: To accomplish its purpose, the proposed project will establish two new material storage and transfer facility sites, one at Stockton West Weber Avenue and another at Brannan Island State Park; modify an existing material storage facility at Rio Vista; establish new flood fight supply facilities at all three locations; and make site preparations to support ICPs at the Stockton West

Weber Avenue site (Stockton West Weber site) and Brannan Island State Recreation Area site (BISRA site). In addition to approximately 223,000 tons of quarry rock stockpiled by DWR at Rio Vista and within the Port of Stockton, DWR would also stockpile up to 40,000 tons of levee repair material each at Stockton West Weber site and at the BISRA site, and 20,000 tons of sand at the Rio Vista site for a total increment of 100,000 tons. Additional information on the proposed project is presented in the original IS/MND (DWR 2013).

Project Refinements: No project refinements have been made at this time for Site 3, the BISRA site; therefore, this site is not addressed further. Project refinements at the other two sites are summarized below.

Proposed project refinements at the **Stockton West Weber site**, which consists of a north and south parcel at the westerly terminus of West Weber Avenue, are as follows:

- ▶ Clear, grub, and grade the site to the following specifications (site clearing, grubbing, and organic material removal planned but not specified in original project description, and tree removal and sea-level rise actions are added project refinements):
 - Clear, grub, and remove approximately 30,000 cubic yards (cy) of organic material including top soil material from approximately 20 acres, including at least 14 and potentially up to approximately 20 trees, as well as shrubs as necessary during project construction.
 - Grade the site with approximately 30,000 cy of imported backfill material to bring the north parcel to an elevation of approximately 10-11 feet and provide structural fill for the building foundation on the south parcel.
 - Construct 12-inch aggregate base all-weather surfaces on the north parcel (approximately 26,000 cy on approximately 12 acres) to a finished grade of approximately 11-12 feet, above the 100-year flood elevation plus free board to anticipate approximated 18 inches of sea level rise; grade and add approximately 2 inches to the existing aggregate base surface on the south parcel (approximately 4,000 cy on about 8 acres).
- ▶ Improve, extend, or abandon existing utilities services where required. Specific work will be identified during final design.
- ▶ Construct a new 7,000 square foot steel frame building with concrete foundation for warehouse use on the south parcel.
- ▶ Construct two new approximately 600-square-foot concrete foundations supported by piles for two rock conveyors (concrete foundation planned but not specified in original IS).
- ▶ Construct two new approximately 100-square-foot concrete foundations for a transformer, one on each parcel.
- ▶ Install a pre-fabricated restroom facility including an approximate 200-square-foot concrete foundation and a possible concrete waste vault.

- ▶ Construct 6,500 square-foot asphalt foundation/pad for four approximately 8-foot by 40-foot temporary office trailers for use as an ICP during flood emergencies and a pre-fabricated restroom facility. The asphalt pad would also encompass American Disabilities Act (ADA) compliant parking stall(s) as required.
- ▶ Construct 4,600 square-foot asphalt ADA parking stalls and pathways for building accessibility.
- ▶ Properly grade and construct surface for areas designated for rock stockpiles; surface would include 12-inch aggregate base consistent with the rest of the site and geogrid/geotextile fabric (planned but not specified in original project description).
- ▶ Establish a quarry rock stockpile of up to 150,000 tons of various rock gradations below 24-inch-minus at two locations on the north parcel and one location on the south parcel, totaling approximately 6 acres (an increase from 40,000 tons in original project description but accounted for in the 2007 IS/MND [DWR 2007]).
- ▶ Remove 12 existing wooden piles, in two clusters of six piles each, which are obstructing the foundation and alignment at one of the conveyor locations along the site's north shoreline fronting the Stockton Deep Water Ship Channel.
- ▶ Install up to eight spud piles (an increase of two spud piles from the original project description) near the toe of bank along the Stockton Deep Water Ship Channel to support two conveyor support barge structures; spud piles would be steel pipes or H piles of 4 square feet each.
- ▶ Install up to 11 dolphin pile clusters for mooring of up to three transport barges during rock-loading operations. The dolphin pile clusters would likely be constructed with three 24-inch-diameter steel pipe piles each (one vertical and two battered) for a total of about 33 piles in the Stockton Deep Water Ship Channel. Each dolphin pile cluster affects approximately 12 square feet at the bottom of the channel. Pile driving would be conducted with an impact hammer and is anticipated to occur from a barge.
- ▶ Clear vegetation from up to approximately 700 linear feet along the ship channel, including a minimum of 100 feet upstream and downstream of each conveyor foundation (about 400 linear feet total) and potentially the 300 linear feet between the conveyor foundations.
- ▶ Place approximately 13,000 square feet of rip rap along the ship channel, extending about 100 feet upstream and downstream of each conveyor foundation (total of about 400 linear feet) to protect the slope from wave action; approximately 9,900 square feet would be above the Ordinary High Water mark (OHWM) and approximately 3,600 square feet would be below the OHWM.

Proposed project refinements at the **Rio Vista site** are as follows:

- ▶ Site clearing, grubbing, and removal of organic material including approximately 4.0 acres of trees as necessary during project construction (site clearing, grubbing, and organic material removal planned but not specified in original project description, and tree removal is a project refinement).
- ▶ Construct 6,000 square-foot asphalt foundation/pad for two approximately 8-foot by 40-foot temporary office trailers for use as an ICP during flood emergencies and a pre-fabricated restroom facility. The asphalt pad would also encompass ADA compliant parking stall(s) as required.

- ▶ Establish a 0.75-acre area for vehicle parking (a decrease from a 1.25-acre area specified in original project description).
- ▶ Provide new water connection for the Central Valley Flood Protection Board (CVFPB) lease of the remaining property and develop electrical connections to the site for future temporary office trailers.
- ▶ Widen existing access road(s) from about 20 feet to 28 feet. This project refinement would remove at least two and up to approximately 15 trees along the existing access road, as well as numerous woody shrubs.

FINDINGS

A subsequent IS has been prepared to assess the potential effects of the proposed project refinements specified above on the environment and the significance of those effects. Based on the subsequent IS, it has been determined that the proposed project refinements would not have any significant effects on the environment with mitigation incorporated. This conclusion is supported by the following findings:

1. The proposed project refinements would have **no impacts** related to Agriculture and Forestry Resources, Land Use and Planning, Mineral Resources, Population and Housing, Public Services, Recreation, and Utilities and Service Systems.
- 2a. The proposed project refinements would have **less-than-significant impacts** on Aesthetics and Air Quality.
- 2b. The proposed project refinements would have **less-than-significant impacts** on Climate Change, and the project's incremental contribution to the cumulative impact of increasing atmospheric levels of Greenhouse Gases (GHGs) is less than cumulatively considerable and, therefore, **less-than-significant**. Please refer to Section 4.8 of the original IS which highlights DWR's efforts to reduce its GHG emissions consistent with Executive Order S-3-05 and the Global Warming Solutions Act of 2006 (Assembly Bill (AB) 32). Section 3.8 of the IS also includes how GHG emissions were analyzed and addressed, inclusive of a Greenhouse Gas Emissions Reduction Plan (GGERP) Consistency Determination Checklist, developed and executed specifically for the subject Delta Flood Emergency Facilities Improvement Project and project refinements.
3. The proposed project refinements would have **potentially significant impacts** related to Biological Resources, Cultural and Paleontological Resources, Hydrology and Water Quality, Geology and Soils, Hazards and Hazardous Materials, Noise, Transportation/Traffic, and Mandatory Findings of Significance, but **mitigation measures are proposed that would reduce these effects to less-than-significant levels**.

Table B-1 in the IS presents the Mitigation Monitoring and Reporting Program (MMRP) for the proposed project and project refinements. This MMRP updates and replaces the MMRP adopted by DWR in June 2013 for the original proposed project. All mitigation measures remain the same as in the *Delta Flood Emergency Facility Improvement Project* IS/MND (DWR 2013), with the exception of Mitigation Measure BIO-2, which now only applies to the BISRA site; Mitigation Measures BIO-4 and BIO-5, which has been modified for clarity and maintains essential terms to protect wetland and riparian habitats, and two new mitigation measures: Mitigation

Measure BIO-7, which applies only to the Stockton West Weber site; and Mitigation Measure BIO-8, which applies only to the Stockton West Weber and Rio Vista sites.

After further evaluation in the IS, it was determined that Mitigation Measure BIO-2 was unnecessary as a mitigation measure for the proposed project and project refinements at the Stockton West Weber and Rio Vista sites because the impacts to trees were less than significant without mitigation. Furthermore, Mitigation Measure BIO-2 is not a feasible mitigation measure at the Stockton West Weber and Rio Vista sites as some tree removal is required to construct the proposed project and project refinements, and meet most of the project objectives. Mitigation Measure BIO-2 is hereby modified to be specific to the BISRA site only.

After further evaluation in the IS, it was determined that Mitigation Measures BIO-4 and BIO-5 had unnecessary language and was henceforth clarified by deleting these terms but maintaining essential components that restrict project activities from wetland and riparian habitats. Mitigation Measures BIO-4 and BIO-5 are hereby modified.

Mitigation Measures BIO-7 and BIO-8 are new mitigation measures proposed to minimize impacts to biological resources as discussed in Section 3.5, “Biological Resources,” in Chapter 3, “Environmental Checklist,” of the IS.

Mitigation Measure HAZ-1 has been modified to reflect the progress of the DWR and State Department of Toxic Substances Control (DTSC) interagency agreement since the publication of the 2013 IS/MND, specifying that Soil Management Plans (SMPs) and Health and Safety Plans (HASPs) have been prepared since the publication of the 2013 IS/MND.

Following are the specific mitigation measures that would be implemented by DWR to avoid or minimize environmental impacts from the proposed project and project refinements. Implementation of these mitigation measures would reduce the environmental impacts of the proposed project and project refinements to a less-than-significant level.

AESTHETICS

AES-1: Design BISRA Joint Use Facility with DPR Incorporating Architectural and Landscaping Technics to Minimize Impacts to Scenic Vistas and Visual Resources.

DWR will consult and coordinate with DPR staff and architect to facilitate the location and design of the joint use facility and steel warehouse within the BISRA so as not to harm the natural aesthetics, scenic vistas, and visual character available within the BISRA and from the nearby Scenic SR 160. Potential design measures may include utilizing natural earth tones for building exteriors, incorporating earthen berms and planting native plants to help screen project building features from recreational areas and from Scenic SR 160.

AES-2: Locate and Design Quarry Rock Stockpile(s) at BISRA to Minimize Impacts to Scenic Vistas and Visual Resources.

DWR will consult and coordinate with DPR staff to facilitate the location, placement, shape, and visual treatment of quarry rock stockpile(s) that will be located near the southern tip of the BISRA peninsula. The quarry rock stockpiles will be located and configured so as not to harm the natural aesthetics, scenic vistas, and visual character available within and adjacent to the BISRA and from the nearby river, sloughs

and Scenic SR 160. Potential visual treatments may include screening by natural, native vegetation of trees and shrubs, utilizing natural berms, or covering the rock stockpiles with a layer of native soil and sand materials from nearby within the BISRA.

AES-3: Locate and Treat Exterior of Warehouse and Cargo Storage Containers at BISRA to Minimize Light and Glare Impacts to Day and Nighttime Views.

DWR will consult and coordinate with DPR staff to facilitate the location and exterior visual treatment of the project warehouse on BISRA to minimize light and glare impacts to day and nighttime views, and not to harm the natural aesthetics, scenic vistas, and visual character available within and adjacent to the BISRA and from Scenic SR 160. Potential visual treatments may include treating the exterior of the warehouse walls and roof in natural earth tones and screening by natural, native vegetation of trees and shrubs.

BIOLOGICAL RESOURCES

BIO-1: Conduct Burrowing Owl Surveys at all Three of the Project Sites Prior to Development.

Prior to any land clearing operations, a burrowing owl survey following standard guidelines (The California Burrowing Owl Consortium, CBOC, 1993) shall be conducted by a qualified biologist. The survey shall entail walking throughout the entire site, including a 500-foot buffer, to identify adjacent suitable habitat that could be affected by noise and vibration from heavy equipment operation. If no burrows are observed, no impact is expected and results of the survey shall be submitted to the California Department of Fish and Wildlife (DFW). If burrows or owls are observed, a nesting season (15 April – 15 July) survey shall also be conducted, the results of which shall determine whether a winter survey will be further required or whether the results of the survey can be submitted to the DFW following the nesting survey. If the surveys confirm occupied burrowing owl habitat, the Incidental Take Minimization Measure for Burrowing Owls (Measure 5.2.4.15) in the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (November 14, 2000) will be implemented.

BIO-2: Retain all Mature Trees at the on the Proposed Brannon Island State Recreation Area Project Sites.

Mature trees that are potential nest trees and native oak trees greater than 8 inches diameter at breast height² dbh will not be removed at the proposed Brannon Island State Recreation Area project site from any of the project sites. If a nest tree becomes occupied during stockpiling and site development activities, then depending upon the bird species involved, appropriate monitoring and mitigation measures as specified by the California Department of Fish and Wildlife DFW will be instituted. At a minimum, all construction activities shall remain a distance of at least two times the drip line radius of active nest trees, as measured from the nest.

BIO-3: Conduct Special-Status Surveys.

DWR will consult with DFW prior to project construction to determine the extent for pre-construction sensitive species survey on the proposed project sites. For those sites determined for specific surveys, a qualified biologist shall conduct the sensitive species survey on the sites and within buffer areas of the

sites. Special status bird species that could potentially nest in trees in or near the project area include Swainson's hawk, tricolored blackbird, white-tailed kite, double-crested cormorant, California black rail, saltmarsh common yellowthroat, song sparrow, Cooper's hawk, ferruginous hawk, merlin, yellow-headed blackbird, and western yellow-billed cuckoo. Potential habitat for special status reptiles/amphibians including the giant garter snake (GGS) and the western pond turtle exists at all three sites necessitating the need to conduct pre-construction surveys at all three sites. In addition, the western red bat could potentially roost in trees in or near the Rio Vista site and the Brannan Island site. The surveys shall be conducted no more than two weeks prior to the start of operations and depending on the expected duration of the activities a follow-up survey may also be required. All observed sensitive species shall be reported to the DFW. The proposed project will be adjusted to avoid impacting these species, or to relocate the individuals under the guidance of the DFW. Preconstruction surveys will also include a botanical survey to identify the presence of elderberry shrubs and Antioch dunes evening primrose.

BIO-4: Conduct Pre-Construction Riparian Habitat Surveys at All Three of the Project Sites Prior to Development.

Prior to any land clearing operations, riparian habitat surveys shall be conducted by a qualified biologist. ~~to confirm that construction activities will not impact riparian habitat.~~ The survey shall entail walking throughout the entire site, including a 100-foot buffer, to identify ~~adjacent suitable~~ riparian habitat that could be affected by construction activities, particularly along the top of waterside banks or slopes, ~~or low-lying areas.~~ Riparian habitat shall be avoided, if feasible. If it is determined that construction would result in the removal of The riparian habitat, surveys shall be submitted to DFW, along with ~~each of the site development plans to confirm that isolated project activities, inclusive of piling installations, utility installations and road/ramp improvements near or adjacent to riparian habitat or other sensitive natural communities will not result in a significant impact to riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service.~~ DWR will mitigate for impacts through restoration of riparian habitat on the Brennan Island, or ~~similar of other state-owned~~ property based on a replacement ratio of 1:1.

BIO-5: Conduct Pre-Design Wetlands and Riparian Habitat Surveys for each of the Sites and Install and Maintain Exclusionary Fencing at the Sites to Ensure Full Avoidance of Seasonal and Permanent Wetlands and Jurisdictional Riparian Habitat.

a) DWR shall retain a qualified biologist to conduct a wetland delineation of the project sites. This delineation shall be submitted to the Corps, and verification received prior to any ground disturbing activities beyond the existing on-site roadways.

b) DWR, will preserve, and not disturb the existing wetlands, and wherever possible, establish 25-foot minimum buffers around all sides of these features. In addition, the final project design shall not cause significant changes to the pre-project hydrology, water quality or water quantity in any wetland that is to be retained on site. ~~This shall be accomplished by avoiding or repairing any disturbance to the hydrologic conditions supporting these wetlands, as verified through wetland protection plans.~~

c) DWR, prior to construction activities, shall ~~install~~ conduct an updated wetland delineation for its potential disturbance area, install orange exclusion fencing on T posts (or equivalent), with silt fence or exclusion fencing around wetlands to be retained on-site where wetlands are adjacent to construction activities. ~~material installed along the bottom, and w~~Wherever possible, a 25-foot buffer adjacent to seasonal and permanent wetlands shall be established identified within and adjacent to the proposed site work. The fencing shall be maintained for the duration of the site work, ~~and the DWR Operations and Maintenance Manual for the Rio Vista site shall include the pre-construction delineation of jurisdictional wetlands and riparian habitat and note that all future traffic within the project site is limited to improved surface areas and stockpile areas, and all other areas are deemed off limits to vehicular and construction equipment.~~

BIO-6: Secure Section 1600 Lake or Streambed Alteration (LSA) Agreement from DFW.

Prior to any ground-disturbing site improvements, DWR shall consult with DFW and secure any applicable Section 1600 Lake or Streambed Alteration (LSA) agreement(s) for any permanent site improvements waterward of the top of bank at Three-Mile Slough for the BISRA site or at the Stockton Deep Water Ship Channel or Mormon Slough at the Stockton West Weber Avenue site.

BIO-7: Avoid and Minimize Underwater Sound Pressure due to Pile Driving.

Underwater sound monitoring shall be performed during pile-driving activities. A qualified biologist/natural resource specialist shall be present during such work to monitor construction activities and compliance with terms and conditions of permits.

Underwater sound reduction measures shall be employed, as needed, to ensure that levels do not exceed the threshold levels established by USFWS and NMFS (for fish greater than 2 grams):

- Peak Pressure – 206 decibels
- Accumulated Sound Exposure Level (SEL) – 187 decibels

These underwater sound reduction measures shall include use of an impact hammer cushion block. Additionally, hammers shall be used only during daylight hours and initially shall be used at low energy levels and reduced impact frequency. Applied energy and frequency shall be gradually increased until necessary full force and frequency are achieved.

If necessary, one or more of the following shall be implemented to further reduce sound:

- Pipe caissons shall be used to isolate the piles from waters to buffer underwater sound pressure levels if underwater sound monitoring indicates that underwater sound levels exceed threshold levels. The caissons shall be driven below the mud line using vibratory or hydraulic methods and the interior area dewatered before pipe piles are installed using impact methods.
- The use of a bubble curtain surrounding the pile to be driven.

Bio-8: Ensure No Net Loss of Functions and Values of Wetlands, other Waters of the United States, and Waters of the State at the Stockton West Weber and Rio Vista Sites.

Before the start of any ground-disturbing activity associated with the construction of any project feature that would affect waters of the United States, including wetlands, or waters of the State, DWR will obtain all necessary permits under Sections 404 and 401 of the Clean Water Act or the State's Porter-Cologne Act for the proposed project and project refinements at the Stockton West Weber and Rio Vista sites, and Section 10 authorization under Rivers and Harbors Act for work within the Stockton Deep Water Ship Channel at the Stockton West Weber site.

All permits, regulatory approvals, and permit conditions for impacts on wetland habitats shall be secured before implementation of any construction activities within waters of the United States or wetland habitats, including waters of the State. DWR will commit to replace, restore, or enhance on a "no net loss" basis, in accordance with U.S. Army Corps of Engineers (USACE) and the Central Valley Regional Water Quality Control Board (RWQCB), the acreage of all wetlands and other waters of the United States that would be removed, lost, and/or degraded with implementation of project plans. Wetland habitat shall be restored, enhanced, and/or replaced at an acreage and location and by methods agreeable to USACE and the Central Valley RWQCB, as determined during the Section 404 and Section 401 permitting processes. Final mitigation ratios will be determined during the permitting process.

CULTURAL AND PALEONTOLOGICAL RESOURCES

CUL-1: Pre-construction Field Survey.

Prior to ground disturbing activities, a field survey will be conducted by a qualified archeologist to identify any prehistoric or historic cultural resources within the project site areas. The survey may reveal a lack of resources. No further identification effort will need to be made. If resources are found in one of the selected sites during the survey, it will be necessary to determine whether the resource is an important resource. This determination will be made by a qualified archeologist based upon surface evidence, if possible. If surface evidence is not conclusive, additional studies, including archival research or subsurface testing, will be conducted. If the additional studies are undertaken and a resource is found to be important under the criteria of the California Register of Historical Resources (CRHR), avoidance will be the preferred method of mitigation. The use of the site with the significant resource might need to be limited to a smaller portion of the site, with protective measures designed for the resource, such as fencing or monitoring site use. The determination of appropriate mitigation will be made by DWR.

CUL-2: Worker Cultural Resource Awareness.

Construction personnel will be informed of the potential for encountering significant archaeological resources and instructed in the identification of artifacts, bone, and other potential resources. All construction personnel will be informed of the need to stop work on the project site if cultural resources are found, and until a qualified archaeologist has been provided the opportunity to assess the significance of the find and implement appropriate measures to protect or scientifically remove the find. Construction personnel will also be informed of the requirement that unauthorized collection of cultural resources is prohibited.

CUL-3: Immediately Halt Construction if any Cultural Resources are Discovered.

DWR shall implement the following mitigation measure to reduce the potential impacts to buried historic cultural resources to a less-than-significant level. If cultural materials (e.g., unusual amounts of shell, animal bone, glass, ceramics, etc.) are discovered during project-related construction activities, ground disturbances in the area of the find shall be halted and a qualified professional archaeologist shall be notified regarding the discovery. The archaeologist, to be retained by DWR, shall determine whether the resource is potentially significant per the CRHR and develop appropriate mitigation. Mitigation may include, but not be limited to, in-field documentation, archival research, archaeological testing, data recovery excavations, or recordation, and shall be implemented before resuming construction in the immediate vicinity.

CUL-4: Immediately Halt Construction if any Human Remains are Discovered.

DWR shall implement the following mitigation measure to reduce the potential impacts to human remains to a less-than-significant level. In accordance with the California Health and Safety Code, if human remains are uncovered during ground-disturbing activities, the contractor and/or DWR shall immediately halt potentially damaging excavation in the area of the burial and notify the County Coroner and a professional archaeologist to determine the nature of the remains. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or State lands (Health and Safety Code Section 7050.5[b]).

If the coroner determines that the remains are those of a Native American, he or she must contact the Native American Heritage Commission (NAHC) by phone within 24 hours of making that determination (Health and Safety Code Section 7050[c]). Following the coroner's findings, DWR, an archaeologist, and the NAHC designated Most Likely Descendent (MLD) shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments are not disturbed. The responsibilities for acting upon notification of a discovery of Native American human remains are identified in California Public Resources Code Section (PRC) 5097.9.

CUL-5: Determination of Significance of Cultural Resources.

If previously unknown cultural resources are discovered during project construction, all work in the area of the find should cease and a qualified archaeologist should be retained by DWR or consultant to assess the significance of the find, make recommendations on its disposition, and prepare appropriate field documentation, including verification of the completion of required mitigation. If archaeological or paleontological resources are discovered during earth moving activities, all construction activities within 50 feet of the find should cease until the archaeologist evaluates the significance of the resource. In the absence of a determination, all archaeological and paleontological resources should be considered significant.

If the resource is determined to be significant, the archaeologist, as appropriate, should prepare a research design for recovery of the resources in consultation with the State Office of Historic Preservation that satisfies the requirements of Public Resources Code, Section 21083.2. The archaeologist should complete

a report of the excavations and findings. Upon approval of the report, the project proponent should submit the report to the regional office of the California Historic Resources Information System.

HYDROLOGY AND WATER QUALITY

HYD-1: Institute Construction Best Management Practices (BMPs) for the Prevention of Erosion and Transport of Soil, Sand, and Silt Offsite during Runoff Events.

DWR shall implement construction Best Management Practices (BMPs) for all land clearing, land leveling, excavation, and fill operations associated with site preparations at the three sites. These measures will be incorporated into the construction plans and specifications. They include avoidance of existing wetlands, including placement of exclusion fencing, creating on site catchments for surface runoff, using coir logs to intercept drainage, and hydroseeding slopes, as appropriate.

Before the start of any construction work, clearing, or site grading associated with preparation, or any stockpiling activities at the sites, measures to control soil erosion and waste discharges will be prepared in accordance with BMPs. DWR will require all contractors conducting work at the sites to implement BMPs to control soil erosion and waste discharges of other construction-related contaminants. The general contractor(s) and subcontractor(s) conducting the work will be responsible for constructing or implementing, regularly inspecting, and maintaining the BMPs in good working order. In addition, the contractors will be required to submit and adhere to the applicable Storm Water Pollution Prevention Plan (SWPPP) associated with site development, preparation, and improvements.

Sufficient buffers from wetlands, riparian habitat, and/or other sensitive areas shall be maintained throughout the construction improvement period(s) of the project.

The plans developed by DWR or its contractor(s) will identify the grading, erosion, and tracking control BMPs and specifications that are necessary to avoid and minimize water quality impacts to the extent practicable. Standard erosion control measures (e.g., management, structural, and vegetative controls) will be implemented for all construction activities that expose soil. Grading operations will be conducted to eliminate direct routes for conveying potentially contaminated runoff to drainage channels. Erosion control barriers such as silt fences and mulching material will be installed, and disturbed areas will be reseeded with native grasses or other plants where necessary. Tracking controls shall be required throughout the construction period, as needed, to reduce the tracking of sediment and debris from the construction site.

At a minimum, entrances and exits shall be inspected daily, and controls implemented as needed.

The following specific BMPs will be implemented, as described in the California BMP Handbook (www.cabmphandbook.com):

- Conduct all work according to site-specific construction plans that identify areas for clearing and grading so that ground disturbance is minimized.

- Avoid riparian vegetation, cover cleared areas with mulches, and install silt fences near riparian areas or streams to control erosion and trap sediment, and reseed cleared areas with native vegetation. Sufficient buffers (minimum 20 feet when possible) from wetlands and/or other sensitive areas shall be maintained throughout the life of the project.
- Stabilize disturbed soils before the onset of the winter rainfall season.
- Stabilize and protect stockpiles from exposure to erosion and flooding.
- Stabilize all construction access by providing a point of entrance/exit to the construction sites that is stabilized to reduce the tracking of mud and dirt onto public roads by construction vehicles.
- Grade each construction entrance/exit to prevent runoff from leaving the construction site, and ensure that all runoff from the stabilized entrances/exits are routed through a sediment-trapping device before discharge.
- Ensure that entry/exit ways are able to support the heaviest vehicles and equipment that will use them.

BMPs will also specify appropriate hazardous materials handling, storage, and spill response practices to reduce the possibility of adverse impacts from use or accidental spills or releases of contaminants. Specific measures applicable to the project include, but are not limited to, the following:

- Develop and implement strict onsite handling rules to keep construction and maintenance materials out of drainages and waterways.
- Conduct all refueling and servicing of equipment with absorbent material or drip pans underneath to contain spilled fuel. Collect any fluid drained from machinery during servicing in leak-proof containers and deliver to an appropriate disposal or recycling facility.
- Maintain controlled construction staging, site entrance, concrete washout, and fueling areas at least 100 feet away from stream channels or wetlands to minimize accidental spills and runoff of contaminants in storm water.
- Prevent raw cement; concrete or concrete washings; asphalt, paint, or other coating material; oil or other petroleum products; or any other substances that could be hazardous to aquatic life from contaminating the soil or entering watercourses.

Maintain spill cleanup equipment in proper working condition. Clean up all spills immediately according to the spill prevention and response plan, and immediately notify DFW and the Regional Water Quality Control Board (RWQCB) of any spills and cleanup procedures.

HAZARDS AND HAZARDOUS MATERIALS

HAZ-1: Develop and Implement Environmental Remediation Plans.

DWR has entered into an interagency agreement with the State Department of Toxic Substances Control (DTSC) ~~and has conducted to conduct~~ applicable supplemental site investigations (SSIs), and ~~has developed Soil Management Plans (SMPs) and Health and Safety Plans (HASPs) approved by DTSC for the Stockton West Weber site parcels. The noted SMPs and HASPs must be implemented shall develop environmental remediation plans that will be incorporated into the site plans and improvements proposed for the Stockton West Weber Avenue parcel(s) prior to and during any ground-disturbing activities that may pose a toxic substance hazardous risk during construction of site improvements and subsequent ground-disturbing operations facility operations that will remain be consistent with current commercial and industrial zoning land uses.~~

NOISE

NOI-1: Implement Measures to Control Construction Equipment Noise Levels.

The contractor and/or DWR shall properly maintain construction equipment and equip it with noise control devices, such as exhaust mufflers or engine shrouds, in accordance with manufacturers' specifications. For non-emergency activities such as site construction and stockpiling quarry rock, operations will be limited to the periods 7:00 AM to 7:00 PM, Mondays through Saturdays.

RECREATION

REC-1: Implement Measures to Minimize Impacts on Recreation within Brannan Island State Recreation Area (BISRA).

DWR shall ~~enter~~ enter into a Memorandum of Understanding with the State Department of Parks and Recreation (DPR) to design project elements in coordination with DPR to minimize impacts on recreational quality and visual resources within the BISRA, and to improve facilities that could jointly benefit recreational services and emergency response capabilities. These include potential features such as developing architectural treatments to blend new structures (multi-use and warehouse facilities) within the park setting, screening the placement and storage of quarry rock stockpiles with vegetation, earthen berms, and/or placing a layer of sand over the quarry rock stockpile, planting native plants to help screen project features, improving service facilities such as restrooms and roads, and collectively implement a 2,500-5,000 square foot joint use facility within the BISRA that could serve as Multi-Agency Center (MAC).

TRANSPORTATION/TRAFFIC

TRANS-1: DWR, in consultation with Caltrans regional offices, will prepare a Traffic Management Plan (TMP) to guide activities during construction phase and restocking phase of the proposed project.

This plan will be prepared and support procurement of necessary Caltrans permits for the transport of heavy construction equipment and/or materials to/from the projects site, or any movement of oversized or

excessive lad vehicles on the State Highway System. At a minimum this plan shall define how to minimize the amount of time spent on construction transportation activities; how to minimize disruption of vehicle and alternative modes of traffic at all times, but particularly during periods of high traffic volumes; adequate signage and other controls, including flag persons, to ensure that traffic can flow adequately during construction; the identification of alternative routes that can meet the traffic flow requirements of a specific area, including communication (signs, webpages, etc.) with drivers and neighborhoods where construction activities will occur; and at the end of each construction day roadways shall be prepared for continued utilization without any significant roadway hazards remaining.

CONTACT INFORMATION

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ACRONYMS AND OTHER ABBREVIATIONS

AAD	Amador Air District
AB	Assembly Bill
ADA	American Disabilities Act
BCAQMD	Butte County Air Quality Management District
BDCP	Bay Delta Conservation Plan
BISRA	Brannan Island State Recreation Area
BISRA site	Brannan Island State Recreation Area site
BMPs	Best Management Practices
CARB	California Air Resources Board
CBC	California Building Standards Code
CCAPCD	Calaveras County Air Pollution Control District
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CG	Commercial, General
CGS	California Geological Survey
CH ₄	methane
CNPS	California Native Plant Society
CO ₂	Carbon Monoxide
CVFPB	California Central Valley Flood Protection Board
CWA	Clean Water Act
Delta	Sacramento-San Joaquin Delta
DFEPRRP	Delta Flood Emergency Preparedness, Response, and Recovery Program
DFW	Department of Fish and Wildlife
DOC's	Department of Conservation's
DPC	Delta Protection Commission
DPR	Department of Parks and Recreation
DRMS	Delta Risk Management Strategy
DSC	Delta Stewardship Council
DTSC	Department of Toxic Substances Control
DWR	Department of Water Resources
EFH	essential fish habitat
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FRAQMD	Feather River Air Quality Management District
FTA	Federal Transit Administration
GHGs	Greenhouse Gases
GGERP	Greenhouse Gas Emissions Reduction Plan
GGs	giant garter snake
GHG	greenhouse gases
HASP	Health and Safety Plan
HFCs	hydrofluorocarbons
I-5	Interstate 5
ICPs	Incident Command Posts
IG	Industrial, General

in/sec	inch per second
IS	Initial Study
IS/MND	Initial Study/Mitigated Negative Declaration
LSA	Lake or Streambed Alteration
MAC	Multi-Agency Center
MBUAPCD	Monterey Bay Unified Air Pollution Control District
MMRP	Mitigation Monitoring and Reporting Program
MND	Mitigated Negative Declaration
MRZ	mineral resource zone
N ₂ O	nitrous oxide
NCSC	Natural Communities of Special Concern
NMFS	National Marine Fisheries Service
NO _x	Nitrogen Oxides
NRCS	Natural Resources Conservation Service
NSAQMD	Northern Sierra Air Quality Management District
OHWM	Ordinary High Water Mark
PAHs	polynuclear aromatic hydrocarbons
PCAPCD	Placer County Air Pollution Control District
PEA	Preliminary Endangerment Assessment report
PFCs	perfluorocarbons
PM	Particulate Matter
PPV	peak particle velocity
proposed project	Delta Flood Emergency Facilities Improvement Project
RMS	root mean square
ROG	reactive organic gases
RPR	Rare Plant Rank
RWQCB	Regional Water Quality Control Board
SCH	State Clearinghouse
SF ₆	sulfur hexafluoride
SJMSCP	Joaquin County Multi-Species Habitat Conservation and Open Space Plan
SJVAPCD	San Joaquin Valley Air Pollution Control District
SLIC	Spills, Leaks, Investigations, and Cleanups
SMAQMD	Sacramento-Metro Air Quality Management District
SMP	Soil Management Plan
SR-4	State Route 4
SRA	shaded riparian aquatic
SSIs	supplemental site investigations
Stockton West Weber site	Stockton West Weber Avenue site
SWP	State Water Project
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TCAPCD	Tehama County Air Pollution Control District
USACE	U.S. Army Corps of Engineers
USFWS	Fish and Wildlife Service
VOC	volatile organic compound
YSAQMD	Yolo Solano Air Quality Management District

1 INTRODUCTION

1.1 PURPOSE OF THIS INITIAL STUDY

The California Environmental Quality Act (CEQA) requires that state agencies consider the environmental consequences of projects over which they have discretionary authority before taking action on those projects. The California Department of Water Resources (DWR) has complied with CEQA by approving an Initial Study (IS), adopting a Mitigated Negative Declaration (MND) and Mitigation Monitoring and Reporting Program (MMRP), and approving the proposed Delta Flood Emergency Facilities Improvement Project (proposed project), a component of the Delta Flood Emergency Preparedness, Response, and Recovery Program (DFEPRRP). These actions were taken by DWR on June 3, 2013, and a Notice of Determination was filed by DWR on June 5, 2013. The State Clearinghouse number for the proposed project was No. 2013042015.

The relevant CEQA information for the proposed project, which is hereby incorporated by reference per CEQA Guidelines Section 15150, is available at the following DWR website:

<http://www.water.ca.gov/floodmgmt/hafoo/fob/dfeprrp/facilities.cfm>. The full citation is as follows:

- ▶ Notice of Determination, Initial Study/Mitigated Negative Declaration, Mitigation Monitoring and Reporting Program, and Response to Comments, Delta Flood Emergency Facilities Improvement Project, State Clearinghouse (SCH) No. 2013042015, A component of the Delta Flood Emergency Preparedness, Response, and Recovery Program (California Department of Water Resources 2013).

Minor refinements to the proposed project have been made since DWR adopted the MND and MMRP, approved the proposed project, and filed the Notice of Determination in June 2013. As a result, DWR has prepared this new subsequent Initial Study and proposed subsequent Mitigated Negative Declaration (IS/MND) to evaluate the potential impacts on the environment from these project refinements. While typically an addendum is completed to cover minor project refinements (CEQA Guidelines Section 15164), DWR chose to prepare this new IS/MND to evaluate the proposed project refinements in the context of the original proposed project evaluated by DWR in June 2013 (DWR 2013). The information contained herein focuses primarily on project refinements and supplements the already completed IS/MND and MMRP that were completed for the proposed project in June 2013 (DWR 2013). Information from the original IS/MND is included in this subsequent IS/MND when necessary to provide context and evaluate the full project impacts of the whole of the action.

No project refinements are proposed at this time for Site 3, the Brannan Island State Recreation Area (BISRA) site; therefore, this site is not addressed further because all environmental impacts of the BISRA site have been fully disclosed in the June 2013 IS/MND (DWR 2013). This subsequent IS evaluates project refinements associated with Site 1 - Stockton West Weber Avenue site (called “Stockton West Weber site” hereafter) and Site 2 - Rio Vista site.

1.2 SUMMARY OF ORIGINAL PROPOSED PROJECT DESCRIPTION, PURPOSE, AND OBJECTIVES

Under the facilities implementation component of the DFEPRRP, DWR proposes to acquire long-term access and improve up to three sites in the Sacramento-San Joaquin Delta (Delta); these sites are located in Stockton, Rio

Vista, and Brannan-Andrus. The purpose of the proposed project is to ensure that the State has the appropriate infrastructure and supplies in the Delta to respond to and recover quickly and effectively from major flood or earthquake disasters in the Delta. The primary objective of the proposed project is to improve three transfer facilities sites where quarry rock, sand, soil, and other flood-fight materials can be efficiently transferred from trucks to barges to expedite levee repairs and facilitate channel closures in the event of Delta levee breaches. In addition, the proposed project sites would serve other emergency response functions needed by DWR to respond rapidly and effectively to significant emergencies in the Delta, including storage of repair materials and flood-fight supplies, and Incident Command Posts (ICPs).

DWR proposes to acquire the needed sites through purchase from willing private sellers or through long-term lease arrangements with other governmental agencies. DWR would utilize existing improvements and construct additional improvements as needed to support the proposed emergency response functions. Such improvements are likely to include site grading, fencing, barge docking and loading facilities, new buildings, parking, temporary office trailers, utilities (water, power, communications, and wastewater), lighting, and security improvements.

1.3 ADDITIONAL INFORMATION IN ORIGINAL INITIAL STUDY

The original IS included extensive information on the background to the proposed project, the proposed project itself, and the development of the proposed project and alternatives. This information is incorporated by reference and is available at the following DWR website:

<http://www.water.ca.gov/floodmgmt/hafoo/fob/dfeprrp/facilities.cfm>, and includes detailed information on the following subjects (pages 1-28 in original IS/MND):

- ▶ Relationship to previous DWR flood preparedness actions in the Delta;
- ▶ Relationship of the proposed project to the DFEPRRP;
- ▶ Purpose and need for proposed project;
- ▶ Location and setting, Delta geography, resources, and resources at risk;
- ▶ Delta levees, flooding, and authority;
- ▶ Related programs, entities, and initiatives in the Delta such as the Delta Levees Maintenance Subvention Program, Delta Levee Special Flood Control Projects, and implementation of the Central Valley Flood Protection Plan;
- ▶ Information on other nearby projects such as the DWR Temporary/Seasonal Delta Barriers Project, Franks Tract Project, Bay Delta Conservation Plan (BDCP), Ecosystem Restoration Programs, Delta Stewardship Council (DSC), Delta Protection Commission (DPC), Local Agency activities; Delta Risk Management Strategy (DRMS), and previous DWR efforts to improve Delta flood emergency response and recovery capabilities; and
- ▶ Information on project alternatives including the range of alternatives considered, no-project alternative, site characteristics, routine operations and maintenance, emergency operations, environmental considerations, and alternatives screening criteria and results.

1.4 SUMMARY OF IMPACTS AND MITIGATION MEASURES FROM ORIGINAL PROJECT IS/MND

The impacts from the original IS/MND are easily scanned in the Environmental Checklist presented on pages 74 – 179 of the original IS/MND (DWR 2013) and located at http://www.water.ca.gov/floodmgmt/docs/Delta-FIP-IS-MND-8-15-2013_FINAL-June2013.pdf. The conclusions for each impact in the Environmental Checklist (less than significant with mitigation incorporated, less-than-significant impact, or no impact) are essentially the same as those presented in this document’s Environmental Checklist in Chapter 3, “Environmental Checklist.” Consequently, they are not repeated herein.

Appendix B, “Mitigation Monitoring and Reporting Program,” of this IS/MND contains the full suite of mitigation measures presented in the 2013 IS/MND (DWR 2013). In addition, three original biological mitigation measures (BIO-2, BIO-4, and BIO-5) have been modified and two new biological mitigation measures (BIO-7 and BIO-8) have been added in this IS/MND to address the proposed project and project refinements. The mitigation measure for hazards and hazardous materials, HAZ-1, has also been modified to reflect the progress of the DWR and State Department of Toxic Substances Control (DTSC) interagency agreement since the publication of the 2013 IS/MND.

1.5 DOCUMENT ORGANIZATION

This IS is organized as follows:

- ▶ Chapter 1 provides an overview of the purpose of this subsequent IS/MND and its relationship with the original 2013 IS/MND for the original project; the original project description, purpose, and objectives; additional information in the original IS/MND; summary of impacts and mitigation measures from the original project IS/MND; and document organization;
- ▶ Chapter 2 describes the proposed project and especially the project refinements evaluated in this IS;
- ▶ Chapter 3 provides a brief summary of the environmental setting, describes the environmental effects of the proposed project and project refinements, and identifies appropriate mitigation measures;
- ▶ Chapter 4 lists references cited; and
- ▶ Chapter 5 lists preparers of this IS.

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2 PROJECT DESCRIPTION

The original project description for the proposed project is summarized in Section 1.2, “Summary of Original Proposed Project Description, Purpose, and Objectives,” and presented in the 2013 IS/MND on pages 32 – 61. This chapter focuses on the proposed project refinements at the Stockton West Weber site and the Rio Vista site. No project refinements are proposed at this time for Site 3, the BISRA site; therefore, this site is not addressed further. The locations of the Stockton West Weber, Rio Vista, and BISRA sites are depicted in Figure 2-1.

2.1 STOCKTON WEST WEBER SITE

2.1.1 SITE DESCRIPTION

This site is near the Port of Stockton, which is located along the eastern edge of the Delta, approximately 50 miles south of Sacramento. It is located between the East Complex of the Port of Stockton and near the intersections of Interstate 5 (I-5) and State Route 4 (SR-4), and just south of the Stockton Deep Water Ship Channel.

The current zoning for all three parcels comprising this site of up to 22.6 acres is Industrial, General (IG). This site is currently adjacent to industrial sites. All of the parcels along West Weber Avenue west of Interstate 5 (I-5) are designated IG, as are the parcels on the east and south of Old Mormon Slough. On the north bank of the Stockton Deep Water Ship Channel, directly across from the site, the parcels are designated Commercial General (CG), and the 2035 General Plan Land Use/Circulation Diagram designation is Commercial. The parcels to the west and south are designated as Industrial in the 2035 General Plan, while the parcels to the north and east are proposed as Commercial (City of Stockton 2007).

The property of interest to DWR consists of three parcels, totaling approximately 22.6 acres. This property was formally privately owned and was recently purchased by DWR. It has dock facilities to support at least two barge-loading operations and additional water frontage to add two or three more additional barge-loading facilities. The site has previously been used for construction purposes and as a barging facility. It has power and communication utilities including yard lighting, and has chain link fencing around portions of its perimeter.

There are two metal buildings on the site. The largest building is north of and adjacent to West Weber Avenue, with approximate dimensions of 200 feet by 80 feet (16,000 square feet). The smaller building is located adjacent to the north Bank of Old Mormon Slough, with approximate dimensions of 100 feet by 70 feet (7,000 square feet).

The two parcels of interest on the Stockton West Weber site have undergone environmental clean-up efforts in the past and under the proposed improvements will be developed in conformance with DWR’s Soil Management Plans (SMPs) and Health and Safety Plans (HASPs) approved by the Department of Toxic Substances Control (DTSC). These plans provide direction and guidance to DWR designers and construction contractors on how to operate and work around possible in-ground contaminants.

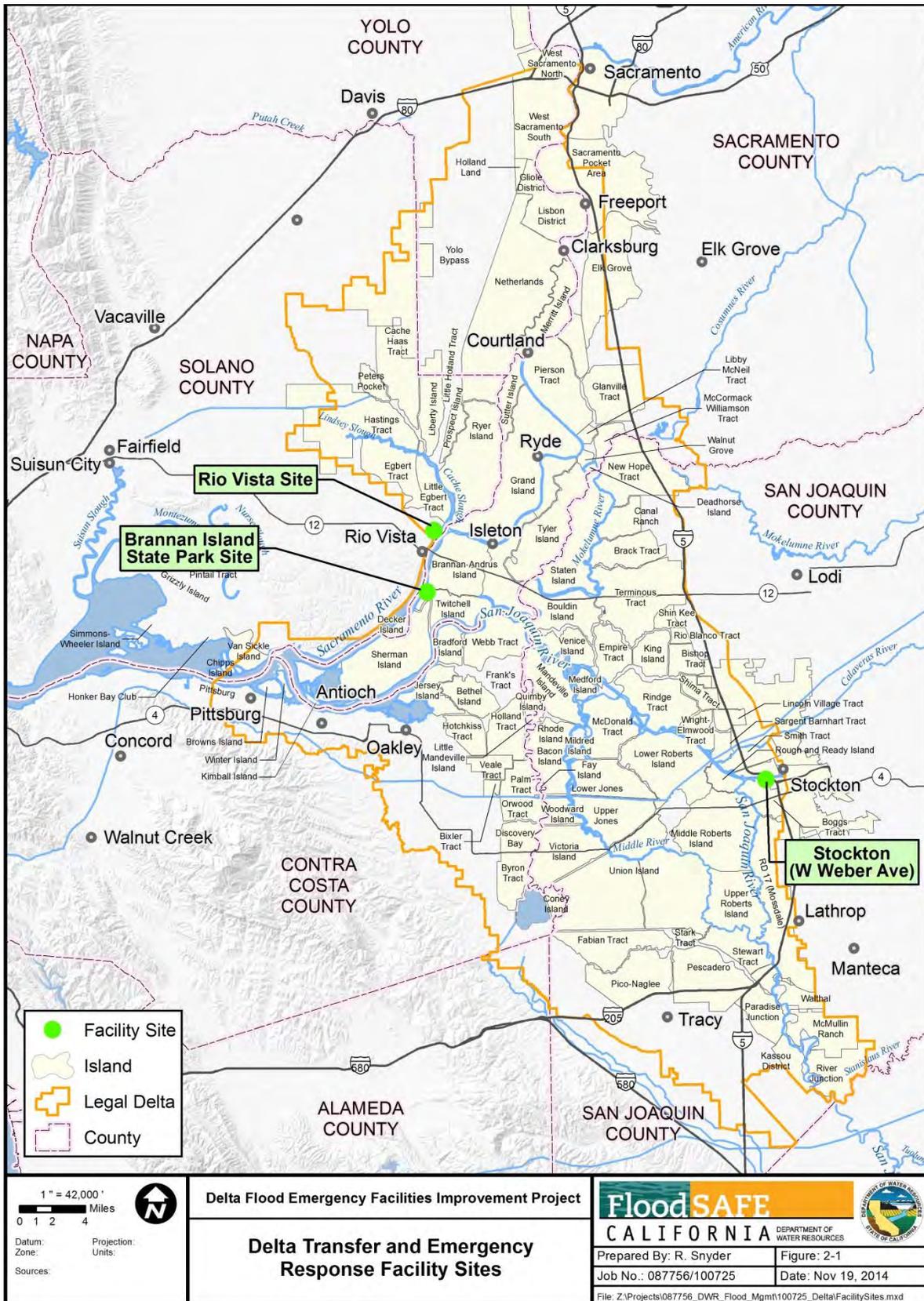


Figure 2-1. Proposed Sites for the Delta Flood Emergency Facilities Improvement Project

Included in the SMP is the HASP to provide guidance to DWR personnel and construction contractors on best practices while working around possible low levels of containments.

The property located across on the south and east bank of Old Mormon Slough is a U.S. Environmental Protection Agency (EPA) Superfund site, formerly a factory for producing pressure treated wood. McCormick & Baxter, the former operator of the site, went bankrupt and ceased operation on or before 1991. Under an EPA Record of Decision (R09-99/044) issued in 1999, the site was cleaned up and stabilized to minimize the transport of pollutants off the site. Remediation included the placement of a 2-foot deep layer of sand in the Old Mormon Slough channel and the closing off of the southeastern portion of the channel from any kind of boat traffic. As a result, access to a portion of the channel is restricted by means of a log boom for an indefinite period to prevent mobilization of contaminated sediments in the channel. The southeastern portion of the log boom is located about 600 feet from the mouth of the channel, allowing approximately 265 feet of existing dock footage along the Slough to be used for loading one or two barges at a time.

This site is zoned for industrial use and has historically been used for construction purposes. It offers sufficient space for barge loading, materials storage, an ICP, and parking. It offers egress to the central Delta via the Stockton Deep Water Channel. It is readily accessible from major highways in the Stockton area, including I-5, SR-99, SR-4, and SR-12.

2.1.2 PROPOSED PROJECT REFINEMENTS

Proposed project refinements are described below. Similar types of construction equipment and number of construction workers used to construct and operate the proposed project would also be used for the project refinements. All proposed project refinements are within the project footprint identified in the original 2013 IS/MND. All proposed project refinements are within the construction and operations schedules identified in the original 2013 IS/MND. All proposed project refinements would use staging areas and haul routes already identified and evaluated in the original 2013 IS/MND. Consequently, the construction approach for the proposed project refinements is generally the same as that identified in the 2013 IS/MND, with any modifications described below.

Proposed project refinements at the **Stockton West Weber site**, which consists of a north and south parcel at the westerly terminus of West Weber Avenue, are as follows:

- ▶ Clear, grub, and grade the site to the following specifications (site clearing, grubbing, and organic material removal planned but not specified in original project description, and tree removal and sea-level rise actions are added project refinements):
 - Clear, grub, and remove approximately 30,000 cubic yards (cy) of organic material including top soil material from approximately 20 acres, including at least 14 and potentially up to approximately 20 trees, as well as shrubs as necessary during project construction.
 - Grade the site with approximately 30,000 cy of imported backfill material to bring the north parcel to an elevation of approximately 10-11 feet and provide structural fill for the building foundation on the south parcel.

- Construct 12-inch aggregate base all-weather surfaces on the north parcel (approximately 26,000 cy on approximately 12 acres) to a finished grade of approximately 11-12 feet, above the 100-year flood elevation plus free board to anticipate approximated 18 inches of sea level rise; grade and add approximately 2 inches to the existing aggregate base surface on the south parcel (approximately 4,000 cy on about 8 acres).
- ▶ Improve, extend, or abandon existing utilities services where required. Specific work will be identified during final design.
- ▶ Construct a new 7,000 square foot steel frame building with concrete foundation for warehouse use on the south parcel.
- ▶ Construct two new approximately 600-square-foot concrete foundations supported by piles for two rock conveyors (concrete foundation planned but not specified in original IS).
- ▶ Construct two new approximately 100-square-foot concrete foundations for an electrical transformer, one on each parcel.
- ▶ Install a pre-fabricated restroom facility including an approximate 200-square-foot concrete foundation and a possible concrete waste vault.
- ▶ Construct 6,500 square-foot asphalt foundation/pad for four approximately 8-foot by 40-foot temporary office trailers for use as an ICP during flood emergencies. The asphalt pad will also encompass American Disabilities Act (ADA) compliant parking stall(s) as required.
- ▶ Construct 4,600 square-foot asphalt ADA parking stalls and pathways for building accessibility.
- ▶ Install about 550 linear feet of metal beam guardrail along a new ramp to be constructed.
- ▶ Properly grade and construct surface for areas designated for rock stockpiles; surface would include 12-inch aggregate base consistent with the rest of the site and geogrid/geotextile fabric (planned but not specified in original project description).
- ▶ Establish a quarry rock stockpile of up to 150,000 tons of various rock gradations below 24-inch-minus at two locations on the north parcel and one location on the south parcel, totaling approximately 6 acres (an increase from 40,000 tons in original project description but accounted for in the 2007 IS/MND [DWR 2007]).
- ▶ Remove 12 existing wooden piles, in two clusters of six piles each, which are obstructing the foundation and alignment at one of the conveyor locations along the site's north shoreline fronting the Stockton Deep Water Ship Channel.
- ▶ Install up to eight spud piles near the toe of bank along the Stockton Deep Water Ship Channel to support two conveyor support barge structures; spud piles would be steel pipes or H piles of 4 square feet each.
- ▶ Install up to 11 dolphin pile clusters for mooring of up to three transport barges during rock-loading operations. The dolphin pile clusters would likely be constructed with three 24-inch-diameter steel pipe piles

each (one vertical and two battered) for a total of about 33 piles in the Stockton Deep Water Ship Channel. Each dolphin pile cluster affects approximately 12 square feet at the bottom of the channel. Pile driving would be conducted with an impact hammer and is anticipated to occur from a barge.

- ▶ Clear vegetation from up to approximately 700 linear feet along the Stockton Deep Water Ship Channel, including a minimum of 100 feet upstream and downstream of each conveyor foundation (about 400 linear feet total) and potentially the 300 linear feet between the conveyor foundations.
- ▶ Place approximately 13,000 square feet of rip rap along the Stockton Deep Water Ship Channel, extending about 100 feet upstream and downstream of each conveyor foundation (total of about 400 linear feet) to protect the slope from wave action; approximately 9,900 square feet would be above the Ordinary High Water mark (OHWM) and approximately 3,600 square feet would be below the OHWM.

The south parcel on this site has been used for loading barges in the past and has fully functional berthing areas with vertical walls comprised of sheet piles. It can accommodate loading of at least two barges at once at the existing berthing areas. Two additional barges could be simultaneously loaded on the northern parcel of the site, using structures near shore to support conveyors to load the transport barges. The conveyor support structures would require the placement of two sets or a total of eight pilings to be driven along the toe of bank below the OHWM fronting the Stockton Deep Water Ship Channel.

This site is also expected to be an effective location for the stockpiling of approximately 150,000 tons of various repair materials, including quarry rock gradations below 24-inch-minus rock. In preparation for a flood emergency, DWR may acquire various repair materials and stockpile these materials on this site. This material would be trucked in from various quarries or other material sources and stockpiled using earth-moving equipment. This preparatory stockpiling operation would generally be conducted during normal workdays Monday through Saturday, under daylight conditions from 7:00 AM to 7:00 PM.

This site is expected to support the installation of the temporary office space needed for a major Delta ICP. Up to 4 temporary office trailers would be placed on a 6,500 square foot asphalt foundation/pad. The location of this trailer pad would require the site improvements of various utilities such as power, telephone, internet, and water. The construction of the utility services would require excavation of trenches approximately 24 to 30 inches deep from the nearest available source. Overhead utility lines would be removed and relocated to prevent obstruction of large equipment that might be needed for the emergency. Aggregate base access roads may be constructed or improved for trucks and heavy equipment. Additional gates may be needed for improved truck routing. Existing lighting and fencing would be improved to support 24-7 emergency operations and to provide site security.

There are portions of the site where the elevation is above the estimated 100-year flood elevation, but the overall elevation of the site would be increased above the 100-year flood elevation plus (NAVD88) 1.5 feet to accommodate future sea level rise.

Figure 2-2 presents specific Stockton West Weber site improvements with proposed project refinements.

During construction, a variety of equipment is anticipated to be used. Dozers, graders, and compactors may be required for moderate earthwork. Rubber tired backhoes and trenchers would be used to prepare the foundations for concrete foundations. Compactors would compact the backfill material for the foundations and trenches.

Concrete trucks would deliver concrete to the site. Loaders and trucks would move soil materials. Cranes and rough terrain forklifts would hoist construction materials from delivery trucks and place them into the work area. Highway trucks would be used to deliver construction materials to the site. Generators would be used to power the construction field office and electric powered tools as needed. Air compressors would be needed for air powered tools.

A barge, or several barges, equipped with a crane and a pile driver or drilling equipment would be needed for the in-water piling operations. The work window for in-water construction would be August 1 – November 30 to minimize impacts to special-status fish species, which would not be expected to be present at the site during this period.

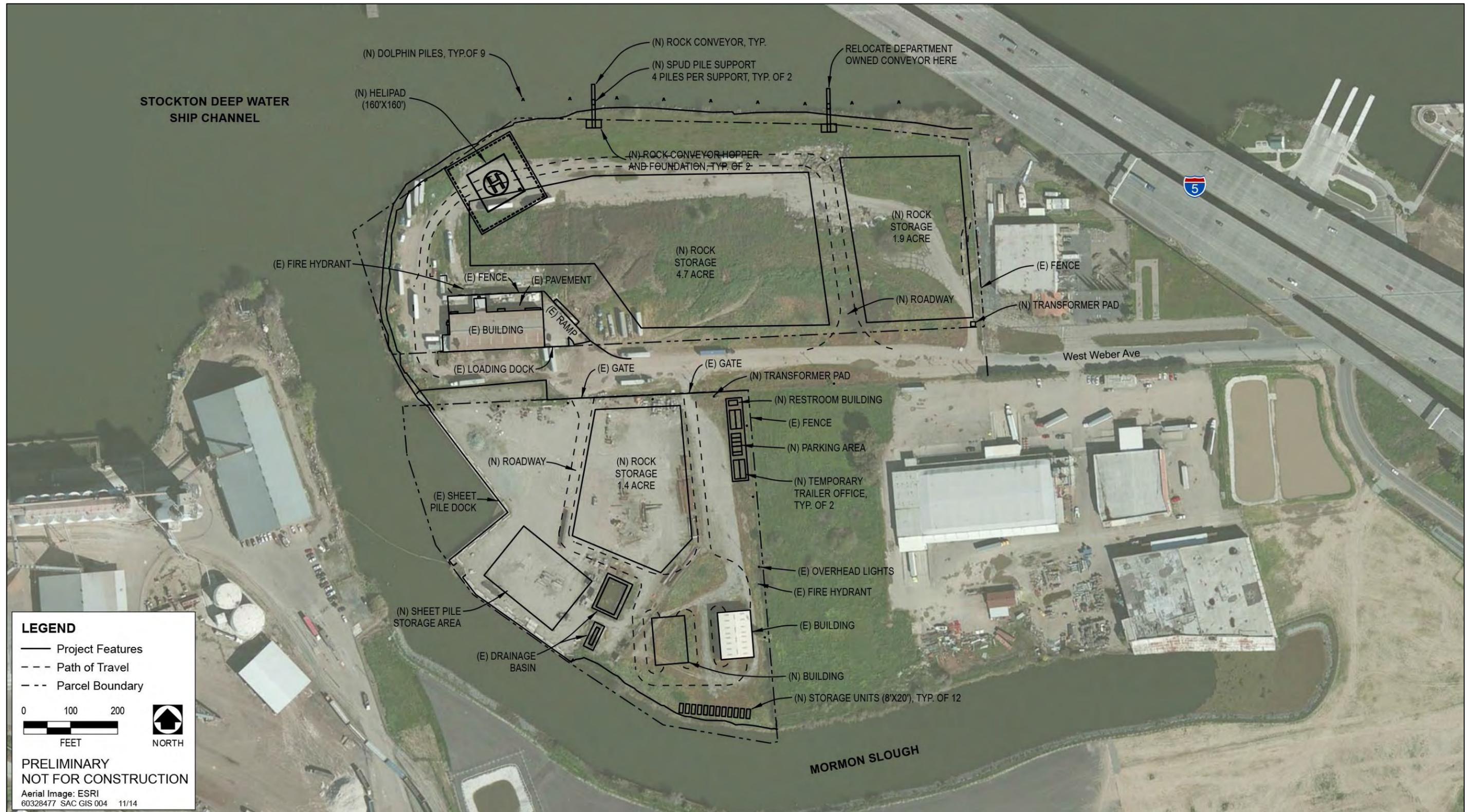
2.2 RIO VISTA SITE

2.2.1 SITE DESCRIPTION

In Rio Vista, DWR established a rock stockpile of approximately 113,000 tons on approximately 3.4 acres of land owned by the Sacramento-San Joaquin Drainage District through the State of California Central Valley Flood Protection Board (CVFPB) along Airport Road. A portion of the CVFPB property is currently under lease to ASTA Construction, Inc. This property is accessed from the south-west via Airport Road. In order to transfer stored quarry rock to barges, DWR would need to contract with the Dutra Group for barge-loading services at its established barge-loading facility located along SR-84/River Road, which is approximately 1,000 feet southeast of the existing stockpile area. The Dutra Group's facility includes business offices, space for unloading trucks, and a barge-loading facility that is capable of docking and loading several barges concurrently. The site is readily accessible from I-80 via Highway 12 and Highway 113. It is also accessible from I-680 via Highway 160 to the south, and from I-5 via Highway 12 and Highway 160.

According to the Solano County General Plan (November 4, 2008), land use zoning for Rio Vista along Airport Road, west of the Rio Vista Site, is urban industrial. East of the City Limit, including the southern portion of the Sacramento-San Joaquin Drainage District CVFPB property where the existing quarry rock stockpile is located, the land is designated as agricultural. Along the waterfront where the Dutra Group has its docking and barge facilities, the designation is urban industrial and water-dependent industrial. The site of interest is currently owned by the Sacramento-San Joaquin Drainage District acting through the CVFPB, and it is currently used by DWR to store quarry rock and is partially leased by a third party, ASTA Construction, Inc., for sand mining purposes.

The Dutra Group used its facility for loading barges in support of DWR's 2007-2008 Emergency Levee Repair Project, as well as other levee repair projects. The property managed by the CVFPB has a significant amount of storage capability for repair material, but much of the property is within the 100-year flood zone. The property has established aggregate base roads on the property to the stockpile area. During low-flow conditions, trucks have access from the CVFPB property to the Dutra Group barge facility. Material would be loaded onto barges with the use of earth-moving equipment. DWR can reasonably anticipate that the Dutra Group's barge-loading facility would be available under contract to DWR for emergency repair work in the event of a major disaster; a standby contract would be executed to provide assurances regarding the availability and cost of such services.



Source: DWR 2014 adapted by AECOM 2014

Figure 2-2. Stockton West Weber Site Improvements

The site topography is variable due to the historic deposition and removal of dredged materials, but the general slope is toward the northeast. It lies generally 10 to 15 feet below Airport Road, with a steep embankment at the road shoulder. The base of the embankment is at an elevation of approximately 20 feet. From there, the elevation drops gradually to approximately 6.5 feet (NAVD88) in the vicinity of the quarry rock storage area. An embankment separates the property from the waterfront to the southeast and from the farmland on the northeast. These embankments are approximately 10 to 15 feet high.

Consistent with this topography, the Federal Emergency Management Agency (FEMA) flood map for this area indicates that the rock stockpile and the Dutra Group's barge-loading facility are at risk of flooding in a 100-year flood event. In such a flooding event, low-lying portions of this site may not be operable until the water recedes. In the aftermath of a seismic event, this site is expected to be operable.

This Rio Vista site is already in State ownership, with a large quarry rock stockpile in place, immediately adjacent to the Dutra Group's dock facilities. The site is strategically located in the West Delta, readily accessible from the I-80 corridor via Highway 12 and Highway 113. It will require relatively modest road improvements to improve the accessibility of the existing quarry rock stockpile under high-water conditions, and to shorten the haul route to the Dutra Group dock area. There are no significant space limitations. It is anticipated that this site can be substantially improved in terms of the efficiency of barge-loading operations with a modest investment in road construction on site. The State investment in this site is already significant, given the CVFPB ownership of the site and the existing stockpile of quarry rock.

2.2.2 PROPOSED PROJECT REFINEMENTS

Proposed project refinements are described below. The same types of construction equipment and number of construction workers used to construct and operate the proposed project would be used for the project refinements; there would be no change. All proposed project refinements are within the project footprint identified in the original 2013 IS/MND. All proposed project refinements are within the construction and operations schedules identified in the original 2013 IS/MND. All proposed project refinements would use staging areas and haul routes already identified and evaluated in the original 2013 IS/MND. Consequently, the construction approach for the proposed project refinements is generally the same as that identified in the 2013 IS/MND, with any modifications described below.

Proposed project refinements at the **Rio Vista site** are as follows:

- ▶ Site clearing, grubbing, and removal of organic material including approximately 4.0 acres of trees as necessary during project construction (site clearing, grubbing, and organic material removal planned but not specified in original project description, and tree removal is a project refinement).
- ▶ Construct 6,000 square-foot asphalt foundation/pad for two approximately 8-foot by 40-foot temporary office trailers for use as an ICP during flood emergencies and a pre-fabricated restroom facility. The pad will also encompass ADA compliant parking stall(s) as required.
- ▶ Establish a 0.75-acre area for vehicle parking (a decrease from a 1.25-acre area specified in original project description).

- ▶ Provide new water connection for the Central Valley Flood Protection Board (CVFPB) lease of the remaining property and develop electrical connections to the site for future temporary office trailers.
- ▶ Widen existing access road(s) from about 20 feet to 28 feet. This project refinement would remove at least two and up to approximately 15 trees along the existing access road, as well as numerous woody shrubs.

The proposed project refinements focus primarily on improving access to the rock stockpile and the Dutra Group's dock facilities, stockpiling of 20,000 tons of sand, and developing site improvements to accommodate storage containers and parking for site personnel.

The existing stockpile of quarry rock already has adequate dry weather access, but the stockpile is located well within the 100-year floodplain and could be temporarily inaccessible during a major flood event. Wet weather and flood water would have a deleterious effect on the access road, particularly under heavy truck traffic. In addition, the existing haul road is long and inefficient from the perspective of transferring rock to the Dutra Group's dock. To best address these drawbacks, the proposed project involves constructing a haul road at the site. The haul road would access the levee road on the northeastern boundary of the property via a ramp. Similarly, the haul road near the property's southerly boundary would be improved with a new ramp from Airport Road near its intersection with St. Francis Way. The proposed haul road would be constructed to drain quickly and to tolerate the heavy truck traffic envisioned during an emergency barge-loading scenario. It is recommended that the emergency contractor utilizing the site be given the responsibility for maintenance of the roads on the property if any problems occur. The Dutra Group facility has all the necessary improvements at their waterside barging facility to operate under an emergency situation in conjunction with the proposed project and project refinements.

Site improvements would also include placement of storage containers to store flood-fight supplies, including bulk bags near the southwestern corner of the property. This portion of the property is at an elevation above the 100-year floodplain and would be readily accessible from Airport Road. An existing access ramp at the southwest corner of the property would be improved to facilitate access to the Dutra Group's Dock and the steel storage containers. In the event of an emergency, sand for filling the bulk bags could be obtained on site.

Figure 2-3 presents specific Rio Vista site improvements with proposed project refinements.



Source: DWR 2014 adapted by AECOM 2014

Figure 2-3. Rio Vista Site Improvements

3 ENVIRONMENTAL CHECKLIST

PROJECT INFORMATION		
1. Project Title:	Delta Flood Emergency Facilities Improvement Project Refinements	
2. Lead Agency Name and Address:	California Department of Water Resources 1416 9 th Street, Sacramento, CA 95814	
3. Contact Person and Phone Number:	John Paasch, Division of Flood Management Phone: (916) 574-2611	
4. Project Location:	Stockton West Weber Avenue site: The project site is located between the East Complex of the Port of Stockton and near the intersections of Interstate 5 (I-5) and State Route 4 (SR-4), and just south of the Stockton Deep Water Ship Channel. Rio Vista site: The project site is located in the West Delta, readily accessible from the I-80 corridor via Highway 12 and Highway 113.	
5. Project Sponsor's Name and Address:	California Department of Water Resources 1416 9 th Street, Sacramento, CA 95814	
6. General Plan Designation:	Stockton West Weber Avenue site: Commercial Rio Vista site: Agricultural, Urban Industrial, Water-Dependent Industrial	
7. Zoning:	Stockton West Weber Avenue site: Industrial General Rio Vista site: Urban Industrial	
8. Description of Project:	Please refer to Chapter 2, "Project Description"	
9. Surrounding Land Uses and Setting:	Please refer to Chapter 2, "Project Description"	
10: Other public agencies whose approval is required:	CDFW, CDPR, Central Valley RWQCB, CVFPB, DTSC, DSC, SHPO, SLC, SJVAPCD, USACE, USFWS, NMFS, USCG, San Joaquin and Solano Counties	
ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:		
The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.		
<input type="checkbox"/> Aesthetics	<input type="checkbox"/> Agriculture Resources	<input type="checkbox"/> Air Quality
<input type="checkbox"/> Biological Resources	<input type="checkbox"/> Cultural Resources	<input type="checkbox"/> Geology/Soils
<input type="checkbox"/> Greenhouse Gas Emissions	<input type="checkbox"/> Hazards & Hazardous Materials	<input type="checkbox"/> Hydrology/Water Quality
<input type="checkbox"/> Land Use/Planning	<input type="checkbox"/> Mineral Resources	<input type="checkbox"/> Noise
<input type="checkbox"/> Population/Housing	<input type="checkbox"/> Public Services	<input type="checkbox"/> Recreation
<input type="checkbox"/> Transportation/Traffic	<input type="checkbox"/> Utilities/Service Systems	<input type="checkbox"/> Mandatory Findings of Significance
<input type="checkbox"/> Wind/Comfort		<input checked="" type="checkbox"/> None With Mitigation

DETERMINATION (To be completed by the Lead Agency)

On the basis of this initial evaluation:

- I find that the proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.
- I find that although the proposed project **COULD** have a significant effect on the environment, there **WILL NOT** be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.
- I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.
- I find that the proposed project **MAY** have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier **EIR** or **NEGATIVE DECLARATION** pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier **EIR** or **NEGATIVE DECLARATION**, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Keith Swanson
Signature

2/11/15
Date

Keith Swanson
Printed Name

Chief, Division of Flood Management
Title

California Department of Water Resources
Agency

EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
4. “Negative Declaration: Less Than Significant With Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from “Earlier Analyses,” as described in (5) below, may be cross-referenced).
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a) Earlier Analysis Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are “Less than Significant with Mitigation Measures Incorporated,” describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project’s environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
 - the significance criteria or threshold, if any, used to evaluate each question; and
 - the mitigation measure identified, if any, to reduce the impact to less than significance.

3.1 AESTHETICS

3.1.1 ENVIRONMENTAL SETTING

STOCKTON WEST WEBER SITE

The Port of Stockton is a heavily industrialized area that is densely populated with warehouses and industrial facilities as well as over 40 miles of railroad tracks (DWR 2007). The Stockton West Weber site currently consists of three parcels containing up to 22.6 acres, all of which are currently zoned Industrial, General (IG). All of the parcels along West Weber Avenue west of Interstate 5 are designated IG, as are the parcels on the east and south of Old Mormon Slough. On the north bank of the Stockton Deep Water Ship Channel, directly across from the site, the parcels are designated Commercial, General (CG) and the 2035 General Plan Land Use/Circulation Diagram designation is Commercial. The parcels to the west and south are designated as Industrial in the 2035 General Plan, while the parcels to the north and east are proposed as commercially zoned (City of Stockton 2007).

The Stockton West Weber site contains areas in both pavement and in open space with two steel structures, yard lighting, and concrete dock access. The southwest parcel contains one steel warehouse and includes about 8 acres of mostly aggregate base and asphalt covered areas; the two northern parcels are primarily unimproved dirt and aggregate base. All three parcels are accessible from West Weber Avenue from the east. The adjacent properties include a vacant lot to the east and parcels with warehouses to the south and west.

RIO VISTA SITE

The Rio Vista site is located northeast of the town of Rio Vista (estimated population 7,400, US Census Bureau 2012). The site is on the southern portion of a large property owned by the Sacramento San Joaquin Drainage District acting through the CVFPB, with a portion leased by ASTA Construction, Inc. The site is located northwest of River Road, northeast of Airport Road, and west of the Sacramento River. According to the Solano County General Plan (November 4, 2008), land use zoning for Rio Vista along Airport Road, west of the Rio Vista site, is urban industrial. East of the City Limit, including the southern portion of the Sacramento San Joaquin Drainage District property managed by CVFPB where the existing quarry rock stockpile is located, the land is designated as agricultural. Along the waterfront where the Dutra Group has its docking and barge facilities, the designation is urban industrial and water-dependent industrial. The adjacent area to the northeast is part of the lower Yolo Bypass, in agricultural use, and is separated from the property by a levee. The site has been previously disturbed (as recently as 2007 per aerial photography provided by Google Earth 2012) and contains dredge spoils. Currently, it is used for surface mining operations by extracting sand and clay from the dredge spoils. The site contains mounds of dirt and scattered areas of ruderal vegetation, as well as some notable habitat areas. The proposed project and project refinements would be confined to the southern portion of the property, comprising approximately 15 acres bounded on the southwest by Airport Road; on the southeast by an embankment that separates the property from commercial, industrial, and residential development along Highway 84 (River Road); on the northeast by the Yolo Bypass west levee; and on the north by a line drawn parallel with the southern boundary, approximately 2,500 feet north of it.

3.1.2 ENVIRONMENTAL EFFECTS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
I. Aesthetics. Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

This analysis focuses on the proposed project refinements and their related effects associated with emergency response activities, including the development of the aforementioned sites as material stockpile and transfer sites, and some of the sites as construction offices and incident command posts. By implementing the proposed project and project refinements, which involve developing these sites and preparing storage sites, these actions would ultimately contribute to the reduction in cumulative environmental impacts associated with a levee breach or failure. It is unknown specifically when and where flooding could occur or the extent of that flooding. Also, because the operations-related impacts to visual effects will be essentially the same with or without the proposed project and project refinements (i.e., emergency rock will be loaded on barges and/or trucks and transported to and placed at the flood site), impacts to visual resources associated with emergency response operations as part of the proposed project and project refinements are not discussed further.

a) Will the proposed Project have a substantial adverse effect on a scenic vista?

A scenic vista is defined as an expansive view of a highly valued landscape from a publicly accessible viewpoint (DWR 2007).

The Stockton West Weber site is located in close proximity to the Port of Stockton, which is a heavily industrialized area where large freight ships regularly dock and trains and trucks pass by. The development of the Stockton West Weber site as a transfer facility would not significantly alter the visual character of the area. The proposed project refinements include a 7,000 square foot steel frame building that would not cause an adverse effect to the heavily industrialized area. Due to the context and intensity of ongoing commercial activities, visual resources are substantially impaired under existing conditions, and the proposed project and project refinements would not substantially affect a scenic vista. There would be **no impact**.

The Rio Vista site has historically been used as a dredged materials disposal area, beginning with the Sacramento River Minor Project in 1913. A portion of the site is currently operated by a private sand and gravel contractor under lease with the CVFPB. Portions of the site have become forested over time, and portions are designated wetlands. Approximately 113,000 tons of rock were placed on the site under the DEFPRRP, where they currently

remain. Most of the properties south and southeast of the site are currently devoted to heavy industrial use, including metal storage and recycling, barge docking facilities, apartments, a mobile home park, and several single family residences. The proposed project improvements, including road improvements, clearing and leveling storage, and parking areas in the southwestern portion of the property, and placement of steel storage containers, would be consistent with previous uses of the property and surrounding land uses. Therefore, the planned development of the Rio Vista site as a transfer facility would not significantly alter the visual character of the area, and impacts from the proposed project and project refinements would be **less than significant**.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

The Stockton West Weber site is not located on or near a state-designated scenic highway and does not contain rock outcroppings or historic buildings that would constitute a scenic resource. There are few trees at the Stockton West Weber site near proposed project and project refinement facilities. The proposed project refinements at the Stockton West Weber site, however, would potentially result in the removal of up to approximately 20 trees, but this is not considered to substantially damage scenic resources at or in the vicinity of this site.

The Rio Vista site also does not contain trees, rock outcroppings, or historic buildings that would constitute a significant scenic resource.

Impacts from the proposed project and project refinements, therefore, would be **less than significant**.

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

The proposed project sites are previously disturbed sites containing past and existing industrial or agricultural uses, including crop production, barge loading, material storage and transport, concrete recycling, and soil salvaging. The Stockton West Weber Avenue site currently has a few stockpiles of materials including soil and rock. The Rio Vista site has been used for dredged materials disposal and mining for nearly 90 years, and the proposed use is consistent with this historical use and the visual character of the site. Consequently, impacts related to the proposed project and project refinements on the visual character or quality of the site and its surroundings would be **less than significant**.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

The proposed project sites would initially be improved to accommodate emergency transfer facilities during regular business hours, primarily during daylight hours. This would include installation of any needed utilities and asphalt covering, as well as initial stockpiling of levee repair materials. The site development activities would be temporary and, once developed, the sites would be largely inactive until they are needed for emergency response. The project improvements would not add or improve permanent outdoor lighting, except at the Stockton West Weber site where permanent outdoor lighting already exists on the southwest parcel.

During emergency operations, truck traffic and barge loading could occur around the clock. Lights would be used to safely extend operation through the nighttime hours with existing overhead lights and portable light towers. Barges may transit the Delta at night during emergency response operations, depending on the timing and scale of the emergency. Barge loading areas may operate during nighttime hours, but this is considered to be a less-than-

significant impact because emergency operations would be infrequent and temporary. The Stockton West Weber site is already in an area that is well lit at night. Rock transport by truck from nearby quarry sites also would occur during a flood with or without the proposed project and project refinements. Consequently, light or glare impacts related to the proposed project and project refinements on the day or nighttime views in the area would be **less than significant**.

3.1.3 MITIGATION MEASURES

No significant impacts are anticipated; therefore, no mitigation measures are needed to address impacts to aesthetics.

3.2 AIR QUALITY

3.2.1 ENVIRONMENTAL SETTING

As required by the Clean Air Act, the United States Environmental Protection Agency (EPA) sets National Ambient Air Quality Standards for six common air pollutants, also known as “criteria pollutants”:

- ▶ Ozone
- ▶ Particulate Matter (PM)
- ▶ Carbon Monoxide (CO₂)
- ▶ Nitrogen Oxides (NO_x)
- ▶ Sulfur Dioxide
- ▶ Lead (EPA 2010 <http://www.epa.gov/air/urbanair/>)

The criteria pollutants are regulated by permissible levels based on human health (primary) and/or environmental (secondary) criteria. The most widespread of these pollutants are particulate matter and ground-level ozone. The Clean Air Act requires individual states to develop State Implementation Plans for attainment and maintenance of National Ambient Air Quality Standards. As such, the California Air Resources Board (CARB) provides leadership to air management districts in the implementation and enforcement of air pollution control rules and regulations.

The proposed project activities that would result in additional air quality emissions include truck transport of rock from quarries and from the Port of Stockton to proposed project sites and development of proposed project sites as transfer, stockpile, and Incident Command Post facilities including establishment of stockpiles, as well as project refinements presented in Chapter 2, “Project Description.”

The proposed stockpiling and barge loading sites and the truck routes between the quarries, the Port of Stockton, and the project sites fall under the jurisdiction of several air districts, as illustrated in Figure 3.2-1. Several quarries have been identified as potential resources to supply materials at the proposed project sites. There are 17 potential quarry sites. The air basins and applicable air districts that would be impacted by the proposed project and project refinements are summarized in Table 3.2-1.



Figure 3.2-1. Air Basins and Air Districts

Table 3.2-1. Impacted Air Basins and Air Districts with Jurisdiction for Proposed Project Locations and Quarry Locations	
Air Basin	Air District (s)
Sacramento Valley	Tehama County Air Pollution Control District (TCAPCD) Butte County Air Quality Management District (BCAQMD) Feather River Air Quality Management District (FRAQMD) Sacramento-Metro Air Quality Management District (SMAQMD) Yolo Solano Air Quality Management District (YSAQMD)
San Francisco Bay Area	Bay Area Air Quality Management District (BAAQMD)
North Central Coast	Monterey Bay Unified Air Pollution Control District (MBUAPCD)
San Joaquin Valley	San Joaquin Valley Air Pollution Control District (SJVAPCD)
Mountain Counties	Northern Sierra Air Quality Management District (NSAQMD) Placer County Air Pollution Control District (PCAPCD) Amador Air District (AAD) Calaveras County Air Pollution Control District (CCAPCD) Tuolumne County Air Pollution Control District (TCAPCD)
Source: CARB: http://www.arb.ca.gov/capcoa/dismap.htm	

CARB and EPA designate areas according to attainment status for criteria pollutants based on air quality monitoring data gathered from air stations located throughout the Sacramento Valley, San Francisco Bay Area, North Central Coast, San Joaquin Valley, and Mountain counties Air Basins. The areas can be designated as:

- ▶ Nonattainment (not meeting standards)
- ▶ Attainment (meeting)
- ▶ Unclassified

The most current attainment designations for all the counties applicable to the proposed project, with respect to both the national and state standards, are shown in Table 3.2-2 for ozone, PM₁₀, and PM_{2.5}.

Table 3.2-2. Summary of Attainment Status Designations for Ozone, PM₁₀, and PM_{2.5}						
County	National			State		
	Ozone (8-hour Standard)	PM₁₀¹	PM_{2.5}²	Ozone (1-hour Standard)	PM₁₀¹	PM_{2.5}²
Sacramento Valley Air Basin						
Sacramento	Nonattainment	Nonattainment	Nonattainment	Nonattainment	Nonattainment	Nonattainment
Yuba	Unclassified/ Attainment	Unclassified	Partial Nonattainment	Nonattainment/ Transitional	Nonattainment	Attainment
Butte	Nonattainment	Unclassified	Partial Nonattainment	Nonattainment	Nonattainment	Nonattainment

Table 3.2-2. Summary of Attainment Status Designations for Ozone, PM₁₀, and PM_{2.5}						
County	National			State		
	Ozone (8-hour Standard)	PM₁₀¹	PM_{2.5}²	Ozone (1-hour Standard)	PM₁₀¹	PM_{2.5}²
Tehama	Unclassified/ Attainment	Unclassified	Unclassified/ Attainment	Nonattainment	Nonattainment	Unclassified
Solano	Nonattainment	Unclassified	Nonattainment	Nonattainment	Nonattainment	Unclassified
Yolo	Nonattainment	Unclassified	Partial Nonattainment	Nonattainment	Nonattainment	Unclassified
San Francisco Bay Area						
Marin	Nonattainment	Unclassified	Nonattainment	Nonattainment	Nonattainment	Nonattainment
Napa	Nonattainment	Unclassified	Nonattainment	Nonattainment	Nonattainment	Nonattainment
Contra Costa	Nonattainment	Unclassified	Nonattainment	Nonattainment	Nonattainment	Nonattainment
North Central Coast						
Santa Clara	Nonattainment	Unclassified	Nonattainment	Nonattainment	Nonattainment	Nonattainment
San Joaquin Valley						
San Joaquin	Nonattainment	Attainment	Nonattainment	Nonattainment	Nonattainment	Nonattainment
Mountain Counties						
Nevada	Nonattainment	Unclassified	Unclassified/ Attainment	Nonattainment	Nonattainment	Unclassified
Placer	Nonattainment	Unclassified	Unclassified/ Attainment	Nonattainment	Nonattainment	Unclassified
Amador	Nonattainment	Unclassified	Unclassified/ Attainment	Nonattainment	Unclassified	Unclassified
Calaveras	Nonattainment	Unclassified	Unclassified/ Attainment	Nonattainment	Nonattainment	Unclassified
Tuolumne	Nonattainment	Unclassified	Unclassified/ Attainment	Nonattainment	Unclassified	Unclassified
Notes:						
¹ Particulate matter with a diameter of 10 microns or less.						
² Fine particulate matter with a diameter of 2.5 microns or less.						
Sources: CARB Area Designation Maps – February 2011: http://www.arb.ca.gov/design/adm/adm.htm						

3.2.2 ENVIRONMENTAL EFFECTS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
II. Air Quality.				
Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied on to make the following determinations.				
Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The California Clean Air Act enacted in 1988 requires the preparation of Air Quality Attainment Plans for nonattainment areas. In addition, nonattainment areas are required to triennially assess the extent of air quality improvements and emission reductions achieved through the use of control measures.

Because of the cumulative nature of air quality impacts, the information contained in DWR (2013) is applicable to the project refinements and incorporated herein in its entirety. Project refinements would involve several activities that could result in fewer or additional air quality impacts that were not analyzed in DWR (2013) such as removing organic material after site clearing and grubbing, constructing a new 7,000 square foot steel frame building, constructing new concrete foundations, installing dolphin pile clusters and spud piles, and stockpiling 150,000 tons of rock at the Stockton West Weber site. Stockpiling of rock at the Stockton West Weber site could be accomplished by relocating up to 110,000 tons of rock from the nearby Port of Stockton versus a longer haul distance from the foothill rock quarries 30 miles to the east. However, the air quality analysis in DWR (2013) encompasses these project refinements and additional air quality analysis is not necessary for the following two primary reasons:

- ▶ Substantially longer haul routes to and from quarry sites were assumed in previous air quality modeling for the project, and the source of rock for the Stockton West Weber site would now be only approximately 3 miles away at the Port of Stockton; and

- ▶ The additional 70,000 tons of quarry rock as part of project refinements on top of the 40,000 tons of quarry rock proposed at the Stockton West Weber Site; 40,000 tons of quarry rock and 20,000 tons of sand at the Rio Vista site; and 40,000 tons of quarry rock at the BISRA site all total 210,000 tons, which is within the total rock stockpiling of 240,000 tons used in the air quality modeling conducted in DWR (2007) and DWR (2013), which resulted in less-than-significant impacts to air quality.

For the 2007 DWR Initial Study, *Delta Emergency Rock and Transfer Facilities Initial Study/ Mitigated Negative Declaration*, (DWR 2007) a detailed analysis of the air quality impacts for two potential quarry sites and the three existing sites was performed. This analysis included modeling with URBEMIS 9.2.2 and the use of EMFAC2007 and OFFROAD2007 emission factors. The DWR modeling assumed 130,000 tons of rock would be stockpiled at the Port of Stockton and 100,000 tons at Rio Vista for a total of 230,000 tons. Under the current project, it is assumed that up to 40,000 tons of rock would be stockpiled at both the Stockton West Weber Avenue site and at the BISRA site (with an additional 110,000 tons relocated from the Stockton West Weber Site as a project refinement), and 20,000 tons of sand would be stockpiled at Rio Vista for a combined total of 210,000 tons of additional material. This would be a sufficient supply in each location to supply one barge-loading operation for about one week. The duration of stockpiling activities was based on the assumption that no more than 100 truckloads would occur on a daily basis. The DWR 2007 modeling was used to estimate the potential environmental impact on air quality of the waterside transfer facilities sites' development for this Initial Study. The 2007 modeling is considered conservative, as it was based on assumed stockpiles larger than considered for the current project with refinements (and therefore more truck trips). The applicable emissions analysis is summarized below for the site preparation and stockpiling of new materials at each of the preferred sites.

However, the following uncertainties preclude more specific detailed analysis of all the possible flood emergency response situations:

- ▶ Timing and location of levee breaches
- ▶ Specific location of quarries to be used
- ▶ Quantities of material needed
- ▶ The possibility of roads being unserviceable during a flood emergency situation

Therefore, the emissions related to emergency response activities are considered exempt from CEQA per CEQA Guidelines, Section 15269[c], and are not the primary focus of this analysis.

SITE PREPARATION/CONSTRUCTION EMISSIONS

The site preparation improvements at each of the sites are summarized in Table 3.2-3. Site preparation and construction emissions would be temporary in duration. The proposed project with project refinements would require limited ground-disturbing activities at all of the sites where aggregate base would be installed.

The Stockton West Weber site would require minimal additional ground disturbance for the installation of utilities. The Rio Vista site would require minimal grading and surfacing to improve the existing road system and construct an earthen ramp in the southwestern corner of the site to improve access to Airport Road.

DWR (2013) assumed the transportation of stockpile material from the Sierra Nevada foothill quarries would be a source of on-road emissions. Thus, the proposed project would result in temporary generation of reactive organic gases (ROG), NO_x, and PM₁₀ emissions from stockpiling and site preparation activities. However, the source of

Table 3.2-3. Site Improvements Related to Construction Emissions		
Site	Site Improvements	Tons of Material to Stockpile
Stockton (W. Weber Ave)	Site preparation including clearing, grubbing and grading; utility installation and aggregate base road installation; improve fencing and lighting; place up to 12 steel storage containers; modify existing buildings; remove existing wood piles and install spud piles and dolphin pile clusters; place rip rap along the ship channel; place pre-fabricated restroom facility and temporary office trailers; and construct new steel frame building, asphalt foundation/pad, and concrete foundation and waste vault.	40,000 collective tons quarry rock and sand plus an additional 110,000 tons of quarry rock from the Port of Stockton as a new project refinement
Rio Vista	Construct new and improve existing all-weather access roads and ramps for existing rock stockpile and new sand stockpile. Place up to five steel storage containers; create staging and parking areas. Stockpile 20,000 tons of sand for potential levee repairs.	20,000 tons of sand (in addition to existing quarry stockpile of 110,000 tons)
Brannan Island	South end of BISRA: Construct new and improve existing all-weather access roads. Create new quarry rock stockpile and all weather surface roads and place pilings for loading two barges. Boat launch and boat launch parking area: stub out utilities for temporary office trailers and improve area for up to two barge loading operations. Area between boat launch and Group picnic area: improve area to accommodate single temporary barge loading operation; Develop 2,500 to 5,000 sf. joint use facility to serve as Multi-Agency Center (MAC) either near BISRA visitor center trailer or near BISRA administration offices and maintenance shop. At north end of BISRA or near BISRA administration offices and maintenance shop: Relocate 10,000 sf. warehouse from Twitchell Island and place up to 5 steel storage containers.	40,000 collective tons of quarry rock, sand and soil

110,000 tons of quarry rock would now be moved from the Port of Stockton site only 3 miles away from the Stockton Weber site, which is substantially closer than the 30 miles that were initially anticipated from foothill rock quarries during the previous air quality analysis. Consequently, the previous air quality analyses in DWR (2007) and DWR (2013) substantially overestimate the distance that quarry rock would need to be hauled.

Table 3.2-4 summarizes applicable thresholds of significance for construction-related emissions in the air quality management districts for the proposed project area. The San Joaquin Valley Air Pollution Control District (SJVAPCD) has the most stringent significance thresholds for construction-related emissions of criteria pollutants. If the proposed project and project refinements comply with the SJVAPCD emissions criteria, then it is unlikely that implementation of the proposed project and project refinements would conflict with air quality plans in any of the other applicable jurisdictions.

The analysis performed by DWR (Table 3.2-5) found that proposed project-generated construction emissions would be less than the significance thresholds for ROG, NO_x, and PM₁₀, in all affected air quality districts. The calculated values in the table were based on the DWR (2007) analysis performed for the Delta Emergency Rock and Transfer Facilities Project by reducing the calculated project pollutant loads in proportion to the ratio of quarry rock in the current project (DWR 2013) versus the 2007 project.

Air Quality District	Pollutant		
	ROG	NOx	PM10
Tehama County APCD (lb./day)	25	25	80
Butte County AQMD (lb./day)	25	25	80
Feather River AQMD (lb./day)	25	25	80
Sacramento-Metro AQMD (lb./day)	-	85	-
Yolo Solano AQMD tons/year (lb./day)	10	10	80
Monterey Bay Unified APCD (lb./day)	-	-	82
San Joaquin Valley APCD (tons/year)	10	10	15

Sites and Parameters	Pollutant		
	ROG	NO _x	PM ₁₀
Emissions in San Joaquin Valley-SJVAPCD (Tons/Year)			
Stockton West Weber Avenue			
Site Preparation Emissions	0.01	0.14	0.01
Stockpiling On-Site Emissions	0.01	0.08	0.21
On-road Emissions - Rock delivered from Jackson Valley Quarry	0.17	2.73	0.12
On-road Emissions - Rock delivered from Hogan Quarry	0.19	2.97	0.13
Rio Vista			
None	0.00	0.00	0
Brannan Island			
On-road Emissions - Rock delivered from Jackson Valley Quarry	0.14	1.85	0.09
On-road Emissions - Rock delivered from Hogan Quarry	0.15	1.99	0.10
Total Unmitigated (Tons/Year)-Worst Case	0.36	5.18	0.44
SJVAPCD Thresholds (Tons/Year)	10	10	-
Significant?	No	No	No
Emissions in Sacramento Valley-SMAQMD(lb./day)			
Rio Vista			
None	0.00	0.00	0.00
Brannan Island			
Site Preparation Emissions	0.22	2.41	45.16
Stockpiling On-Site Emissions	0.07	0.35	11.31
On-road Emissions - Rock delivered from Jackson Valley Quarry	1.45	18.80	0.94

Table 3.2-5. Summary of Modeled Project-Generated Construction-Related Emissions of Criteria Air Pollutants and Precursors¹ NO_x Emissions			
Sites and Parameters	Pollutant		
	ROG	NO_x	PM₁₀
On-road Emissions - Rock delivered from Hogan Quarry	1.29	16.70	0.83
Total Unmitigated (Tons/Year)-Worst Case	1.45	18.80	45.16
SMAQMD Thresholds(lb./day)	-	85	-
Significant?	No	No	No
Emissions in Solano County-YSAQMD			
Rio Vista	ROG(tons/year)	NO_x(tons/year)	PM₁₀(lb./day)
Site Preparation Emissions	0.04	0.44	45.16
Total Unmitigated (Tons/Year)-Worst Case	0.04	0.44	45.16
YSAQMD Thresholds(tons/year and lb./day)	10	10	80
Significant?	No	No	No
Emissions in Amador County-ACAPCD (lb./day)			
Stockton West Weber Avenue			
On-Road Emissions-Rock Delivered from Jackson Valley Quarry	1.25	19.73	0.87
Brannan Island			
On-Road Emissions-Rock Delivered from Jackson Valley Quarry	1.45	18.80	0.94
Total Unmitigated (Tons/Year)-Worst Case	1.45	19.73	0.94
ACAPCD Thresholds(lb./day)	274	274	383
Significant?	No	No	No
Emissions in Calaveras County - CCAPCD (Tons/Year)			
Stockton West Weber Avenue			
On-Road Emissions-Rock Delivered from Hogan Quarry	0.19	2.97	0.13
Brannan Island			
On-Road Emissions-Rock Delivered from Hogan Quarry	0.15	1.99	0.10
Total Unmitigated (Tons/Year)-Worst Case	0.34	4.96	0.23
CCAPCD Thresholds (Tons/Year)	10	10	-
Significant?	No	No	No
Notes:			
¹ Based on EMFAC2007 and OFFROAD2007 emission factors contained in URBEMIS V. 9.2.2, using general information provided in the project description (e.g., equipment list, stockpiling volumes and area, number of truck trips), and default model settings and parameters. Stockpiling is assumed to take place at one site at a time, i.e., trucks deliver the rock to only one site at a given time.			

OPERATION-RELATED EMISSIONS OF CRITERIA AIR POLLUTANTS AND PRECURSORS

Once the proposed project sites are prepared as discussed above, the operation-related emissions would only occur during emergency flood-fighting operations. The long-term operation of the proposed project and project

refinements would not require any additional employees. Therefore, there would be no employee commute emissions associated with the operation of the proposed project and project refinements. The long-term operation of the proposed project and project refinements would not include any major stationary emission sources. Landscaping and maintenance activities at the proposed project sites would be similar to the activities that currently take place at the sites; therefore, there would be no additional emissions related to landscaping and maintenance. Implementation of the proposed project and project refinements would not result in a net increase in long-term operation-related criteria pollutant emissions from mobile and stationary sources. Project operation-related emissions would not conflict with or obstruct implementation of the applicable air quality plans.

The proposed project operations would result in temporary increases in emissions during declared emergency responses. This would include the use of construction equipment at the proposed project sites, worker commutes, and the transport of stockpiled materials to levee repair locations. The timing and location of levee breaches that would be repaired with the stockpiled material is highly unpredictable. Because the specific emissions could be highly variable depending on the size and location(s) of levee breaches and failures, modeling project-generated emissions associated with emergency operations would be too speculative at this time. Because the transport of rock from quarries and stockpiles to barge loading facilities and then to levee breach locations in the Delta would occur under a declared emergency, they are considered exempt from CEQA per CEQA Guidelines, Section 15269[c]. Moreover, these activities would occur with or without the proposed project and project refinements.

a) Does the proposed Project conflict with or obstruct implementation of the applicable air quality plan?

It is estimated that construction-related emissions would be short term and temporary in nature and would not represent a significant impact to air quality. This determination is based on the Modeled Project-Generated Construction-Related Emissions of Criteria Air Pollutants and Precursors (DWR, 2007). The Model evaluates three criteria pollutants—ROG, NO_x, and PM₁₀. None of the three pollutants exceed the threshold limits for the applicable air quality management district. Therefore, the proposed project and project refinement activities would be unlikely to conflict with applicable air quality management plans in the proposed project area. This impact would be **less than significant**.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

As discussed in part a), the proposed project and project refinements' construction and site development activities would not result in project-generated construction emissions that would exceed the significance thresholds for ROG, NO_x, and PM₁₀, in all applicable air quality management districts. The project would not contribute to an existing or projected air quality violation for a nonattainment status area. This impact would be **less than significant**.

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

As indicated in the response for part a), the proposed project and project refinements would not result in a cumulatively considerable net increase in criteria pollutants for regions that are designated as nonattainment under applicable federal and state ambient air quality standards. This impact would be **less than significant**.

d) Expose sensitive receptors to substantial pollutant concentrations?

The Stockton West Weber site is located in a highly industrialized area and there are no sensitive receptors in the immediate vicinity.

Project construction, including site preparation and establishment of rock stockpiles, would result in short-term generation of diesel exhaust emissions from construction equipment and trucks used for hauling stockpile material. These activities would expose any sensitive receptors in the area to diesel particulate matter, which is considered a Toxic Air Contaminant. The duration of mobilized equipment used on proposed project sites would be a maximum of 3 months on each site. When hauling trucks make trips to and from the sites to and from the quarries they would not operate within 500 feet of any particular sensitive receptor for more than a few minutes per day. In addition, diesel particulate matter concentrations have been shown to decrease dramatically within approximately 300 feet of the source vehicle (DWR, 2007). Thus, the exposure of sensitive receptors to a toxic air contaminant would be temporary and very limited since sensitive receptors would not be within 300 feet of mobilized equipment for more than a few minutes at a time, if at all.

Operations of the proposed project and project refinements would not result in any new permanent sources of emissions due to stationary emission sources on the sites nor due to commuter trips. Once the sites are developed as emergency response sites, there would be no further activity except for basic maintenance of the sites until such time as a flood fight emergency is declared. The proposed project and project refinements are not intended to be operated frequently or for long periods of time over the long term. This impact would be **less than significant**.

Operations of the proposed project and project refinements would result in temporary increases in emissions during declared emergency responses. This would include the use of construction equipment at the proposed project sites, worker commutes, and the transport of stockpiled materials to levee repair locations. The timing and location of levee breaches that would be repaired with the stockpiled material is highly unpredictable. Because the specific emissions could be highly variable depending on the size and location(s) of levee breaches and failures, modeling project-generated emissions associated with emergency operations would be too speculative at this time. Because the transport of rock from quarries and stockpiles to barge loading facilities and then to levee breach locations in the Delta would occur under a declared emergency, they are considered exempt from CEQA per CEQA Guidelines, Section 15269[c]. Moreover, these activities would occur with or without the proposed project and project refinements.

e) Create objectionable odors affecting a substantial number of people?

The potential odors associated with the proposed project and project refinement activities include diesel exhaust emissions from on-site construction equipment at the sites during site preparation phases, from trucks hauling stockpile materials to the proposed project sites, and from establishment of stockpiles at the sites. The activities resulting in diesel exhaust emissions would be temporary and would be limited to regular business hours.

The Stockton West Weber Avenue site is surrounded by industrial properties and the proposed project would not result in significant increases in odors in and around the proposed project sites.

The Rio Vista site is surrounded by agricultural, commercial, industrial, and limited residential properties. No residential properties are closer than 500 feet from any proposed work areas.

Project refinements would result in no additional effects at the Brannan Island site that were not disclosed in DWR (2013).

The proposed project and project refinements do not include long-term operation of any new sources of odor. Thus, the proposed project and project refinements would not create objectionable odors affecting a substantial number of people. The impact would be **less than significant**.

Operations of the proposed project and project refinements would result in temporary increases in emissions during declared emergency responses. This would include the use of construction equipment at the proposed project sites, worker commutes, and the transport of stockpiled materials to levee repair locations. The timing and location of levee breaches that would be repaired with the stockpiled material are highly unpredictable. Because the specific emissions could be highly variable depending on the size and location(s) of levee breaches and failures, modeling project-generated emissions associated with emergency operations would be too speculative at this time. Because the transport of rock from quarries and stockpiles to barge loading facilities and then to levee breach locations in the Delta would occur under a declared emergency, they are considered exempt from CEQA per CEQA Guidelines, Section 15269[c]. Moreover, these activities would occur with or without the proposed project and project refinements.

3.2.3 MITIGATION MEASURES

No significant impacts are anticipated; therefore, no mitigation measures are needed to address impacts to air quality.

3.3 AGRICULTURE AND FORESTRY RESOURCES

3.3.1 ENVIRONMENTAL SETTING

All of the proposed project sites are previously disturbed sites. These project sites were previously used for activities such as barge loading, material storage, concrete recycling, and soil salvaging. No agricultural activities currently take place on the project sites and the project sites are not designated or zoned for agricultural use.

3.3.2 ENVIRONMENTAL EFFECTS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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III. Agriculture and Forestry Resources.

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997, as updated) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.				
Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?

According to the San Joaquin County Important Farmland map, published by California Department of Conservation's (DOC's) Division of Land Resource Protection, the Stockton West Weber site is designated as Urban and Built-Up Land (i.e., land that is used for residential, industrial, commercial, institutional, and public utility structures and for other developed purposes). The Solano County Important Farmland map designates the Rio Vista site is designated as Other Land (i.e., land that generally includes low-density rural developments, vegetative and riparian areas not suitable for livestock grazing, confined-animal agriculture facilities, and vacant and nonagricultural land surrounded on all sides by urban development). (DOC 2008a, 2008b, 2006.)

These land use designations are not considered by DOC to be Important Farmland. Therefore, implementing the proposed project and project refinements would not convert Important Farmland to nonagricultural uses. The proposed project and project refinements would have **no impact**.

b) Conflict with existing zoning for agricultural use or a Williamson Act contract?

No portions of the project sites are zoned for agricultural use or held under Williamson Act contracts. Therefore, the proposed project and project refinements would have **no impact**.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code § 12220 (g)), timberland (as defined by Public Resources Code § 4526), or timberland zoned Timberland Production (as defined by Government Code § 51104(g))?

The project sites are not zoned as forestland, timberland, or a Timberland Production Zone. Therefore, implementing the proposed project and project refinements would not conflict with existing zoning for, or cause rezoning of, forestry resources. The proposed project and project refinements would have **no impact**. Result in the loss of forest land or conversion of forest land to non-forest use?

Section 12220(g) of the California Public Resources Code defines forestland as land that can support 10% native tree cover and woodland vegetation of any species (including hardwoods) under natural conditions, and that allows for management of one or more forest resources (timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation) and other public benefits. The project sites do not contain forestland as defined by Section 12220(g). Therefore, implementing the proposed project and project refinements would not result in the loss of forestland or conversion of forestland to nonforest uses. The proposed project and project refinements would have **no impact**.

d) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to nonagricultural use or conversion of forest land to non-forest use?

Implementation of the proposed project and project refinements would include site grading and clearing; fencing; barge docking and loading facilities; new buildings, including a 7,000-square-foot steel framed building for warehouse use; parking; temporary office trailers; utilities (water, power, communications, and wastewater); lighting; and security improvements. The Stockton West Weber site and Rio Vista site have been uses for industrial-related uses and no active agricultural uses are located on or adjacent to the project sites.

In addition, by preparing and responding more quickly and effectively to an emergency response in the event of a levee breach or failure in the Delta, the proposed project and project refinements would reduce the effects of water inundation to the existing land uses, including agricultural land uses; therefore, the proposed project and project refinements would potentially provide beneficial impacts to existing agricultural land uses located in the vicinity of a levee failure. Therefore, the proposed project and project refinements would not result in other changes in the physical environment that could result in the conversion of agricultural land, including Important Farmland, to nonagricultural uses. Furthermore, for the reasons described in response to question (d) above, implementing the proposed project and project refinements would not result in the conversion of forestland to non-forest uses. Therefore, the proposed project and project refinements would have **no impact**.

3.3.3 MITIGATION MEASURES

No significant impacts are anticipated; therefore, no mitigation measures for agriculture and forestry resources are needed or proposed.

3.4 BIOLOGICAL RESOURCES

This section describes biological resources at the Stockton West Weber Avenue and Rio Vista sites and identifies potential impacts to habitats and species that could result from project refinements, which only would affect these two project sites. While the proposed project and project refinements would result in certain potentially significant environmental impacts, those impacts would be reduced to a less-than-significant level by implementation of biological mitigation measures presented in Appendix B, “Mitigation Monitoring and Reporting Program.”

3.4.1 ENVIRONMENTAL SETTING

STOCKTON WEST WEBER AVENUE SITE

The Stockton West Weber site is located near the Port of Stockton along the San Joaquin River in San Joaquin County. The site is an infill area within a well-developed urban center with extensive ground disturbance and extensive paving. This site is currently used for storage and light industrial uses in a highly industrialized area. Large portions of the site are covered with concrete and/or gravel. Portions of the site surrounding buildings are not presently developed and are vegetated. Few trees are present at this site, a result of the past industrial use of this site. Barge-loading would occur along a bulk headed dock on Old Mormon Slough and along the north bank of the property adjoining the Stockton Deep Water Ship Channel, which is entirely armored with rip-rap. Project refinements include development of the north bank of the Stockton Deep Water Ship Channel to facilitate loading two barges simultaneously, if needed during an emergency situation. Development of the north bank of the Stockton Deep Water Ship Channel would result in the removal of small trees and shrubs growing sparsely along the north bank (i.e., SRA habitat) and removal of 12 existing wooden piles that are obstructing the foundation and alignment at one of the conveyor locations. Many of the fish species in the vicinity of this project site use the San Joaquin River to some degree, even if only as a migratory pathway to and from upstream spawning and rearing areas. The ship channel is also used by certain fish species (e.g., delta smelt) that make little to no use of areas in the upper segment of the San Joaquin River.

Wildlife use of the site is expected to be minimal given the significantly disturbed environmental setting. Wildlife use is expected to be limited to common species such as black rat (*Rattus rattus*), rock pigeon (*Columba livia*), and house sparrow (*Passer domesticus*). Trees in the general vicinity provide potential nesting habitat for tree-nesting raptors such as red-tailed hawk (*Buteo jamaicensis*), Swainson’s hawk (*Buteo swainsoni*), and red-shouldered hawk (*Buteo lineatus*). A detailed list of special-status species with potential to occur within the Stockton West Weber site is provided in Chapter 4 of the *Delta Flood Emergency Facility Improvement Project IS/MND* (DWR 2013).

RIO VISTA SITE

The Rio Vista site is located on the southernmost 150 acres of a large dredged material disposal site owned by the Sacramento San Joaquin Drainage District and managed by the CVFPB. It consists of silty and sandy dredge spoils that support several types of vegetation. Disturbed ruderal vegetation covers most of the site and is composed of common tarweed (*Hemizonia pugsens*), Great Valley gumweed (*Grindelia camporum*), birds-foot trefoil (*Lotus corniculatus*), common knotweed (*Polygonum arenastrum*), prickly lettuce (*Lactuca serriola*), ripgut brome (*Bromus diandrus*), and wild oat. Seasonal wetlands and remnant riparian forest habitats also occur

at the site. Patches of willow scrub are also present, comprising a mix of tree and shrub species, with narrow-leaved willow (*Salix exigua*) being the most common plant. Willow scrub has an understory of nonnative grasses including ripgut brome and wild oat.

A remnant riparian forest comprising approximately 6.75 acres lies southwest of the existing rock stockpile. The canopy is dominated by Fremont's cottonwood (*Populus fremontii*), Oregon ash (*Fraxinus latifolia*), Gooding's black willow (*Salix gooddingii*), and valley oak (*Quercus lobata*). Himalayan blackberry (*Rubus discolor*) and California grape (*Vitis californica*) are a prevalent species in the shrub and vine strata, respectively. The understory is dominated by mugwort (*Artemisia douglasiana*), western ragweed (*Ambrosia psilostachya*), and horseweed (*Conyza canadensis*). Topographic depressions in the forest floor are dominated by broadleaved cattail (*Typha latifolia*) (DWR 2011). Potentially jurisdictional riparian forest and seasonal wetlands on portions of the Rio Vista site are presented in Figure 3.4-1.

Wildlife expected at the Rio Vista site include common species that use disturbed grasslands. Western fence lizard (*Sceloporus occidentalis*), western meadowlark (*Sturnella neglecta*), savannah sparrow (*Passerculus sandwichensis*), and black-tailed jackrabbit (*Lepus californicus*) have been observed at the Rio Vista site. No evidence of use by burrowing mammals was documented at the site. A detailed list of special-status species with potential to occur within the Rio Vista site is provided in Chapter 4 of the *Delta Flood Emergency Facility Improvement Project IS/MND* (DWR 2013).

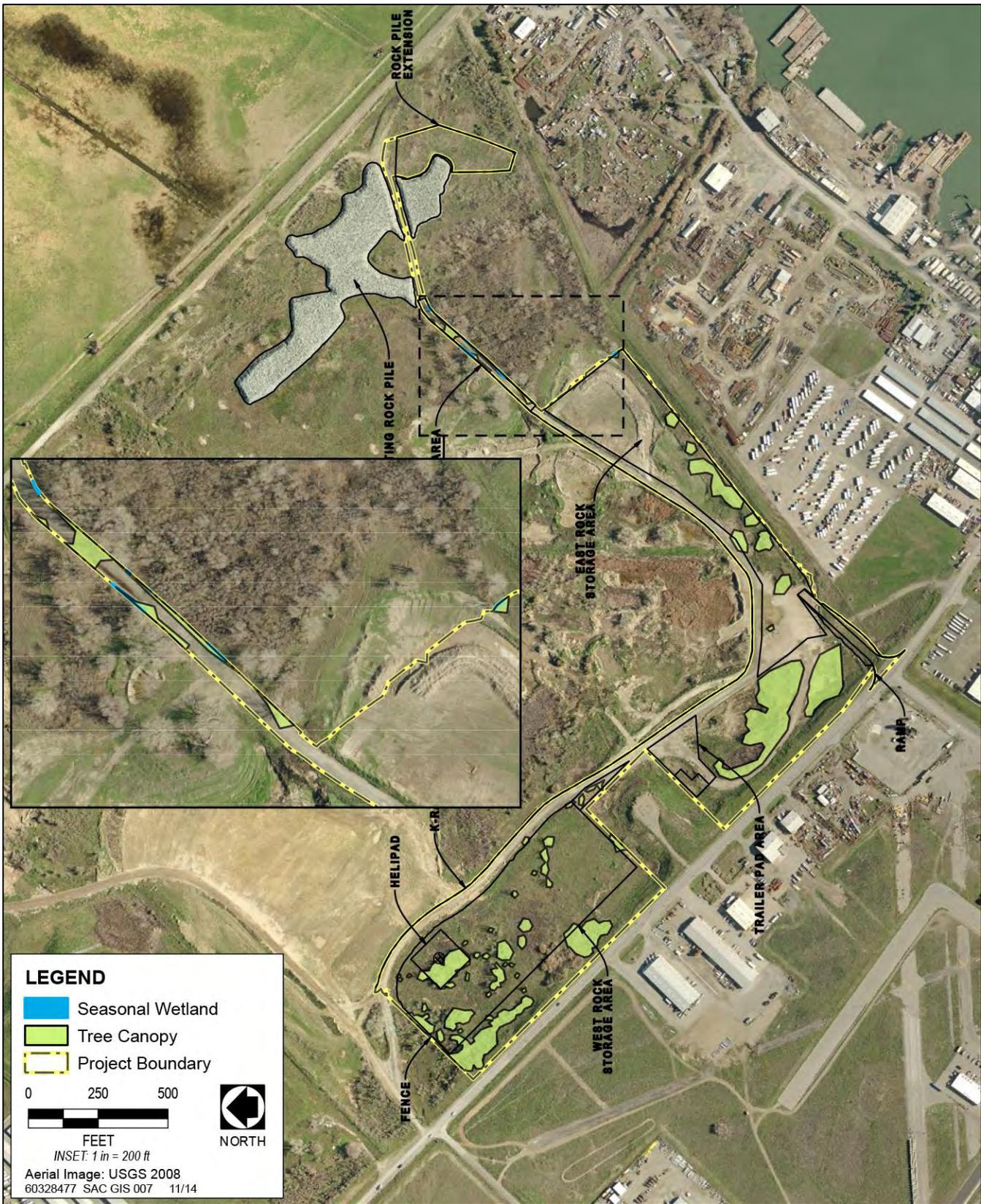
SPECIAL-STATUS SPECIES

Special-status species include plants and animals in the following categories:

- ▶ Species listed or proposed for listing as threatened or endangered under the federal Endangered Species Act (ESA) or California Endangered Species Act (CESA).
- ▶ Species considered as candidates for listing as threatened or endangered under the ESA or CESA.
- ▶ Species identified by the California Department of Fish and Wildlife (DFW) as California Species of Special Concern.
- ▶ Plants listed as endangered or rare under the California Native Plant Protection Act.
- ▶ Animals fully protected under the California Fish and Game Code.
- ▶ Taxa considered by the California Native Plant Society (CNPS) to be "rare, threatened, or endangered in California" (Rare Plant Rank [RPR] 1B and 2).

Special-Status Plants

Over 50 species of rare plants occur within the Delta (DWR 2007); however, it was determined that no habitat for special-status plants occurs at the sites considered in the *Delta Flood Emergency Facility Improvement Project IS/MND* (DWR 2013). The project refinements have physical overlap with the area previously evaluated (DWR 2013), and therefore project refinements will have no impact on sensitive plant species since it was previously determined that suitable habitat for sensitive plant species is not present.



Source: DWR 2014 adapted by AECOM 2014

Figure 3.4-1. Tree Canopy and Potentially Jurisdictional Wetlands on Rio Vista Site

Special-Status Wildlife

Overall, the Delta provides habitat for several special-status species, including nine mammals, six reptiles and amphibians, 10 birds, and over 20 invertebrates (DWR 2007). Most special-status wildlife species do not have potential to occur within the project sites under evaluation because the sites have been substantially degraded due to past land use. This section focuses on project refinements not addressed in the *Delta Flood Emergency Facility Improvement Project IS/MND* (DWR 2013). Species addressed in this section are restricted to special-status birds and fish species that have potential to be affected by implementation of project refinements. A complete list of wildlife evaluated is presented in DWR (2013).

Sensitive Habitats

Sensitive habitats include those that are of special concern to resource agencies, or that are afforded specific consideration through CEQA, Section 1600 of the California Fish and Game Code, and/or Section 404 of the federal Clean Water Act (CWA). The seasonal wetland habitat at the Rio Vista site may be protected under Section 404 of CWA. The Stockton Deep Water Ship Channel is a Section 10, tidally influenced, navigable in-fact waterway that may also be regulated under Section 404 of CWA. In addition, the sparse riparian vegetation growing along the north bank of the Stockton Deep Water Ship Channel is considered riparian and shaded riparian aquatic (SRA). For the purpose of this analysis, the habitats identified above are considered sensitive habitats.

3.4.2 ENVIRONMENTAL EFFECTS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. Biological Resources. Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?

SPECIAL-STATUS BIRDS

Swainson’s hawk is a California threatened species, and white-tailed kite is fully protected under the California Fish and Game Code. All raptors and their active nests are protected under Section 3503.5 of the California Fish and Game Code and the Migratory Bird Treaty Act. Tree-nesting raptors such as Swainson’s hawk, white-tailed kite, and more common species such as red-tailed hawk, red-shouldered hawk, and American kestrel may use trees within and near the Stockton West Weber and Rio Vista sites for nesting.

Implementation of the proposed project and project refinements at the Stockton West Weber site would result in the removal of at least 14 trees, with the possibility of removing up to approximately 20 trees. Tree removal within the interior portion of the site would result in the loss of 10 Siberian elm (*Ulmus pumilia*), three pecan (*Carya illinoensis*), and one California black walnut (*Juglans hindsii*). A grove of Chinaberry (*Melia azedarach*) trees would also be removed along the northeastern portion of the project site. With the exception of the California black walnut, all trees proposed for removal within the interior portion of the site are not native. Tree removal within the interior portion of the project site is required for the placement of the rock stockpile and haul road.

The banks of the Stockton Deep Water Ship Channel are colonized by scattered shrubs, primarily narrowleaf willow (*Salix exigua*). In addition, a few scattered immature trees including Siberian elm, California black walnut, and one valley oak (*Quercus lobata*) measuring less than 4 inches at diameter breast height may require removal for the installation of spud piles and concrete foundations that would support the rock conveyors during barge loading in an emergency situation.

Approximately 13.37 acres of trees are present within the Rio Vista project site. Tree species common within the Rio Vista site include valley oak, Fremont’s cottonwood (*Populus fremontii*), Oregon ash (*Fraxinus latifolia*), Gooding’s black willow (*Salix gooddingii*), and red willow (*S. laevigata*). Shrubs including arroyo willow (*S. lasiolepis*) and narrowleaf willow are common at the site. Implementation of the proposed project and project refinements at the Rio Vista site would result in the removal of up to approximately 4.0 acres of trees. Tree

removal would be required for project refinements such as the expansion of the rock stockpile, and widening the access road to 28 feet.

This level of impact to trees at both the Stockton West Weber and Rio Vista sites is not a substantial adverse impact and therefore is a less-than-significant impact that does not require mitigation.

Mature trees can provide nesting habitat for raptors and other species protected under the Migratory Bird Treaty Act. Shrubs primarily provide nesting habitat for songbirds protected under the Migratory Bird Treaty Act. The loss of an active nest due to tree removal would constitute a significant impact. However, implementation of mitigation measure BIO-3 described in Appendix B, “Mitigation Monitoring and Reporting Program,” would reduce the impact on special-status birds to ensure that active nests are not impacted if vegetation removal occurs during the active nesting season (typically considered to be February 1—September 15). The impact to special-status birds at the Stockton West Weber and Rio Vista sites would be **less than significant with mitigation incorporated.**

SPECIAL-STATUS FISH SPECIES

The Stockton Deep Water Ship Channel and Mormon Slough are Delta waterways. The waterways that surround the Stockton West Weber site are designated as critical habitat for steelhead and delta smelt under the federal ESA and as essential fish habitat (EFH) for Pacific salmon under the Magnuson-Stevens Fishery Conservation and Management Act (as amended). Implementation of the proposed project and project refinements would result in impacts to special-status fish habitat by removal of vegetation along the banks, placement of eight spud piles near the toe of the bank, and installation of up to 11 dolphin pile clusters for mooring of up to three transport barges during rock loading operations, and the removal of 12 existing wooden piles that are obstructing the foundation and alignment at one of the conveyor locations. The installation of in-water piling structures using impact hammers or vibratory hammers could adversely impact special-status fish species, resulting in a significant impact. However, implementation of BIO-7 described in Appendix B, “Mitigation Monitoring and Reporting Program,” would reduce the impact on special-status fish species to a less-than-significant level by restricting all in-water work to occur between July 1 and October 31, when special-status fish species are unlikely to be present at the project site and vicinity, and requiring BMPs for noise attenuation. The impact to special-status fish would be **less than significant with mitigation incorporated.**

Proposed project refinements at the Rio Vista site are restricted to upland habitats and therefore have no ability to result in impacts to special-status fish species. Therefore, **no impacts** to special-status fish species would occur at the Rio Vista site.

b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?

Implementation of the proposed project at the Stockton West Weber site would result in the need to remove scattered trees and shrubs along the bank of the Stockton Deep Water Ship Channel. Removal of woody vegetation along the bank would constitute a loss of riparian vegetation, which is regulated by CDFW under the Lake and Streambed Alteration Program. Because the Stockton Deep Water Ship Channel provides habitat for listed fish species, removal of any woody riparian vegetation would result in a loss of shaded riverine aquatic (SRA) habitat. Removal of riparian vegetation would be a significant impact. Implementation of BIO-4 described

in Appendix B, “Mitigation Monitoring and Reporting Program,” would reduce the loss of riparian vegetation to a **less than significant with mitigation incorporated**.

CDFW maintains a list of Natural Communities of Special Concern (NCSC) (CDFW 2010). The forested communities at the Rio Vista site are best characterized as a combination of Valley Oak Woodland Alliance and Fremont Cottonwood Forest Alliance (Sawyer et al. 2009). Both of these forest alliances are designated as NCSC. The proposed project and project refinements at the Rio Vista site would result in the loss of up to approximately 4.0 acres of tree canopy at the Rio Vista site. However, tree removal on the Rio Vista site does not constitute a significant impact because the site has been subject to a high level of disturbance associated with past mining operations and current use as an emergency rock stock pile location. The loss of NCSC vegetation communities is significant only in high-quality stands. Because the forest communities present at the Rio Vista site do not meet the criteria of high-quality stands, the loss of up to approximately 4.0 acres of trees is **less than significant**.

c) Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Implementation of the proposed project at the Stockton West Weber site would result in the installation of a total of eight spud piles near the toe of the bank, below the ordinary high water mark (OHWM), to support two conveyor support barge structures and up to 11 dolphin pile clusters within the Stockton Deep Water Ship Channel. The Stockton Deep Water Ship Channel is a tidally influenced waterway, subject to Section 404 of the CWA and Section 10 of the Rivers and Harbors Act of 1899. Installation of the spud and dolphin piles would result in the placement of structures (i.e., piles) below the OHWM of the Stockton Deep Water Ship Channel on the north shore of the Stockton West Weber site. Approximately 13,000 square feet of rip-rap would be placed along the north shore. Approximately 9,900 square feet would be above the OHWM and approximately 3,600 square feet of rip rap would be placed below the OHWM to stabilize the bank during barge loading during emergency events. Alteration of a waterway regulated under Sections 404 and 401 of the CWA, Section 10 of the Rivers and Harbors Act, and Section 1600 of the California Fish and Game Code would be a significant impact. However, impacts would be reduced with implementation of Mitigation Measures BIO-6 and BIO-8 in Appendix B, “Mitigation and Monitoring Program,” to **less than significant with mitigation incorporated**. Wetlands are present within the Rio Vista site. It is anticipated that at least 0.1 acre but up to 0.4 acre of wetland habitats would be directly impacted with implementation of the proposed project refinements at the Rio Vista site due to access road widening. The loss of wetland habitat would be considered to be a significant impact. However, wetland impacts would be reduced with implementation of Mitigation Measure BIO-8 in Appendix B, “Mitigation and Monitoring Program,” to **less than significant with mitigation incorporated**.

d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Proposed project refinements are not expected to interfere significantly with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. Upland sites provide marginal habitat for common wildlife species and impacts to sensitive species would be avoided per the mitigation measures discussed below (and included in Appendix B, “Mitigation Monitoring and Reporting Program.” Native and non-native migratory fish species are

present in the Delta and surrounding waterways; however, proposed project refinements such as in-water spud and dolphin pilings would not substantially interfere with fish movements due to the small size (maximum footprint is 6 square feet), wide spacing, and limited number of in-water structures. This impact would be **less than significant**.

e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The Stockton West Weber site is located within the incorporated limits of the City of Stockton. The City of Stockton regulates removal of native trees only within city rights-of-way. The Stockton West Weber site is not located within city rights-of-way and therefore tree removal at this site would not be in conflict with any local ordinance. Therefore, there is **no impact**.

The Rio Vista site is located in unincorporated Solano County. Solano County does not have a tree ordinance regulating tree removal. Therefore, there is **no impact**.

f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The proposed project refinements would not conflict with any adopted Habitat Conservation Plan, Natural Communities Conservation Plan; other approved local, regional, or state habitat conservation plans or General Plans, or local policies or ordinances.

The Delta Reform Act requires State and local actions that fit the legal definition of a “covered action” to be consistent with the policies included in the Delta Plan. The project refinements are likely to achieve the definition of a covered action because the proposed action is 1) located in the Delta, 2) is being implemented and approved by a state agency, and 3) has a significant impact on the achievement of the goal to implement flood-sponsored flood control programs and reduce risks to people, property, and state interests in the Delta. The mechanism for determining consistency is filing a certification of consistency with the Delta Stewardship Council. Both the Stockton West Weber and Rio Vista sites fall within the legal Delta and are likely to achieve the criteria of a covered project. DWR will file a consistency determination with the Delta Stewardship Council. Thus, there is **no impact**.

3.4.3 MITIGATION MEASURES

Mitigation Measures BIO-1, BIO-3, and BIO-6 presented below are included in the *Delta Flood Emergency Facility Improvement Project IS/MND* (DWR 2013), remain unchanged, and apply to proposed project refinements.

After further evaluation in this IS/MND, it was determined that Mitigation Measure BIO-2 was unnecessary as a mitigation measure for the proposed project and project refinements at the Stockton West Weber and Rio Vista sites because the impacts to trees were less than significant without mitigation, i.e., see “a)” above. Furthermore, Mitigation Measure BIO-2 is not a feasible mitigation measure as some tree removal is required to construct the proposed project and project refinements at the Stockton West Weber and Rio Vista sites, and meet most of the project objectives. Mitigation Measure BIO-2 is hereby retained at this time only for the BISRA site.

After further evaluation in the IS, it was determined that Mitigation Measures BIO-4 and BIO-5 had unnecessary language and was henceforth clarified by deleting these terms but maintaining essential components that restrict project activities from wetland and riparian habitats. Mitigation Measures BIO-4 and BIO-5 are hereby modified.

Mitigation Measures BIO-7 and BIO-8 are new mitigation measures proposed to minimize environmental impacts as discussed above related to the proposed project and project refinements at the Stockton West Weber site and the Stockton West Weber and Rio Vista sites, respectively.

Mitigation Measure BIO-1: Conduct Burrowing Owl Surveys at all Three Project Sites Prior to Development. Prior to any land-clearing operations, a burrowing owl survey following standard guidelines (The California Burrowing Owl Consortium, CBOC, 1993) shall be conducted by a qualified biologist. The survey shall entail walking throughout the entire site, including a 500-foot buffer, to identify adjacent suitable habitat that could be affected by noise and vibration from heavy equipment operation. If no burrows are observed, no impact is expected and results of the survey shall be submitted to the California Department of Fish and Wildlife (DFW). If burrows or owls are observed, a nesting season (15 April – 15 July) survey shall also be conducted, the results of which shall determine whether a winter survey will be further required or whether survey results can be submitted to the DFW following the nesting survey. If the surveys confirm occupied burrowing owl habitat, the Incidental Take Minimization Measure for Burrowing Owls (Measure 5.2.4.15) in the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (November 14, 2000) will be implemented.

Mitigation Measure BIO-2: Retain all Mature Trees ~~at~~ the Proposed Brannon Island State Recreation Area Project Sites.

Mature trees that are potential nest trees and native oak trees greater than 8 inches diameter at breast height² dbh will not be removed at the proposed Brannon Island State Recreation Area project site ~~from any of the project sites~~. If a nest tree becomes occupied during stockpiling and site development activities, then depending upon the bird species involved, appropriate monitoring and mitigation measures as specified by the California Department of Fish and Wildlife (DFW) will be instituted. At a minimum, all construction activities shall remain a distance of at least two times the drip line radius of active nest trees, as measured from the nest.

Mitigation Measure BIO-3: Conduct Special-Status Surveys.

DWR will consult with DFW prior to project construction to determine the extent for pre-construction sensitive species survey on the proposed project sites. For those sites determined for specific surveys, a qualified biologist shall conduct the sensitive species survey on the sites and within buffer areas of the sites. Special status bird species that could potentially nest in trees in or near the project area include Swainson's hawk, tricolored blackbird, white-tailed kite, double-crested cormorant, California black rail, saltmarsh common yellowthroat, song sparrow, Cooper's hawk, ferruginous hawk, merlin, yellow-headed blackbird, and western yellow-billed cuckoo. Potential habitat for special status reptiles/amphibians including the giant garter snake (GGS) and the western pond turtle exists at all three sites necessitating the need to conduct pre-construction surveys at all three sites. In addition, the western red bat could potentially roost in trees in or near the Rio Vista site and the Brannon Island site. The surveys shall be conducted no more than two weeks prior to the start of operations and depending on the expected duration

of the activities a follow-up survey may also be required. All observed sensitive species shall be reported to the DFW. The proposed project will be adjusted to avoid impacting these species, or to relocate the individuals under the guidance of the DFW. Preconstruction surveys will also include a botanical survey to identify the presence of elderberry shrubs and Antioch dunes evening primrose.

Mitigation Measure BIO-4: Conduct Pre-Construction Riparian Habitat Surveys at All Three of the Project Sites Prior to Development.

Prior to any land clearing operations, riparian habitat surveys shall be conducted by a qualified biologist. ~~to confirm that construction activities will not impact riparian habitat.~~ The survey shall entail walking throughout the entire site, including a 100-foot buffer, to identify ~~adjacent suitable~~ riparian habitat that could be affected by construction activities, particularly along the top of waterside banks or slopes. ~~or low-lying areas.~~ Riparian habitat shall be avoided, if feasible. If it is determined that construction would result in the removal of The riparian habitat, surveys shall be submitted to DFW, along with ~~each of the site development plans to confirm that isolated project activities, inclusive of piling installations, utility installations and road/ramp improvements near or adjacent to riparian habitat or other sensitive natural communities will not result in a significant impact to riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service.~~ DWR will mitigate for impacts through restoration of riparian habitat on the Brennan Island, or ~~similar of other state-owned~~ property based on a replacement ratio of 1:1.

Mitigation Measure BIO-5: Conduct Pre-Design Wetlands and Riparian Habitat Surveys for each of the Sites and Install and Maintain Exclusionary Fencing at the Sites to Ensure Full Avoidance of Seasonal and Permanent Wetlands and Jurisdictional Riparian Habitat.

a) DWR shall retain a qualified biologist to conduct a wetland delineation of the project sites. This delineation shall be submitted to the Corps, and verification received prior to any ground disturbing activities beyond the existing on-site roadways.

b) DWR, will preserve, and not disturb the existing wetlands, and wherever possible, establish 25-foot minimum buffers around all sides of these features. In addition, the final project design shall not cause significant changes to the pre-project hydrology, water quality or water quantity in any wetland that is to be retained on site. ~~This shall be accomplished by avoiding or repairing any disturbance to the hydrologic conditions supporting these wetlands, as verified through wetland protection plans.~~

c) DWR, prior to construction activities, shall ~~install~~ conduct an updated wetland delineation for its potential disturbance area, install orange exclusion fencing on T posts (or equivalent), with silt fence or exclusion fencing around wetlands to be retained on-site where wetlands are adjacent to construction activities. ~~material installed along the bottom, and w~~ Wherever possible, a 25-foot buffer adjacent to seasonal and permanent wetlands shall be established identified within and adjacent to the proposed site work. The fencing shall be maintained for the duration of the site work, ~~and the DWR Operations and Maintenance Manual for the Rio Vista site shall include the pre-construction delineation of jurisdictional wetlands and riparian habitat and note that all future traffic within the project site is limited to improved~~

~~surface areas and stockpile areas, and all other areas are deemed off limits to vehicular and construction equipment.~~

Mitigation Measure BIO-6: Secure Section 1600 Lake or Streambed Alteration (LSA) Agreement from DFW

Prior to any ground-disturbing site improvements, DWR shall consult with DFW and secure any applicable Section 1600 Lake or Streambed Alteration (LSA) agreement(s) for any permanent site improvements waterward of the top of bank at Three-Mile Slough for the BISRA site or at the Stockton Deep Water Ship Channel or Mormon Slough at the Stockton West Weber Avenue site.

Mitigation Measure BIO-7: Avoid and Minimize Underwater Sound Pressure due to Pile Driving

Underwater sound monitoring shall be performed during pile-driving activities. A qualified biologist/natural resource specialist shall be present during such work to monitor construction activities and compliance with terms and conditions of permits.

Underwater sound reduction measures shall be employed, as needed, to ensure that levels do not exceed the threshold levels established by USFWS and NMFS (for fish greater than 2 grams):

- Peak Pressure – 206 decibels
- Accumulated Sound Exposure Level (SEL) – 187 decibels

These underwater sound reduction measures shall include use of an impact hammer cushion block. Additionally, hammers shall be used only during daylight hours and initially shall be used at low energy levels and reduced impact frequency. Applied energy and frequency shall be gradually increased until necessary full force and frequency are achieved.

If necessary, one or more of the following shall be implemented to further reduced sound:

- Pipe caissons shall be used to isolate the piles from waters to buffer underwater sound pressure levels if underwater sound monitoring indicates that underwater sound levels exceed threshold levels. The caissons shall be driven below the mud line using vibratory or hydraulic methods and the interior area dewatered before pipe piles are installed using impact methods.
- The use of a bubble curtain surrounding the pile to be driven.

Mitigation Measure BIO-8: Ensure No Net Loss of Functions and Values of Wetlands, Other Waters of the United States, and Waters of the State at the Stockton West Weber and Rio Vista Sites

Before the start of any ground-disturbing activity associated with the construction of any project feature that would affect waters of the United States, including wetlands, or waters of the State, DWR will obtain all necessary permits under Sections 404 and 401 of the Clean Water Act or the State's Porter-Cologne Act for the proposed project and project refinements at the Stockton West Weber and Rio Vista sites, and Section 10 authorization under Rivers and Harbors Act for work within the Stockton Deep Water Ship Channel at the Stockton West Weber site.

All permits, regulatory approvals, and permit conditions for impacts on wetland habitats shall be secured before implementation of any construction activities within waters of the United States or wetland habitats, including waters of the State. DWR will commit to replace, restore, or enhance on a “no net loss” basis, in accordance with U.S. Army Corps of Engineers (USACE) and the Central Valley Regional Water Quality Control Board (RWQCB), the acreage of all wetlands and other waters of the United States that would be removed, lost, and/or degraded with implementation of project plans. Wetland habitat shall be restored, enhanced, and/or replaced at an acreage and location and by methods agreeable to USACE and the Central Valley RWQCB, as determined during the Section 404 and Section 401 permitting processes. Final mitigation ratios will be determined during the permitting process.

3.4.4 IMPACTS AFTER APPLICATION OF MITIGATION MEASURES

As previously discussed, mitigation measures were designed to reduce potentially significant impacts to a less-than-significant level. Consequently, all biological impacts are **less than significant with mitigation incorporated**.

3.5 CULTURAL AND PALEONTOLOGICAL RESOURCES

3.5.1 ENVIRONMENTAL SETTING

CULTURAL RESOURCES

Stockton West Weber Site

The entire site has been subjected to heavy industrial use and has been heavily disturbed, including grading, construction of docks, placement of concrete foundations, trenching for utilities, paving, and placement of aggregate base. There are no prehistoric sites or historic period resources recorded in or immediately adjacent to this site. Additional environmental setting information is presented in DWR (2013).

Rio Vista Site

The historic excavation of materials from the Sacramento River, combined with artificial levees and berms, has created a depressed area, or pit, approximately 6 feet deep and suitable for spoiling of suction dredge materials. Sand removal activities occurred on the site to maintain the permanent structural features of the site, including berms, levees, access roads, and the discharge spillway (State of California et al., 1993).

The site has been subject to two archeological survey efforts, which include the areas of proposed ground disturbance activities, except for the immediate vicinity of the existing quarry rock stockpile. The surveys resulted in no cultural resources being discovered. There are no prehistoric sites or historic period resources recorded in or immediately adjacent to this site. It is extremely unlikely that the site contains any cultural resources, as the entire site is composed of fill from dredging the Sacramento River. The site has also been periodically excavated for the removal and beneficial re-use of dredged materials. Proposed project facility construction include fill with aggregate base to improve upon and extend the access roads to the quarry stockpile site, shallow excavation of 3 acres or less of sand to create a sand stockpile and concrete pads for several facilities.

Additional environmental setting information is presented in DWR (2013).

PALEONTOLOGICAL RESOURCES

Both the Stockton West Weber site and the Rio Vista site are located in a historic alluvial floodplain of the Delta, and the geologic unit overlying both sites consists of hydraulically-dredged materials that are less than 11,700 years old (i.e., Holocene age) (Atwater 1982:Plates 6 and 17). By definition, in order to be considered a unique paleontological resource, a fossil must be more than 11,700 years old. Holocene deposits contain only the remains of extant, modern taxa (if any resources are present), which are not considered “unique” paleontological resources. Therefore, the hydraulically-dredged materials are not considered to be paleontologically sensitive.

3.5.2 ENVIRONMENTAL EFFECTS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
V. Cultural Resources. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?

No known significant historical resources are present at the sites. However, not all the sites have been fully surveyed and there could be a potentially significant impact. The proposed project refinements would be subject to Mitigation Measures CUL-1 through CUL-5 in Appendix B, “Mitigation Monitoring and Reporting Program.” Consequently, the impacts from project refinements on historical resources would be **less than significant with mitigation incorporated.**

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

The construction of concrete foundations for a new 7,000 square foot steel frame building and two rock conveyors could result in a significant impact to previously unidentified archaeological resources. At the Rio Vista site, widening of the existing access road could also impact previously unknown archaeological resources due to the ground-disturbing activities. The proposed project refinements would be subject to Mitigation Measures CUL-1 through CUL-5 in Appendix B, “Mitigation Monitoring and Reporting Program,” Consequently, the impacts from project refinements on archaeological resources would be **less than significant with mitigation incorporated.**

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

The proposed earth-moving activities at the Stockton West Weber and Rio Vista sites would primarily affect Holocene-age materials dredged from the Sacramento River, which are not considered to be paleontologically sensitive. Therefore, the project would have **no impact**.

d) Disturb any human remains, including those interred outside of formal cemeteries?

Due to the disturbed nature of the sites, it is highly unlikely that human remains would be uncovered. However, disturbance of previously undiscovered human remains during ground-disturbing activities could potentially occur. The proposed project refinements would be subject to Mitigation Measures CUL-1 through CUL-5 in Appendix B, "Mitigation Monitoring and Reporting Program." Consequently, the impacts from project refinements on human remains would be **less than significant with mitigation incorporated**.

3.5.3 MITIGATION MEASURES

Mitigation Measure CUL-1: Pre-construction Field Survey.

Prior to ground disturbing activities, a field survey will be conducted by a qualified archeologist to identify any prehistoric or historic cultural resources within the project site areas. The survey may reveal a lack of resources. No further identification effort will need to be made. If resources are found in one of the selected sites during the survey, it will be necessary to determine whether the resource is an important resource. This determination will be made by a qualified archeologist based upon surface evidence, if possible. If surface evidence is not conclusive, additional studies, including archival research or subsurface testing, will be conducted. If the additional studies are undertaken and a resource is found to be important under the criteria of the California Register of Historical Resources (CRHR), avoidance will be the preferred method of mitigation. The use of the site with the significant resource might need to be limited to a smaller portion of the site, with protective measures designed for the resource, such as fencing or monitoring site use. The determination of appropriate mitigation will be made by DWR.

Mitigation Measure CUL-2: Worker Cultural Resource Awareness.

Construction personnel will be informed of the potential for encountering significant archaeological resources and instructed in the identification of artifacts, bone, and other potential resources. All construction personnel will be informed of the need to stop work on the project site if cultural resources are found, and until a qualified archaeologist has been provided the opportunity to assess the significance of the find and implement appropriate measures to protect or scientifically remove the find. Construction personnel will also be informed of the requirement that unauthorized collection of cultural resources is prohibited.

Mitigation Measure CUL-3: Immediately Halt Construction if any Cultural Resources are Discovered.

DWR shall implement the following mitigation measure to reduce the potential impacts to buried historic cultural resources to a less-than-significant level. If cultural materials (e.g., unusual amounts of shell, animal bone, glass, ceramics, etc.) are discovered during project-related construction activities, ground

disturbances in the area of the find shall be halted and a qualified professional archaeologist shall be notified regarding the discovery. The archaeologist, to be retained by DWR, shall determine whether the resource is potentially significant per the CRHR and develop appropriate mitigation. Mitigation may include, but not be limited to, in-field documentation, archival research, archaeological testing, data recovery excavations, or recordation, and shall be implemented before resuming construction in the immediate vicinity.

Mitigation Measure CUL-4: Immediately Halt Construction if any Human Remains are Discovered.

DWR shall implement the following mitigation measure to reduce the potential impacts to human remains to a less-than-significant level. In accordance with the California Health and Safety Code, if human remains are uncovered during ground-disturbing activities, the contractor and/or DWR shall immediately halt potentially damaging excavation in the area of the burial and notify the County Coroner and a professional archaeologist to determine the nature of the remains. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or State lands (Health and Safety Code Section 7050.5[b]).

If the coroner determines that the remains are those of a Native American, he or she must contact the Native American Heritage Commission (NAHC) by phone within 24 hours of making that determination (Health and Safety Code Section 7050[c]). Following the coroner's findings, DWR, an archaeologist, and the NAHC designated Most Likely Descendent (MLD) shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments are not disturbed. The responsibilities for acting upon notification of a discovery of Native American human remains are identified in California Public Resources Code Section (PRC) 5097.9.

Mitigation Measure CUL-5: Determination of Significance of Cultural Resources.

If previously unknown cultural resources are discovered during project construction, all work in the area of the find should cease and a qualified archaeologist should be retained by DWR or consultant to assess the significance of the find, make recommendations on its disposition, and prepare appropriate field documentation, including verification of the completion of required mitigation. If archaeological or paleontological resources are discovered during earth moving activities, all construction activities within 50 feet of the find should cease until the archaeologist evaluates the significance of the resource. In the absence of a determination, all archaeological and paleontological resources should be considered significant.

If the resource is determined to be significant, the archaeologist, as appropriate, should prepare a research design for recovery of the resources in consultation with the State Office of Historic Preservation that satisfies the requirements of Public Resources Code, Section 21083.2. The archaeologist should complete a report of the excavations and findings. Upon approval of the report, the project proponent should submit the report to the regional office of the California Historic Resources Information System.

3.5.4 IMPACTS AFTER APPLICATION OF MITIGATION MEASURES

As previously discussed, mitigation measures were designed to reduce potentially significant impacts to a less-than-significant level. Consequently, all biological impacts are **less than significant with mitigation incorporated**.

3.6 HYDROLOGY AND WATER QUALITY

3.6.1 ENVIRONMENTAL SETTING

Both the Stockton West Weber and Rio Vista project sites are located in the Delta, which is the largest estuary on the Pacific Coast. The Delta is the hub of the State Water Project and the Central Valley Project, two of California’s largest water distribution systems, which supply a portion of the drinking water for two-thirds of the State’s population and irrigation water for over 7 million acres of farmland.

The Stockton West Weber site is generally flat with large areas covered in gravel base and pavement. It is located in downtown Stockton, adjacent to the Stockton Deep Water Ship Channel at its juncture with the Old Mormon Slough.

The Rio Vista site is located on the west side of the Sacramento River, just north of the town of Rio Vista. This site has been used as a hydraulic dredge disposal area and as a source of sand and aggregate since the early 1900s. A portion of the property lies within the 100-year floodplain. The site is set back from the Sacramento River a distance of 600-1500 feet. Existing waterside activities at this site consist of industrial, commercial, and residential uses, including Dutra Group’s dock and corporation yard facilities, as well sand mining activities by Asta Construction.

In the event of levee failures and flooding, the potential for salt water intrusion exists in the Delta, which would compromise the imported drinking water supplies for over 20 million people and agricultural water supplies for the State’s valuable farming resources in the Central Valley. The proposed project would facilitate a more rapid emergency response and recovery effort in the event of levee damage or levee breaches in the Delta.

3.6.2 ENVIRONMENTAL EFFECTS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. Hydrology and Water Quality. Would the project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Result in inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a) Violate any water quality standards or waste discharge requirements?

The proposed project refinements at the Rio Vista site would require additional minor clearing, grading, and application of aggregate to accommodate to the proposed facilities and site uses, along with several small concrete pads.

The proposed project refinements at the Stockton West Weber site would require additional grading, including grading to raise a portion of the site above the 100-year floodplain; installation of several small concrete pads for restroom facilities, temporary office trailers, and rock conveyors; installation of aggregate base and paved parking; and construction of a 7,000-square-foot steel framed building. The Stockton West Weber site does include existing drainage facilities including storm drain inlets and a detention pond on the parcel south of West Weber Avenue; and the parcel north of West Weber has a small network of storm drain pipes that discharge directly into the Stockton Deep Water Ship Channel. Site drainage facilities would likely require improvements on both parcels, with more drainage facility improvements likely required on the north parcel.

Construction activities associated with the proposed project and refinements would expose soils to erosive forces and could transport sediment and hazardous construction materials such as fuels, oils, and lubricants into local

river channels, increasing turbidity, degrading water quality, and resulting in siltation to local waterways. Intense rainfall and associated stormwater runoff could result in short periods of sheet erosion.

The proposed project and project refinements would be subject to Mitigation Measure HYD-1 in Appendix B, “Mitigation Monitoring and Reporting Program,” which requires that a Storm Water Pollution Prevention Plan (SWPPP) be prepared and that Best Management Practices (BMPs) be used throughout site preparation. Standard erosion control measures (e.g., management, structural, and vegetative controls) would be implemented for all construction activities that expose soil. Grading operations would be conducted to eliminate direct routes for conveying potentially contaminated runoff to drainage channels. Erosion control barriers such as silt fences and mulching material would be installed, and disturbed areas would be reseeded with native grasses or other plants where necessary. Additional BMPs specifying the appropriate hazardous materials handling, storage, and spill response practices to reduce the possibility of water quality degradation from accidental spills or releases of contaminants would also be implemented. Therefore, the impact from project refinements related to violation of water quality standards or waste discharge requirements would be **less than significant with mitigation incorporated**.

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?

The proposed project refinements at the Rio Vista site would require additional minor clearing, grading, and application of aggregate to accommodate the proposed facilities and site uses, along with several small concrete pads. However, the site would not be paved and the additional aggregate and rock stockpiles would allow water to infiltrate into the ground.

The proposed project refinements at the Stockton West Weber site would require additional grading, including grading to raise a portion of the site above the 100-year floodplain; installation of several small concrete pads for restroom facilities, temporary office trailers, and rock conveyors; installation of aggregate base and paved parking; and construction of a 7,000-square-foot steel framed building. Although additional impervious surfaces would be created at both sites, the majority of the sites would still consist of pervious surfaces, including the aggregate and rock stockpiles. Overall, most of the surface area at both project sites would remain covered by pervious surfaces after the project is implemented. Because of the relatively small amount of impervious surfaces being constructed in relation to the size of the project sites, the proposed project refinements would not interfere substantially with groundwater recharge. Water supply for the new restroom and the warehouse buildings would be provided via new underground piping that would connect to the existing municipal water supply. No new groundwater wells would be installed. Therefore, the project would not result in a substantial depletion of groundwater supplies. Consequently, the impacts from project refinements on depletion of groundwater supplies and interference with groundwater recharge would be **less than significant**.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial on- or off-site erosion or siltation?

The proposed project and project refinements, including grading, installation of concrete pads, and a 7,000-square-foot building at the Stockton West Weber site, would not result in a substantial alteration of the existing drainage patterns of either site. Furthermore, the Stockton West Weber site includes existing drainage facilities. The majority of the land area at both sites would continue to be undeveloped. The proposed project and project refinements in the river channel would include installation of dolphin and spud piles. The proposed dolphin pile structures would typically consist of a number of piles driven into the riverbed and connected above the water level to provide a platform or fixing point, in order to improve stability during the barge-loading process. The piles would be anchored to the riverbed. The spud piles would be installed to anchor the conveyor barges. These structures would have no impact on the course of the river channels.

Furthermore, the proposed project and project refinements would be subject to Mitigation Measure HYD-1 in Appendix B, "Mitigation Monitoring and Reporting Program," which requires that BMPs be used throughout site preparation. Standard erosion control measures (e.g., management, structural, and vegetative controls) would be implemented for all construction activities that expose soil. Grading operations would be conducted to eliminate direct routes for conveying potentially contaminated runoff to drainage channels. Erosion control barriers such as silt fences and mulching material would be installed, and disturbed areas would be reseeded with native grasses or other plants where necessary. Therefore, the impacts from the proposed project and project refinements related to erosion and siltation would be **less than significant impact with mitigation incorporated**.

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in on- or off-site flooding?

As described in c) above, the proposed project and project refinements would not result in a substantial alteration of the existing drainage patterns at either site, nor would they alter the course of the river channels. Overall, most of the surface area at both project sites would remain covered by pervious surfaces after the project is implemented. The few structures that would be installed, such small concrete pads for the restrooms, transformers, and rock conveyer belts to the barges, along with the 7,000-square-foot building at the Stockton West Weber site, would not substantially increase the rate or amount of surface runoff in a manner that would result in increased on- or off-site flooding. Furthermore, the Stockton West Weber site, which would contain the majority of the proposed new facilities, already includes existing drainage facilities. Therefore, the impacts from the proposed project and project refinements would be **less than significant**.

e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?

The proposed project and project refinements at the Rio Vista site would require additional minor clearing, grading, and application of aggregate to accommodate to the proposed project refinements, along with several small concrete pads. However, the site would not be paved and the additional aggregate and rock stockpiles would allow water to infiltrate into the ground.

The proposed project and project refinements at the Stockton West Weber site would require additional grading, including grading to raise a portion of the site above the 100-year floodplain; installation of several small concrete pads for restroom facilities, transformers, temporary office trailers, and rock conveyors; installation of aggregate base and paved parking; and construction of a 7,000-square-foot steel framed building. Although additional impervious surfaces would be created at both sites, the majority of the sites would still consist of pervious surfaces, including the aggregate and rock stockpiles. Overall, most of the surface area at both project sites would remain covered by pervious surfaces after the project is implemented. Because of the relatively small amount of impervious surfaces being constructed in relation to the size of the project sites, increases in storm water runoff would be small.

However, the operation of equipment during the construction process could result in accidental spills of hazardous materials such as fuels, oils, lubricants, concrete, paint, and solvents. The materials could be transported into adjacent river channels via overland flow, particularly during a rain event. These construction-related wastes have the potential to degrade existing water quality and beneficial uses in the river channels. The proposed project and project refinements would be subject to Mitigation Measure HYD-1 in Appendix B, "Mitigation Monitoring and Reporting Program," which requires that a SWPPP be prepared and that BMPs be implemented to specify the appropriate hazardous materials handling, storage, and spill response practices to reduce the possibility of adverse impacts from use or accidental spills or releases of contaminants. Therefore, the impact from the proposed project and project refinements related to creation of additional sources of polluted runoff would be **less than significant impact with mitigation incorporated**.

f) Otherwise substantially degrade water quality?

As discussed in impacts a) through e) above, the proposed project and project refinements could result in erosion, sedimentation, and transport of contaminants from accidental spills into river channels. However, the proposed project and project refinements would be subject to Mitigation Measure HYD-1 in Appendix B, "Mitigation Monitoring and Reporting Program," which requires that a SWPPP be prepared and that BMPs be implemented to reduce erosion and sediment and contaminant transport. Consequently, the impact from the proposed project and project refinements on degradation of water quality would be **less than significant with mitigation incorporated**.

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

The proposed project and project refinements do not include the construction of any housing. Therefore, the proposed project and project refinements would have **no impact**.

h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?

The Stockton West Weber site is not located within a 100-year flood hazard area. A portion of the Rio Vista site is located within a 100-year floodplain; however, the proposed project refinements include grading that would elevate that portion of the site such that all facilities would be installed at an elevation that would be above the 100-year floodplain (see Chapter 2, "Project Description"). Therefore, the proposed project and project refinements would not place structures within a 100-year flood hazard area, and the proposed project and project refinements would have **no impact**.

i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?

The proposed project and project refinements would not expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam. As described in impact h) above, all proposed project features and elements would be installed at an elevation that would be above the 100-year floodplain. The proposed project and project refinements would provide stockpiles of flood-fight materials at three strategic locations in the Delta, all elevated above the 100-year floodplain, to expedite emergency response to levee breaches within the Delta. Therefore, the proposed project and project refinements would provide a **beneficial impact** by reducing the potential property loss and personal injury associated with flooding resulting from levee failures in the Delta. **No adverse impact** would occur.

j) Result in inundation by seiche, tsunami, or mudflow?

The project sites are not located in steep areas where mudflow could occur, and they are located too far from the Pacific Ocean to be affected by tsunamis. Both project sites are located adjacent to Delta river channels. The sites would only be occupied on a temporary basis during a flood emergency situation, and the probability of a seiche occurring during one of these temporary and short-term periods when personnel would be present on site is extremely low. Therefore, the impact on the proposed project and project refinements from seismic seiches is considered **less than significant**.

3.6.3 MITIGATION MEASURES

HYD-1: Institute Construction Best Management Practices (BMPs) for the Prevention of Erosion and Transport of Soil, Sand, and Silt Offsite during Runoff Events.

DWR shall implement construction Best Management Practices (BMPs) for all land clearing, land leveling, excavation, and fill operations associated with site preparations at the three sites. These measures will be incorporated into the construction plans and specifications. They include avoidance of existing wetlands, including placement of exclusion fencing, creating on site catchments for surface runoff, using coir logs to intercept drainage, and hydroseeding slopes, as appropriate.

Before the start of any construction work, clearing, or site grading associated with preparation, or any stockpiling activities at the sites, measures to control soil erosion and waste discharges will be prepared in accordance with BMPs. DWR will require all contractors conducting work at the sites to implement BMPs to control soil erosion and waste discharges of other construction-related contaminants. The general contractor(s) and subcontractor(s) conducting the work will be responsible for constructing or implementing, regularly inspecting, and maintaining the BMPs in good working order. In addition, the contractors will be required to submit and adhere to the applicable Storm Water Pollution Prevention Plan (SWPPP) associated with site development, preparation, and improvements.

Sufficient buffers from wetlands, riparian habitat, and/or other sensitive areas shall be maintained throughout the construction improvement period(s) of the project.

The plans developed by DWR or its contractor(s) will identify the grading, erosion, and tracking control BMPs and specifications that are necessary to avoid and minimize water quality impacts to the extent

practicable. Standard erosion control measures (e.g., management, structural, and vegetative controls) will be implemented for all construction activities that expose soil. Grading operations will be conducted to eliminate direct routes for conveying potentially contaminated runoff to drainage channels. Erosion control barriers such as silt fences and mulching material will be installed, and disturbed areas will be reseeded with native grasses or other plants where necessary. Tracking controls shall be required throughout the construction period, as needed, to reduce the tracking of sediment and debris from the construction site.

At a minimum, entrances and exits shall be inspected daily, and controls implemented as needed.

The following specific BMPs will be implemented, as described in the California BMP Handbook (www.cabmphandbook.com):

- Conduct all work according to site-specific construction plans that identify areas for clearing and grading so that ground disturbance is minimized.
- Avoid riparian vegetation, cover cleared areas with mulches, and install silt fences near riparian areas or streams to control erosion and trap sediment, and reseed cleared areas with native vegetation. Sufficient buffers (minimum 20 feet when possible) from wetlands and/or other sensitive areas shall be maintained throughout the life of the project.
- Stabilize disturbed soils before the onset of the winter rainfall season.
- Stabilize and protect stockpiles from exposure to erosion and flooding.
- Stabilize all construction access by providing a point of entrance/exit to the construction sites that is stabilized to reduce the tracking of mud and dirt onto public roads by construction vehicles.
- Grade each construction entrance/exit to prevent runoff from leaving the construction site, and ensure that all runoff from the stabilized entrances/exits are routed through a sediment-trapping device before discharge.
- Ensure that entry/exit ways are able to support the heaviest vehicles and equipment that will use them.

BMPs will also specify appropriate hazardous materials handling, storage, and spill response practices to reduce the possibility of adverse impacts from use or accidental spills or releases of contaminants.

Specific measures applicable to the project include, but are not limited to, the following:

- Develop and implement strict onsite handling rules to keep construction and maintenance materials out of drainages and waterways.
- Conduct all refueling and servicing of equipment with absorbent material or drip pans underneath to contain spilled fuel. Collect any fluid drained from machinery during servicing in leak-proof containers and deliver to an appropriate disposal or recycling facility.

- Maintain controlled construction staging, site entrance, concrete washout, and fueling areas at least 100 feet away from stream channels or wetlands to minimize accidental spills and runoff of contaminants in storm water.
- Prevent raw cement; concrete or concrete washings; asphalt, paint, or other coating material; oil or other petroleum products; or any other substances that could be hazardous to aquatic life from contaminating the soil or entering watercourses.

Maintain spill cleanup equipment in proper working condition. Clean up all spills immediately according to the spill prevention and response plan, and immediately notify DFW and the Regional Water Quality Control Board (RWQCB) of any spills and cleanup procedures.

3.6.4 IMPACTS AFTER APPLICATION OF MITIGATION MEASURES

As previously discussed, a mitigation measure was designed to reduce potentially significant impacts to a less-than-significant level. Consequently, all hydrology and water quality impacts are **less than significant with mitigation incorporated**.

3.7 GEOLOGY AND SOILS

3.7.1 ENVIRONMENTAL SETTING

Both the Stockton West Weber and Rio Vista sites are located within the Delta. The Delta was formed by the comingling of organic matter deposited by tules and plants and sediment deposition from river transport to form thick deposits of peat capped by tidal marshes. Historically, the accumulation of sediment in the Delta corresponded with the gradual rise in mean sea level and the region was dominated by tidal marshes and meandering sloughs. Farming activity in the last 150 years has led to the alteration and drainage of those marshes and the creation of numerous islands and a levee system. As a result of exposure of peat soils from farming operations, subsidence of exposed land masses (as a result of oxidation) is ongoing throughout the Delta.

The nearest historically active (i.e., exhibiting displacement within the last 200 years) faults to the project sites consist of the Concord Fault—approximately 21 miles southwest of the Rio Vista site, and the Greenville Fault—approximately 23 miles west of the Stockton West Weber site. The Coast Ranges-Central Valley geomorphic boundary lies approximately 15 miles west of Stockton, and the Great Valley Fault (which lies beneath the surface along this boundary) is considered seismically active. Other active faults in the Coast Ranges to the west of the project sites include the Hayward, Greenville, Dunnigan Hills (Zamora), Ortigalita, Healdsburg-Rodgers Creek, West Napa, and San Andreas Faults.

STOCKTON WEST WEBER SITE

This site is located on a nearly flat-lying peninsula and has little geographic variation. It was created by material dredging and built up with imported fill material. Soils in the project vicinity are generally part of the Jacktone-Hollenbeck Stockton association. These soils are fine-grained, somewhat poorly drained to moderately well drained, with a moderately deep to deep cemented hard pan. The project site soil is classified as Urban Land

Complex (NRCS 2010b, c). Based on field investigations, the on-site soils are believed to consist of a mixture of imported fill and poorly drained Jackstone Clay, with slow permeability rates and a moderately deep hardpan.

RIO VISTA SITE

The Rio Vista site was a formerly swampy area, filled with sand and silt from the Sacramento River during hydraulic dredging and widening of the river beginning in the early 1920s. Portions of the site have been periodically excavated for the beneficial re-use of sediments deposited there by the dredging operations. Such use continues on portions of the site at present. The soils are primarily characterized as Xeropsamments, which are less than 35 percent (by volume) rock fragments and have a texture of loamy fine sand or coarser in all layers. Additional soil types that are present in small percentages consist of Fluvaquents, Gazwell, and Sailboat. The soil in the area is originally earthy fill and is characterized as somewhat excessively well drained (NRCS 2010b, c).

Additional environmental setting information is presented in DWR (2013).

3.7.2 ENVIRONMENTAL EFFECTS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. Geology and Soils. Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

Surface ground rupture along faults is generally limited to a linear zone a few yards wide. Since neither project site is located within or adjacent to an Alquist-Priolo Earthquake Fault Zone (CGS 2012), nor is either site located within or immediately adjacent to the trace of any other known fault (Jennings 1994), surface fault rupture at either project site is unlikely. This impact is considered **less than significant**.

ii) Strong seismic ground shaking?

Active faults are located along the western margin of the Central Valley and in the Coast Ranges, approximately 15-25 miles west of the project sites. Therefore, strong seismic shaking could occur at the project sites. However, the concrete foundations that would be installed at both sites, and the new 7,000-square-foot steel frame building at the Stockton West Weber site, would be subject to the design requirements of the California Building Standards Code (CBC), which incorporates criteria that are intended to minimize structural damage and personal injury from seismic hazards (including strong seismic ground shaking), to the maximum extent practicable. Furthermore, the sites would only be occupied on a temporary basis during emergency flood situations, and the probability of a large magnitude earthquake occurring at the time when the sites would be occupied is extremely low. Therefore, this impact is considered **less than significant**.

iii) Seismic-related ground failure, including liquefaction?

Soil liquefaction most commonly occurs when ground shaking from an earthquake causes a sediment layer saturated with groundwater to lose strength and take on the characteristics of a fluid, thus becoming similar to quicksand. Liquefaction may also occur in the absence of a seismic event, when unconsolidated soil above a hardpan becomes saturated with water. Factors determining the liquefaction potential are the soil type, the level and duration of seismic ground motions, the type and consistency of soils, and the depth to groundwater. Loose sands, peat deposits, and unconsolidated Holocene-age sediments are the most susceptible to liquefaction, while clayey silts, silty clays, and clays deposited in freshwater environments are generally stable under the influence of seismic ground shaking.

Both of the project sites contain areas of loose, unconsolidated, Holocene-age soils that may be subject to liquefaction in the event of a large magnitude earthquake. However, the concrete foundations that would be installed at both sites, and the new 7,000-square-foot steel frame building at the Stockton West Weber site, are subject to the design requirements of the CBC, which incorporates criteria that are intended to minimize structural

damage and personal injury from seismic hazards (including liquefaction), to the maximum extent practicable. Therefore, this impact is considered **less than significant**.

iv) Landslides?

Both of the project sites are located in areas of nearly level topography, and are not located adjacent to any steep slopes where landslides would occur. Therefore, the proposed project and project refinements would have **no impact**.

b) Result in substantial soil erosion or the loss of topsoil?

The proposed project refinements would include additional clearing; additional grading for concrete foundations, road widening, and a smaller parking area; and construction of a 7,000- square-foot steel framed building at the Stockton West Weber site. Earth-moving activities at both project sites could cause a short-term increase in wind and water erosion, which could in turn result in sediment transport into adjacent river channels. The proposed project refinements would be subject to Mitigation Measure HYD-1 in Appendix B, "Mitigation Monitoring and Reporting Program." Consequently, the impacts from the proposed project and project refinements related to erosion and loss of topsoil would be **less than significant with mitigation incorporated**.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in an off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

The peat soils of the Delta are subsiding at an estimated rate of slightly over 3 inches per year and, as a result, many islands that were formerly at or above sea level are now below sea level. Subsidence is a serious concern in the Delta that can lead to major flooding. As levees gradually sink and erode over time, costly maintenance is necessary to continue to protect the low lands behind them. However, neither of the project sites is subject to subsidence due to loss or compaction of peat. The Stockton West Weber site is underlain by mineral soils and fill materials used to create the present industrial site. The Rio Vista site is underlain by mineral soils, silts, and sands. The project sites would be further modified with aggregate, asphalt, and concrete bases, and stockpiles would be stored on aggregate material, which would serve to increase the stability of soils. The project consists of previously utilized industrial or dredged materials discharge areas located in relatively flat areas, and would include site preparations that would reduce the potential for soil instability. The proposed dolphin pile structures would typically consist of a number of piles driven into the riverbed and connected above the water level to provide a platform or fixing point to improve stability during the barge-loading process. The piles would be anchored to the riverbed. Therefore, the proposed project and project refinements would have a **less-than-significant** impact from construction in unstable soils.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial risks to life or property?

Based on the Natural Resources Conservation Service (NRCS) soil survey data discussed above, none of the concrete foundations or other project facilities would be constructed in expansive soils; therefore, the proposed project and project refinements would have **no impact**.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

The proposed project and project facilities would not entail the use of septic tanks or alternative wastewater disposal systems. The Stockton West Weber site would connect to the existing Stockton municipal wastewater system, and DWR may also install additional vault toilets from which the wastewater is pumped (rather than percolated through the soil) at this site. At the Rio Vista site, portable restroom facilities would be used during emergency operations. Therefore, the proposed project and project refinements would have **no impact**.

3.7.3 MITIGATION MEASURES

No significant impacts are anticipated; therefore, no mitigation measures are needed to address impacts to geology and soils.

3.8 CLIMATE CHANGE

3.8.1 ENVIRONMENTAL SETTING

Gases that trap heat in the atmosphere are referred to as greenhouse gases (GHG). This entrapment of heat in the atmosphere is believed to contribute to climate change, which is a significant change in elements of climate lasting for decades or longer. The most prominent GHGs that have been identified as contributing to climate change are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). Some GHGs such as CO₂ occur naturally and are emitted to the atmosphere through natural processes and human activities. The principal greenhouse gases that enter the atmosphere because of human activities are CO₂, CH₄, N₂O, and fluorinated gases.

The recent increase in concentration of carbon dioxide in the atmosphere over the past 50 years is the result of human activities, mainly the burning of fossil fuels. As the concentration of CO₂ in the atmosphere has increased, so has the average surface temperature of the earth. The relationship between the atmospheric CO₂ concentration and surface temperature is shown in Figure 3.8-1 for the past 150 years.

Additional environmental setting information on climate change and CEQA guidelines regarding climate change are presented in DWR (2013).

3.8.2 ENVIRONMENTAL EFFECTS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII.Greenhouse Gas Emissions. Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

1800 - 2005

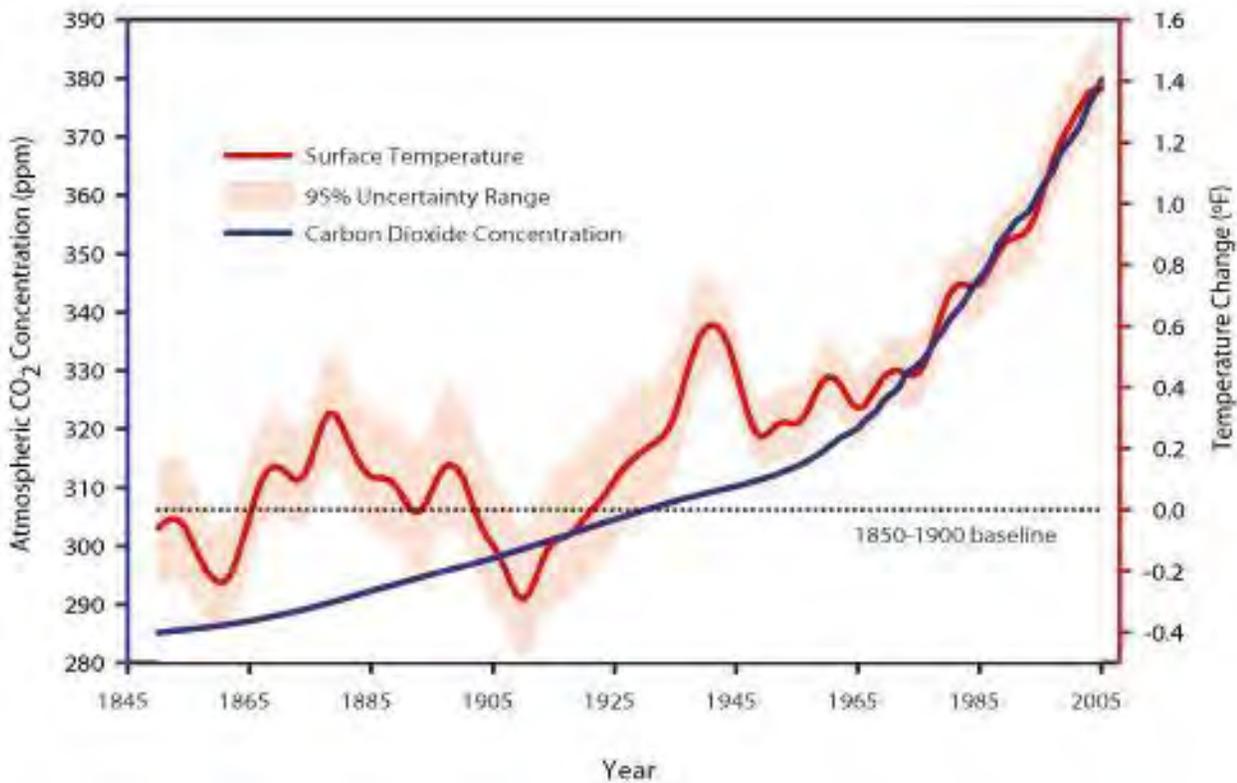


Figure 3.8-1. Atmospheric CO₂ and Global Surface Temperature Trends

The proposed project and project refinement activities would include the emission of GHGs from construction equipment and trucks hauling stockpile materials during site preparation. Once the sites are prepared there would be very little direct and indirect emissions as a result of the proposed project and project refinements. During emergency activation, the transportation of rock from quarries and stockpiles to barge-loading facilities and to levee breach locations in the Delta would occur under a declared emergency with or without the proposed project and project refinements. Furthermore, emergency activations are considered exempt from CEQA per CEQA Guidelines, Section 15269[a, b, c].

CONSTRUCTION-RELATED EMISSIONS DETERMINED BY DWR

In May 2012, DWR adopted the DWR Climate Action Plan-Phase I: Greenhouse Gas Emissions Reduction Plan (GGERP), which details DWR's efforts to reduce its GHG emissions consistent with Executive Order S-3-05 and the Global Warming Solutions Act of 2006 (Assembly Bill (AB) 32). DWR also adopted the Initial Study/Negative Declaration prepared for the GGERP in accordance with the CEQA Guidelines review and public process. Both the GGERP and Initial Study/Negative Declaration are incorporated herein by reference and are available at: <http://www.water.ca.gov/climatechange/CAP.cfm>. The GGERP provides estimates of historical (back to 1990), current, and future GHG emissions related to operations, construction, maintenance, and business practices (e.g., building-related energy use). The GGERP specifies aggressive 2020 and 2050 emission reduction goals and identifies a list of GHG emissions reduction measures to achieve these goals.

DWR specifically prepared its GGERP as a “Plan for the Reduction of Greenhouse Gas Emissions” for purposes of CEQA Guidelines Section 15183.5. That section provides that such a document, which must meet certain specified requirements, “may be used in the cumulative impacts analysis of later projects.” Because global climate change, by its very nature, is a global cumulative impact, an individual project’s compliance with a qualifying GHG Reduction Plan may suffice to mitigate the project’s incremental contribution to that cumulative impact to a level that is not “cumulatively considerable.” (See CEQA Guidelines § 15064, subd. (h)(3).)

More specifically, “[l]ater project-specific environmental documents may tier from and/or incorporate by reference” the “programmatically review” conducted for the GHG emissions reduction plan. “An environmental document that relies on a greenhouse gas reduction plan for a cumulative impacts analysis must identify those requirements specified in the plan that apply to the project, and, if those requirements are not otherwise binding and enforceable, incorporate those requirements as mitigation measures applicable to the project.” (CEQA Guidelines § 15183.5, subd. (b)(2).)

Section 12 of the GGERP outlines the steps that each DWR project will take to demonstrate consistency with the GGERP. These steps include: 1) analysis of GHG emissions from construction of the proposed project, 2) determination that the construction emissions from the project do not exceed the levels of construction emissions analyzed in the GGERP, 3) incorporation into the design of the project DWR’s project level GHG emissions reduction strategies, 4) determination that the project does not conflict with DWR’s ability to implement any of the “Specific Action” GHG emissions reduction measures identified in the GGERP, and 5) determination that the project would not add electricity demands to the State Water Project (SWP) system that could alter DWR’s emissions reduction trajectory in such a way as to impede its ability to meet its emissions reduction goals.

Consistent with these requirements, a GGERP Consistency Determination Checklist is attached in Section 3.8.4 documenting that the proposed project and project refinements have met each of the required elements.

DETERMINATION

Based on the analysis provided in the GGERP and the demonstration that the proposed project and project refinements are consistent with the GGERP (as shown in the attached Consistency Determination Checklist – Section 3.8.4), DWR as the lead agency has determined that the proposed project’s and project refinements’ incremental contribution to the cumulative impact of increasing atmospheric levels of GHGs is less than cumulatively considerable and, therefore, less than significant for project-specific construction activities. Therefore, the proposed project and project refinements would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; impacts from GHG emissions are **less than significant**. Furthermore, the proposed project and project refinements would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHG; this impact would be **less than significant**.

OPERATION-RELATED EMISSIONS

Operations of the proposed project and project refinements would result in temporary increases in emissions during declared emergency responses. This would include the use of construction equipment at the proposed project sites, worker commutes, and the transport of stockpiled materials to levee repair locations. The timing and location of levee breaches that would be repaired with the stockpiled material are highly unpredictable. Because

the specific emissions could be highly variable depending on the size and location(s) of levee breaches and failures, modeling project-generated emissions associated with emergency operations would be too speculative to be quantified at this time. Because the transport of rock from quarries and stockpiles to barge-loading facilities and to levee breach locations in the Delta would occur under a declared emergency with or without the project, they are considered exempt from CEQA per CEQA Guidelines, Section 15269[a, b, c]. Based on Section 3.8.2.2, “Determination,” above, and the information herein regarding operation-related emissions, the proposed project and project refinements would result in impacts that are **less than significant**.

3.8.3 MITIGATION MEASURES

No significant impacts are anticipated; therefore, no mitigation measures are needed to address impacts related to GHG emissions.

3.8.4 DWR GGERP CONSISTENCY DETERMINATION CHECKLIST AND CHG EMISSIONS INVENTORY

DWR’s project-specific GGERP Consistency Determination Checklist and supporting CHG Emissions inventory is included herein on the following 10 pages. The combined site consistency determination taken from the original IS/MND (DWR 2013) is presented first followed by the site consistency determinations for the Rio Vista and West Weber sites for the project with project refinements.

3.9 HAZARDS AND HAZARDOUS MATERIALS

3.9.1 ENVIRONMENTAL SETTING

None of the levee repair materials that would be stockpiled contain hazardous materials or waste.

The State Water Resources Control Board (SWRCB) GeoTracker database (SWRCB 2010) and DTSC EnviroStor database (DTSC 2012) were reviewed for each of the project sites. The findings are summarized below.

STOCKTON WEST WEBER SITE

The Stockton West Weber site is within an area that is part of a larger voluntary cleanup site for lead, polynuclear aromatic hydrocarbons (PAHs), and volatile organic compounds (VOCs) that were released during previous land use activities, including vehicle storage and refueling and railroad use. There are also three nearby designated Spills, Leaks, Investigations, and Cleanups (SLIC) sites on the peninsula where the Stockton West Weber site is located, all of which have achieved closed status. There is also an active EPA Superfund site located south of the site across the Old Mormon Slough. The proposed project and project refinements would not disturb the toxic contaminants in that area.

According to a Preliminary Endangerment Assessment report (PEA) completed in 2008 by Geo-Phase Environmental, Inc., the areas that are proposed for this project’s activities exhibited low levels of contaminants; however, none appeared to be in excess of regulatory standards for existing and planned commercial and industrial uses (Geo-Phase Environmental 2008). In 2013, DWR entered into an interagency agreement with DTSC, conducted applicable supplemental site investigations (SSIs), and developed SMPs and HASPs approved

DWR GHG Emissions Reduction Plan Consistency Determination Form For Projects Using Contractors or Other Outside Labor

Print Form



California Department of Water Resources
1416 9th Street
Sacramento, CA
95814
dwrclimatechange.water.ca.gov
www.water.ca.gov/climatechange

This form is to be used by DWR project managers to document a DWR CEQA project's consistency with the DWR Greenhouse Gas Emissions Reduction Plan. This form is to be used only when DWR is the Lead Agency and when contractors or outside labor and equipment are used to implement the project.

Additional Guidance on filling out this form can be found at:
dwrclimatechange.water.ca.gov/guidance_resources.cfm

The DWR Greenhouse Gas Emissions Reduction Plan can be accessed at:
<http://www.water.ca.gov/climatechange/CAP.cfm>

Project Name:	Delta Flood Emergency Facilities Improvement Project
Environmental Document type:	Mitigated Negative Declaration
Manager's Name:	John Paash
Manager's email:	John.Paasch@water.ca.gov
Division:	Division of Flood Management
Office, Branch, or Field Division	Hydrology & Flood Operations Office

Short Project Description: The purpose of the Delta Flood Emergency Facilities Improvement Project (FIP), a component of the Delta Flood Emergency Preparedness, Response, and Recovery Program is to ensure that the State has the appropriate infrastructure, materials and supplies in the Delta to respond to and recover quickly and effectively from major flood or earthquake disasters in the Sacramento-San Joaquin River Delta. To accomplish its purpose, the proposed project will establish material storage and transfer facility sites strategically located within the Delta.

Project GHG Emissions Summary

Total Construction Emissions mtCO₂e

Maximum Annual Construction Emissions mtCO₂e

All other emissions from the project not accounted for above will occur as ongoing operational, maintenance, or business activity emissions and therefore have already been accounted for and analyzed in the GGERP.

Extraordinary Construction Project Determination
Do total project construction emissions exceed 25,000 mtCO₂e for the entire construction phase or exceed 12,500 mtCO₂e in any single year of construction.

Yes - Additional analysis is required, consult with C4

No - Additional analysis not required

Project GHG Reduction Plan Checklist

All Project Level GHG Emissions Reduction Measures have been incorporated into the design or implementation plan for the project. (Project Level GHG Emissions Reduction Measures)

Or

All feasible Project Level GHG Emissions Reduction Measures have been incorporated into the design or implementation plan for the project and Measures not incorporated have been listed and determined not to apply to the proposed project (Include as an attachment).

Project does not conflict with any of the Specific Action GHG Emissions Reduction Measures. (Specific Action GHG Emissions Reduction Measures)

Would implementation of the project result in additional energy demands on the SWP system of 15 GWh/yr or greater?

Yes No

If you answered Yes, attach a Renewable Power Procurement Plan update approval letter from the DWR SWP Power and Risk Office.

Is there substantial evidence that the effects of the proposed project may be cumulatively considerable notwithstanding the proposed project's compliance with the requirements of the DWR GHG Reduction Plan?

Yes No

If you answered Yes, the project is not eligible for streamlined analysis of GHG emissions using the DWR GHG Emissions Reduction Plan. (See CEQA Guidelines, section 15183.5, subdivision (b)(2).)

Based on the information provided above and information provided in associated environmental documentation completed pursuant to the above referenced project, the DWR CEQA Climate Change Committee has determined that the proposed project is consistent with the DWR Greenhouse Gas Reduction Plan and the greenhouse gases emitted by the project are covered by the plan's analysis.

Project Manager Signature:		Date:	2/11/12
CE Approval Signature:		Date:	2/14/12

Attachments:

- GHG Emissions Inventory
- List and Explanation of excluded Project Level GHG Emissions Reduction Measures
- Plan to update Renewable Energy Procurement Plan from DWR SWP Power and Risk Office

Delta Flood Emergency Facilities Improvement Project - Inventory and Calculation of Greenhouse Gas Emissions

Emissions from Construction Equipment									
Line	Type of Equipment	Maximum Number per Day	Total Operation Days	Total Operation Hours ¹	Fuel Consumption Per Hour ²	Total Fuel Consumption (gal. diesel)	CO ₂ e/gal diesel ³	Total CO ₂ Equivalent Emissions (metric tons)	
1									
2	Cement and mortar mixer	3	2	48	0.29	14	0.010	0.1	
3	Crane	3	10	240	8.18	1,963	0.010	20.4	
4	Grader	3	15	360	5.66	2,038	0.010	21.2	
5	Tractors/Loaders/Backhoes	6	45	2160	2.37	5,119	0.010	53.2	
6	Off-Highway Truck	1	5	40	7.55	302	0.010	3.1	
7	Pump	3	15	360	1.3	468	0.010	4.9	
8	Water Truck	3	15	360	7.55	2,718	0.010	28.2	
9	Rubber Tired Dozer	3	15	360	8.36	3,010	0.010	31.3	
10	Paver			0	3.18	-	0.010	-	
11	Scraper	3	15	360	9.52	3,427	0.010	35.6	
12	Crane (Dredging)	1	2	16	16.28	260	0.010	2.7	
13	Roller	3	15	360	2.71	976	0.010	10.1	
14				0		-	0.010	-	
15				0		-	0.010	-	
16				0		-	0.010	-	
17				0		-	0.010	-	
18				0		-	0.010	-	
19				0		-	0.010	-	
20				0		-	0.010	-	
21				0		-	0.010	-	
22				0		-	0.010	-	
23				0		-	0.010	-	
24				0		-	0.010	-	
25	TOTAL						20,295		211

Sites	Max HP	Notes
All	15 HP	
All	500 HP	
All	175 HP	
All (2 at each site)	120 HP	
Rio Vista	250 HP	Off-Highway truck. Used to transfer sand stockpile
All	50 HP	Other equip
All	250 HP	Off-Highway truck
All	250 HP	
All	120 HP	
All	250 HP	
Brannan	750 HP	
All	120 HP	

26¹ An 8-hour work day is assumed.
 27² California Air Resource Board Offroad 2007 Emissions Inventory fuel consumption factors
 28³ World Resources Institute-Mobile combustion CO₂ emissions tool, June 2003 Version 1.2

30	Emissions from Transportation of Construction Workforce							
31	Average Number of Workers per Day	Total Number of Workdays	Average Distance Travelled (round trip)	Total Miles Travelled	Average Passenger Vehicle Fuel Efficiency ⁴	Total Fuel Consumption (gal. gasoline)	CO ₂ e/gal Gasoline ³	Total CO ₂ Equivalent Emissions (metric tons)
32	30	60	30	54000	20.8	2596.2	0.009	23

All. Assumes 10 workers per day per site

⁴ United States Environmental Protection Agency. 2008. Light-Duty Automotive Technology and Fuel Economy Trends: 1975 through 2008. [EPA420-R-08-015]

35	Emissions from Transportation of Construction Materials							
36	Trip Type	Total Number of Trips	Average Trip Distance	Total Miles Travelled	Average Semi-truck Fuel Efficiency	Total Fuel Consumption (gal. diesel)	CO ₂ e/gal Diesel ³	Total CO ₂ Equivalent Emissions (metric tons)
37	Delivery (stockpile)	4000	104	416000	5	83200	0.010	865
	Delivery (AB)	4250	60	255000	5	51000	0.010	530
38	Spoils						0.010	0
39	TOTAL							1395

Conservative distance assumption: lone to Rio Vista. Shorter distance to Stockton. Assumes 20 tons/truck haul

40	Construction Electricity Emissions			
42		MWh of electricity	mtCO ₂ e/MWh ⁵	CO ₂ e emissions
43	Electricity Needed	0	0.310	0
44	⁵ eGRID2010 Version 1.0, February 2011 (Year 2007 data) CAMX-WECC sub-region .			
45				
46	Total Construction Activity Emissions	1,628.8 (from lines 25, 32, 39, and 43)		
47	Total Years of Construction	2 Years		
48	Expected Start Date of Construction	July-14		
49				
50	Estimated Project Useful life	2 Years		
51	Average Annual Total GHG Emissions⁷	814.4 MT CO ₂ equivalents		
52	⁷ short-term construction emissions amortized over life of project			

**Site Improvements
Inventory and Calculation of Greenhouse Gas Emissions
Rio Vista**

Emissions from Construction Equipment

Line	Type of Equipment	Maximum Number per Day	Total Operation Days	Total Operation Hours ¹	Fuel Consumption Per Hour ²	Total Fuel Consumption (gal. diesel)	CO ₂ e/gal diesel ³	Total CO ₂ Equivalent Emissions (metric tons)
1	CLEAR AND GRUB, REMOVE TREES							
2	Dozers	1	20.0	160	8.00	1,280	0.010	13
3	Grader	1	20.0	160	9.00	1,440	0.010	15
4	Skid Steer Loaders	1	15.0	120	4.00	480	0.010	5
5	Service truck	1	3.0	24	3.00	72	0.010	1
6	Pickups	1	15.0	120	2.00	240	0.010	2
7	Tree chipper	1	4.0	32	3.00	96	0.010	1
8								
9	EXCAVATION							
10	Dozers	1	10.0	80	12.00	960	0.010	10
11	Grader	1	10.0	80	10.00	800	0.010	8
12	Loaders	1	10.0	80	3.50	280	0.010	3
13	Off road trucks	1	10.0	80	8.00	640	0.010	7
14	Scrapers	1	10.0	80	10.00	800	0.010	8
15	Service truck	1	5.0	40	3.00	120	0.010	1
16	Pickups	1	10.0	80	2.00	160	0.010	2
17								
18								
19	BACKFILL							
20	Dozers	1	20.0	160	12.00	1,920	0.010	20
21	Scrapers	1	20.0	160	10.00	1,600	0.010	17
22	Grader	2	30.0	480	12.00	5,760	0.010	60
23	Compactor	2	30.0	480	3.00	1,440	0.010	15
24	Service truck	1	10.0	80	3.00	240	0.010	2
25	Pickups	1	20.0	160	3.70	592	0.010	6
26								
27								
28	SPREAD AB							
29	Dozers	1	30.0	240	12.00	2,880	0.010	30
30	Grader	4	30.0	960	12.00	11,520	0.010	120
31	Loaders	1	10.0	80	3.50	280	0.010	3
32	Off road trucks	1	10.0	80	8.00	640	0.010	7
33	Service truck	1	10.0	80	3.00	240	0.010	2
34	Pickups	1	20.0	160	3.70	592	0.010	6
35								
36								
37	CONCRETE							
38	Concrete pump	1	15.0	120	5.00	600	0.010	6
39	Air compressor	2	15.0	240	3.00	720	0.010	7
40	Generator	1	15.0	120	3.00	360	0.010	4
41	Service truck	1	5.0	40	3.00	120	0.010	1
42	Pickups	1	20.0	160	3.70	592	0.010	6
43								
44	HMA							
45	Roller	1	3.0	24	3.00	72	0.010	1
46	Paving Equipment	1	3.0	24	3.00	72	0.010	1
47								
48								

49	K RAIL							
50	Rough Terrain Forklifts	1	18.0	144	3.00	432	0.010	4
51	Dozers	1	10.0	80	8.50	680	0.010	7
52	Compactor	1	10.0	80	4.00	320	0.010	3
53	Grader	1	15.0	120	12.00	1,440	0.010	15
54	Service truck	1	5.0	40	3.00	120	0.010	1
55								
56								
57	METAL BEAM GUARDRAIL							
58	Rough Terrain Forklifts	1	10.0	80	3.00	240	0.010	2
59	Skid Steer Loaders/auger	1	10.0	80	3.00	240	0.010	2
60	Work truck	1	10.0	80	3.00	240	0.010	2
61								
62	FENCE							
63	Rough Terrain Forklifts	1	8.0	64	3.00	192	0.010	2
64	Skid Steer Loaders/auger	1	8.0	64	3.00	192	0.010	2
65	Work truck	1	8.0	64	3.00	192	0.010	2
66								
67	CMP CULVERT							
68	Rough Terrain Forklifts	1	5.0	40	4.00	160	0.010	2
69	Skid Steer Loaders	1	5.0	40	3.00	120	0.010	1
70	Work truck	1	5.0	40	2.50	100	0.010	1
71								
72	ELEC WORK							
73	Trenchers	1	15.0	120	3.50	420	0.010	4
74	Work truck	1	15.0	120	2.50	300	0.010	3
75								
76	GEOTEXTILE FABRIC							
77	Rough Terrain Forklifts	1	15.0	120	3.00	360	0.010	4
78								
79	TOTAL					39,748		451
80		8 Hours per work day						
81	California Air Resource Board Offroad 2007 Emissions Inventory fuel consumption factors							
82	World Resources Institute-Mobile combustion CO ₂ emissions tool, June 2003 Version 1.2							
83								
84	Emissions from Transportation of Construction Workforce							
85	Average Number of Workers per Day	Total Number of Workdays	Average Distance Travelled (round trip)	Total Miles Travelled	Average Passenger Vehicle Fuel Efficiency⁴	Total Fuel Consumption (gal. gasoline)	CO₂e/gal Gasoline³	Total CO₂ Equivalent Emissions (metric tons)
86	15	60	30	27,000	20.8	1,298	0.009	12
87	⁴ United States Environmental Protection Agency. 2008. Light-Duty Automotive Technology and Fuel Economy Trends: 1975 through 2008. [EPA420-R-08-015]							

88								
89 Emissions from Transportation of Construction Materials								
90	Trip Type	Total Number of Trips	Average Trip Distance	Total Miles Travelled	Average Semi-truck Fuel Efficiency	Total Fuel Consumption (gal. diesel)	CO₂e/gal Diesel³	Total CO₂ Equivalent Emissions (metric tons)
91	Deliver AB	1773	30.00	53,190	6	8,865	0.010	92
92	Deliver HMA	13	30.00	390	6	65	0.010	1
93	Deliver Concrete&R	110	30.00	3,300	6	550	0.010	6
94	Deliver K rail	53	30.00	1,590	6	265	0.010	3
95	CMP, guardrail, etc	50	30.00	1,500	6	250	0.010	3
96	Remove trees & grub	10	30.00	300	6	50	0.010	1
97	TOTAL	2009		60,270		10,045		104
98								
99 Construction Electricity Emissions								
100		MWh of electricity	mtCO₂/MWh⁵	CO₂ e emissions				
101	Electricity Needed	0	0.310	0				
102	⁵ eGRID2010 Version 1.0, February 2011 (Year 2007 data) CAMX-WECC sub-region .							
103								
104	Total Construction Activity Emissions	567 (from lines 34, 41, 47, and 51)						
105	Total Years of Construction	60 days						
106	Expected Start Date of Construction	May 1, 2015						
107								
108	Estimated Project Useful life	5 Years						
109	Average Annual Total GHG Emissions	113 MT CO ₂ equivalents						
	⁷ short-term construction emissions amortized over life of project							

**West Weber Avenue Improvements
Inventory and Calculation of Greenhouse Gas Emissions
Port of Stockton**

Emissions from Construction Equipment									
Line	Type of Equipment	Maximum Number per Day	Total Operation Days	Total Operation Hours ¹	Fuel Consumption Per Hour ²	Total Fuel Consumption (gal. diesel)	CO ₂ e/gal diesel ³	Total CO ₂ Equivalent Emissions (metric tons)	
1	RELOCATE ROCK FROM PORT OF STOCKTON								
2	Loaders	4	120	3840	2.37	9,101	0.010	95	Load rock
3	Rock truck	6	120	5760	12.35	71,136	0.010	739	Transport rock
4	CLEAR AND GRUB								
5	Dozers	4	25	800	8.00	6,400	0.010	67	Clear ground
6	Grader	5	25	1000	9.00	9,000	0.010	94	Clear ground
7	Service truck	1	5	40	3.00	120	0.010	1	Service equipment
8	Pickups	1	20	160	2.00	320	0.010	3	Supervision
9	Loader	2	15	240	3.00	720	0.010	7	Load trucks
10	EXCAVATION FOR BUILDINGS								
11	Dozers	1	5	40	12.00	480	0.010	5	Excavate buildings
12	Grader	1	5	40	10.00	400	0.010	4	Grade
13	Service truck	1	1	8	3.00	24	0.010	0	Service equipment
14	Pickups	1	2	16	2.00	32	0.010	0	Supervision
15	IMPORTED FILL, SPREAD								
16	Dozers	2	20	320	12.00	3,840	0.010	40	Spread fill
17	Grader	3	20	480	12.00	5,760	0.010	60	Spread fill
18	Compactor	2	25	400	3.00	1,200	0.010	12	Compact backfill
19	Service truck	1	5	40	3.00	120	0.010	1	Service equipment
20	Pickups	1	25	200	3.70	740	0.010	8	Supervision
21	GEOTEXTILE FABRIC, SPREAD								
22	Rough Terrain Forklifts	2	15	240	2.50	600	0.010	6	Handle materials
23	SPREAD AB								
24	Dozers	3	20	480	12.00	5,760	0.010	60	Spread fill
25	Grader	3	25	600	12.00	7,200	0.010	75	Spread fill
26	Loaders	1	10	80	3.50	280	0.010	3	Load roads
27	Off road trucks	1	10	80	8.00	640	0.010	7	Transport on site
28	Service truck	1	20	160	3.00	480	0.010	5	Service equipment
29	Pickups	1	30	240	3.70	888	0.010	9	Supervision
30	CONCRETE								
31	Concrete pump	1	10	80	5.00	400	0.010	4	Pump concrete
32	Air compressor	2	10	160	3.00	480	0.010	5	Run vibrators
33	Generator	1	10	80	3.00	240	0.010	2	Run forming saws
34	Service truck	1	5	40	3.00	120	0.010	1	Service equipment
35	Pickups	1	10	80	3.70	296	0.010	3	Supervision
36	ELEC WORK								
37	Trenchers	1	12	96	3.50	336	0.010	3	Trench ditches
38	Dozer	1	10	80	2.50	200	0.010	2	Backfill trenches
39	Compactors	1	10	80	1.50	120	0.010	1	Compact backfill
40	Work truck	1	10	80	2.50	200	0.010	2	Haul materials to trench
41	HMA								
42	Grader	1	2	16	3.00	48	0.010	0	Spread HMA
43	Roller	1	2	16	3.00	48	0.010	0	Compact HMA
44	Paving Equipment	1	2	16	3.00	48	0.010	0	Spread HMA
45	RIPRAP								
46	Excavator	1	19	152	10.00	1,520	0.010	16	Place rock
47	Rubber tired loaders	1	19	152	10.00	1,520	0.010	16	Handle rock at work site
48									
49	FENCE								
50	Rough Terrain Forklifts	1	12	96	3.00	288	0.010	3	Handle fencing
51	Skid Steer Loaders/Auger	1	12	96	3.00	288	0.010	3	Auger holes
52	Work truck	1	8	64	3.00	192	0.010	2	Distribute materials to work location
53	DOLPHIN PILES								
54	Tug	1	2	16	10.00	160	0.010	2	Mobilize and demobilize
55	Tug/Crane on barge	1	25	200	3.00	600	0.010	6	Handle barge during drive

56	Crane on barge	1	25	200	12.00	2,400	0.010	25	Drive piles	
57	Work truck	1	3	24	2.00	48	0.010	0	Handle piles at loading area	
58	Rough Terrain Forklifts	1	5	40	2.50	100	0.010	1	Handle piles at loading area	
59	CONVEYOR PILES									
60	Tug	1	2	16	10.00	160	0.010	2	Mobilize and demobilize	
61	Tug/Crane on barge	1	6	48	3.00	144	0.010	1	Handle barge during driving	
62	Crane on barge	1	6	48	12.00	576	0.010	6	Drive piles	
63	Work truck	1	1	8	2.00	16	0.010	0	Handle piles at loading area	
64	Rough Terrain Forklifts	1	1	8	2.50	20	0.010	0	Handle piles at loading area	
65	REMOVE WOOD PILES									
66	Tug/Crane on barge	1	4	32	3.00	96	0.010	1	Handle barge at work site	
67	Crane on barge	1	4	32	3.50	112	0.010	1	Pull piles	
68	Tug	1	2	16	10.00	160	0.010	2	Mobilize and demobilize	
69										
70	METAL BEAM GUARDRAIL									
71	Rough Terrain Forklifts	1	7	56	3.00	168	0.010	2	Handle materials	
72	Skid-Steer Loaders/Auger	1	7	56	3.00	168	0.010	2	Auger holes	
73	Work truck	1	7	56	3.00	168	0.010	2	Deliver materials to work location	
74	CMP CULVERT									
75	Trenchers	2	13	208	3.50	728	0.010	8	Excavate trenches	
76	Rough Terrain Forklifts	1	5	40	2.00	80	0.010	1	Handle CMP off trucks	
77	Dozer	1	13	104	3.50	364	0.010	4	Place backfill	
78	Compactors	2	13	208	2.00	416	0.010	4	Compact backfill	
79	Work truck	1	5	40	2.50	100	0.010	1	Deliver CMP to work location	
80	TOTAL						138,369		1,438	

81 8 Hours per work day
82 California Air Resource Board Official 2007 Emissions Inventory fuel consumption factors
83 World Resources Institute-Mobile combustion CO₂ emissions tool, June 2003 Version 1.2
84

85 Emissions from Transportation of Construction Workforce

86	Average Number of Workers per Day	Total Number of Workdays	Average Distance Travelled (round trip)	Total Miles Travelled	Average Passenger Vehicle Fuel Efficiency ⁴	Total Fuel Consumption (gal. gasoline)	CO ₂ e/gal Gasoline ³	Total CO ₂ Equivalent Emissions (metric tons)
87	10	120	20	24000	20.8	1154	0.00901	10
88	20	60	20	24000	20.8	1154	0.00901	10
89	30	180	40	48000		2308	0.009	21

90 ⁴ United States Environmental Protection Agency, 2008. Light-Duty Automotive Technology and Fuel Economy Trends: 1975 through 2008. [EPA420-R-08-015]

91

92 Emissions from Transportation of Construction Materials

93	Trip Type	Total Number of Trips	Average Trip Distance	Total Miles Travelled	Average Semi-truck Fuel Efficiency	Total Fuel Consumption (gal. diesel)	CO ₂ e/gal Diesel ³	Total CO ₂ Equivalent Emissions (metric tons)
94	Transfer rock	5750	5.00	28,750	6	4,792	0.010	50
95	Remove clear & grub	1,500	30.00	45,000	6	7,500	0.010	78
96	Remove wood piles	2	30.00	54	6	9	0.010	0
97	Import fill	1,500	30.00	45,000	6	7,500	0.010	78
98	Deliver geotextile	73	30.00	2,178	6	363	0.010	4
99	Deliver concrete	223	30.00	6,697	6	1,116	0.010	12
100	Deliver HMA, fence, guard rail, CMP	25	30.00	737	6	123	0.010	1
101	Deliver riprap	100	30.00	3,000	6	500	0.010	5
102	Deliver piles	12						
103	TOTAL	9,184		131,415		21,903		228

104

105 Construction Electricity Emissions

106	MWh of electricity	mtCO ₂ e/MWh ⁵	CO ₂ e emissions
107	Electricity Needed	0	0.310

108 ⁵ eGRID2010 Version 1.0, February 2011 (Year 2007 data) CAMX-WECC sub-region.

109

110 Total Construction Activity Emissions

1,686 (from lines 98, 108, 112, and 126)

111 Total Years of Construction

180 days

112 Expected Start Date of Construction

Nov 1, 2015

113

114 Estimated Project Useful life

10 Years

115 Average Annual Total GHG Emissions⁷

169 MT CO₂ equivalents

116 ⁷ short-term construction emissions amortized over life of project

by DTSC for the Stockton West Weber site parcels. The noted SMPs and HASPs provide cautionary measures for all ground-disturbing activities and removal of excavated material. The SMPs and HASPs must be implemented prior to and during any ground-disturbing activities that may pose a toxic substance hazardous risk during construction of site improvements and subsequent ground-disturbing operations.

3.10 RIO VISTA SITE

There are no hazardous waste sites known to be present on or in the immediate vicinity of the Rio Vista site. The adjacent dock facilities owned by the Dutra Group have been in heavy industrial use and may have some unidentified contaminants. If any contaminants exist, they would not be disturbed as part of the proposed project and project refinements.

Additional environmental setting information is presented in DWR (2013).

3.10.1 ENVIRONMENTAL EFFECTS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. Hazards and Hazardous Materials. Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Construction of the proposed project and project refinements, such as clearing, grading, installation of concrete pads, and the 7,000 square-foot steel framed building, would entail the routine transport, use, or disposal of small amounts of hazardous materials such as fuels, oils, and lubricants. Project-related operational activities associated with stockpiling rock and loading barges in an emergency flood situation would also entail the use of minor amounts of hazardous materials such as fuels, oils, and lubricants in order to operate necessary equipment. However, the use of these materials is heavily regulated at the local, state, and federal level, and these regulations are intended to reduce the potential hazards to human health and the environment to the maximum extent feasible. Therefore, the proposed project and project refinements would not create a significant hazard to the public or the environment through the transport, use, or disposal of hazardous materials. This impact would be **less than significant**.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?

As discussed in a) above, construction and operation of the proposed project refinements would entail the routine use of small quantities of hazardous materials such as fuels, oils, and lubricants in order to operate necessary equipment. The use of these materials is heavily regulated at the local, state, and federal level, and these regulations are intended to reduce the potential hazards to human health and the environment to the maximum extent feasible. Furthermore, the proposed project and project refinements would be subject to Mitigation Measure HYD-1 in Appendix B, "Mitigation Monitoring and Reporting Program," which entails preparation and implementation of a SWPPP and BMPs designed to reduce hazards from accidental spills and procedures to clean up such spills if they do occur. Therefore, the impacts from the proposed project and project refinements related to accidental release of hazardous materials would be **less than significant with mitigation incorporated**.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

There are no schools within one-quarter mile of either of the project sites. Furthermore, the proposed project and project refinements do not include the emission or handling of acutely hazardous substances. Therefore, the project would have **no impact**.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

There are no known hazardous material contamination hazards on the Rio Vista site. Although contaminants were detected in soils at the Stockton West Weber site, the contaminants have been found to be present at low levels, consistent with background levels for the area. All identified SLIC sites are closed. The nearby superfund site south of Old Mormon Slough would not be disturbed or affected by the proposed project and project refinements.

To address any outstanding hazardous materials and/or any hazardous risks associated with disturbing the existing soils at the Stockton West Weber site, DWR has consulted with DTSC and entered into an interagency agreement with DTSC to conduct applicable SSIs, and has developed SMPs and HASPs approved by DTSC for the Stockton West Weber site parcels. The noted SMPs and HASPs must be implemented prior to and during any ground-disturbing activities that may pose a toxic substance hazardous risk during construction of site improvements and subsequent ground-disturbing operations. Furthermore, the proposed project and project refinements would be subject to Mitigation Measure HAZ-1 in Appendix B, "Mitigation Monitoring and Reporting Program," which requires DWR to implement SMPs and HASPs approved by DTSC for the Stockton West Weber site parcels. The noted SMPs and HASPs must be implemented prior to and during any ground-disturbing activities that may pose a toxic substance hazardous risk during construction of site improvements and subsequent ground-disturbing operations that will remain consistent with current commercial and industrial zoning land uses. Therefore, the impacts from construction and operation of the proposed project and project refinements on a known hazardous materials contamination site would be **less than significant with mitigation incorporated**.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

The Stockton West Weber site is not located within any airport land use plan or within 2 miles of a public airport or public use airport. The Rio Vista site is approximately 1.7 miles southeast of the Rio Vista Municipal Airport. This airport has two runways that are 2,200 feet long and 4,200 feet long, respectively. The airport accommodates general aviation and transient regional aviation, including small jet planes and helicopters. Construction of the proposed project and project refinements, such as clearing, minor grading, and construction of facilities, would not create any conflicts with the existing airport operations. None of the equipment used for project operations (e.g., transportation, storage, or transfer of quarry rock or other emergency flood-related materials) would represent a new use in the area since the Rio Vista site has been used for mining and storage of dredged materials for many decades. The Dutra Group docks have been used for barge loading operations in the past.

The proximity of the airport enhances the viability of this site as an ICP, as it includes aviation navigational aids, a heliport, and other support functions. DWR may consider locating the ICP on the airport property, subject to an agreement with the City of Rio Vista.

Because the proposed project and project refinements would not result in a safety hazard for aviation or for people residing or working in the project area, there would be **no impact**.

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

The Stockton West Weber and Rio Vista sites are not in the vicinity of any private airstrips. The proposed project and project refinements would not result in an aircraft safety hazard for people residing or working in the project area; thus, there would be **no impact**.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The proposed project and project refinements entail implementation of an emergency response plan for repairing levee breaks and breaches in the Delta. Constructing the proposed project and project refinements and operating the emergency flood response stockpiles would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. Thus, there would be **no impact**.

h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

The Stockton West Weber and the Rio Vista sites are not located in the vicinity of wildlands and would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. There would be **no impact**.

3.10.2 MITIGATION MEASURES

Mitigation Measure HAZ-1: Develop and Implement Environmental Remediation Plans.

DWR has entered into an interagency agreement with the State Department of Toxic Substances Control (DTSC) ~~and has conducted to conduct~~ applicable supplemental site investigations (SSIs), and has developed Soil Management Plans (SMPs) and Health and Safety Plans (HASPs) approved by DTSC for the Stockton West Weber site parcels. The noted SMPs and HASPs must be implemented ~~shall develop environmental remediation plans that will be incorporated into the site plans and improvements proposed for the Stockton West Weber Avenue parcel(s) prior to and during~~ any ground-disturbing activities that may pose a toxic substance hazardous risk during construction of site improvements and subsequent ground-disturbing operations ~~facility operations~~ that will remain ~~be~~ consistent with current commercial and industrial zoning land uses.

3.10.3 IMPACTS AFTER APPLICATION OF MITIGATION MEASURES

As previously discussed, mitigation measures were designed to reduce potentially significant impacts to a less-than-significant level. Consequently, all hazards and hazardous materials impacts are **less than significant with mitigation incorporated**.

3.11 LAND USE AND PLANNING

3.11.1 ENVIRONMENTAL SETTING

STOCKTON WEST WEBER SITE

The Stockton West Weber site is located near the Port of Stockton in San Joaquin County and consists of three parcels, totaling approximately 22.6 acres. The site has previously been used for construction purposes and as a barging facility and contains dock facilities. There are two metal buildings on the site, one located north of and adjacent to West Weber Avenue and the other located adjacent to the north Bank of Old Mormon Slough.

The three parcels that comprise the Stockton West Weber site are zoned by San Joaquin County as Industrial, General (IG). All of the parcels along West Weber Avenue west of I-5 are designated IG, as are the parcels on the east and south of Old Mormon Slough. On the north bank of the Stockton Deep Water Ship Channel, directly across from the site the parcels are designated Commercial, General (CG) and the 2035 General Plan Land Use/Circulation Diagram designation is Commercial. The parcels to the west and south are designated as Industrial in the 2035 General Plan, while the parcels to the north and east are proposed as commercially zoned (City of Stockton 2007).

RIO VISTA SITE

The Rio Vista site is located on the west side of the Sacramento River, just north of the town of Rio Vista. The project site consists of 3.4 acres of land owned by the Sacramento-San Joaquin Drainage District through the State of California Central Valley Flood Protection Board (CVFPB) and used by DWR for rock stockpiling. A portion of the CVFPB property is currently under lease to ASTA Construction.

This site has been used as a hydraulic dredge disposal area and as a source of sand and aggregate since the early 1900s. Existing waterside activities at this site consist of industrial and commercial uses, including Dutra Group's dock and corporation yard facilities, as well as sand mining activities by Asta Construction.

According to the Solano County General Plan (November 4, 2008), land use zoning for Rio Vista along Airport Road, west of the Rio Vista site, is urban industrial. East of the city limit, including the southern portion of the Sacramento-San Joaquin Drainage District property managed by the CVFPB where the existing quarry rock stockpile is located, the land is designated as agricultural. Along the waterfront where the Dutra Group has its docking and barge facilities, the designation is urban industrial and water-dependent industrial.

3.11.2 ENVIRONMENTAL EFFECTS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
X. Land Use and Planning. Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) Physically divide an established community?

Construction of the project and project refinements would occur on lands that are used for construction or industrial purposes. Because there are no existing residences within either of the project sites, implementation of the proposed project and project refinements would not physically divide an established community. Therefore, the proposed project and project refinements would have **no impact**.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

Implementation of the proposed project and project refinements at the Stockton West Weber site would include construction of aggregate-based access roads, a 7,000-square-foot steel-frame building, concrete foundations for rock conveyors, and temporary office trailers; installation of a pre-fabricated restroom facility; establishment of a quarry rock stockpile and installation of spud piles and dolphin pile clusters. The site has previously been used for construction purposes. As discussed above, the Stockton Weber Avenue site is zoned as IG, and the proposed project and project refinements would not conflict with the IG zoning of the project site.

Implementation of the proposed project and project refinements at the Rio Vista site would include additional clearing, a smaller parking area, road widening, and site improvements for future temporary office trailers. As discussed above, the project site is zoned by the Solano County General Plan as urban industrial. The proposed project and project refinements would not conflict with the urban industrial zoning of the Rio Vista site. The proposed project and project refinements would occur on land used as a dredge disposal area and as a source of sand and aggregate since the early 1900s. The proposed project and project refinements would not change the overall use of the Rio Vista site and would not hinder stockpiling or dredging operations.

In addition, by preparing and responding more quickly and effectively to an emergency response in the event of a levee breach or failure in the Delta, the proposed project would reduce the effects of water inundation to the

existing land uses; therefore, the proposed project would potentially provide beneficial impacts to existing land uses located in the vicinity of a levee failure. For the reasons discussed above, the proposed project would not conflict with an applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Therefore, the project would have **no impact**.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan (NCCP)?

The Stockton West Weber site is within the geographic area covered by the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP). This plan is designed to balance open space conservation and conversion of open space to non-open space, while protecting agricultural uses, property rights, and long-term management of plants, fish, and wildlife. Because the Stockton West Weber site does not qualify as “open space” nor does it provide connectivity to other open space, the proposed project and project refinements would not conflict with the SJMSCP. (See Section 3.4, “Biological Resources,” for further discussion.) Therefore, the project would have **no impact**.

3.11.3 MITIGATION MEASURES

No significant impacts are anticipated; therefore, no mitigation measures are needed or proposed for land use.

3.12 MINERAL RESOURCES

3.12.1 ENVIRONMENTAL SETTING

STOCKTON WEST WEBER SITE

The Stockton West Weber site, in San Joaquin County, is located in an area classified by the California Geological Survey (CGS) as mineral resource zone (MRZ) 1: areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence (Jensen and Silva 1988: Plate 9).

RIO VISTA SITE

The Rio Vista site, in eastern Solano County, is not located in an area that is included in a CGS mineral land classification report. However, the Rio Vista Sand Pit (formerly the Asta Sand Pit), operated by Asta Construction, is an existing sand and clay mining operation, a portion of which is located on part of the Rio Vista site (Larosse et al. 1999 and Chapter 2, “Project Description”). The Rio Vista site is also located within the Rio Vista Gas Field. This large natural gas field, which spans more than 29,000 acres, was discovered in 1936 and has been in continuous operation since that time. It has produced over 3.6 trillion cubic feet of natural gas so far, and contains an estimated reserve of approximately 330 billion cubic feet (California Division of Oil, Gas, and Geothermal Resources 2009).

Additional environmental setting information is presented in DWR (2013).

3.12.2 ENVIRONMENTAL EFFECTS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. Mineral Resources. Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

The Rio Vista site is located within the Rio Vista Gas Field, and a portion of the site is leased by Asta Construction for sand mining operations. However, the proposed project and project refinements, such as site clearing, minor grading, construction of concrete foundations, and widening of the existing access road, would have no effect on the existing Asta Construction mining operation or on the operation of the existing Rio Vista Gas Field. Furthermore, the proposed project and project refinements would entail stockpiling of sand for use in levee emergency repairs, which would be an appropriate use of the existing mineral resource at the Rio Vista site. The Stockton West Weber site is located in an area where CGS has determined that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence (Jensen and Silva 1988:Plate 9). Therefore, the proposed project and project refinements would have **no impact** on known, regionally important mineral resources.

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

The Rio Vista Gas Field is discussed as an important source of natural gas and the Rio Vista Sand Pit is shown an existing source of sand in the *Solano County General Plan* (Solano County 2008: Chapter 4). However, as stated above, the proposed project and project refinements would have no effect on the existing Asta Construction mining operation or on the operation of the existing Rio Vista Gas Field. Furthermore, the proposed project and project refinements would entail stockpiling of sand for use in levee emergency repairs, which would be an appropriate use of the existing mineral resource at the Rio Vista site. The Stockton West Weber site is not located in a locally-designated important mineral resource recovery site (San Joaquin County 1992). Therefore, the proposed project and project refinements would have **no impact** on known, locally important mineral resources.

3.12.3 MITIGATION MEASURES

No significant impacts are anticipated; therefore, no mitigation measures are needed to address impacts to mineral resources.

3.13 UTILITIES AND SERVICE SYSTEMS

3.13.1 ENVIRONMENTAL SETTING

The proposed project and project refinements would be built on sites that are currently developed and have been used as industrial sites, dredged materials disposal, and storage sites. The proposed project and project refinements would not include or induce construction of new homes or extend public roadways or infrastructure.

3.13.2 ENVIRONMENTAL EFFECTS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. Utilities and Service Systems. Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand, in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

The proposed project and project refinements would include site grading, fencing, barge docking and loading facilities, new buildings, parking, temporary office trailers, utilities (water, power, communications, and wastewater), lighting, and security improvements. None of these activities would result in the need for wastewater

service. In addition, the proposed project and project refinements would not include any new development that would require wastewater treatment.

The proposed project and project refinements at the Stockton West Weber site include installation of a pre-fabricated restroom facility with a connection to the City of Stockton sewer system or a concrete waste vault. Portable restroom facilities would be used at the Rio Vista site. These restroom facilities would not result in the need for wastewater treatment service. Therefore, the proposed project and project refinements would not result in wastewater discharges that exceed the Central Valley Regional Water Quality Control Board's requirements, and the project would have **no impact**.

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Dust control during construction activities and emergency operations would require the use of water; however, the amount of water would be minimal and existing facilities would have adequate capacity for watering activities. As discussed under question a) above, the proposed project and project refinements would not require wastewater service. In addition, the proposed project and project refinements would not include any new development that would require water treatment. Because the proposed project and project refinements would not require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the proposed project and project refinements would have **no impact**.

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

The proposed project and project refinements at the Stockton West Weber and Rio Vista sites would create additional impervious surfaces; however, the majority of the sites would still consist of pervious surfaces, including the aggregate and rock stockpiles. Because the proposed project and project refinements would not result in significant increases in storm water runoff, and with storm drainage improvements incorporated into site plans for the Stockton West Weber to reduce direct run-off into the adjoining bodies of water, the proposed project and project refinements would have **no impact**.

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

Construction activities and movement of materials at the Stockton West Weber and Rio Vista sites could create dust, and the graveled areas would require watering during construction, stockpiling activities, barge loading, and truck hauling activities to minimize the creation of dust. Water for reducing the creation of dust is generally obtained from the site or from nearby water sources such as fire hydrants or existing water spigots. Water supply for the new restroom and the warehouse buildings would be provided via new underground piping that would connect to the existing municipal water supply. Since use of the project site would be temporary and generally in response to limited emergency situations, water use would also be temporary and existing water sources and supply would be sufficient. Therefore, the proposed project and project refinements would have a **no impact**.

- e) **Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand, in addition to the provider's existing commitments?**

As discussed under questions a) and b) above, the proposed project and project refinements would not generate any wastewater. Because the proposed project and project refinements would not exceed a wastewater treatment provider's capacity, the proposed project and project refinements would have **no impact**.

- f) **Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?**

The proposed project and project refinements propose site clearing, grubbing, and the removal of organic material including trees and shrubs. The 2013 CALGreen Code (Title 24, Part 11 of the California Code of Regulations) requires that 100 percent of trees, stumps, rocks, and associated vegetation and soils resulting primarily from land clearing be reused or recycled.

Any solid waste generated during construction activities would be incidental. Workers that would be onsite would use available refuse containers in the project vicinity for disposing of solid waste. Additional solid waste generated during stockpiling and emergency operations would be temporary and minimal. Any solid waste generated during project activities would be disposed in the Foothill Sanitary Landfill. Because the Foothill Sanitary Landfill has a permitted throughput of 1,500 tons per day and an expected closure date of 2082, it is anticipated that this facility could accommodate the small amount of solid waste that could be generated during project activities (CalRecycle 2014). Therefore, this impact is considered **less than significant**.

- g) **Comply with federal, state, and local statutes and regulations related to solid waste?**

As discussed under f) above, vegetation and trees that were removed would be reused or recycled, in compliance with the 2013 California Green Building Code. Any solid waste generated during project activities would be incidental and disposed in the Foothill Sanitary Landfill. Transportation and disposal would be in accordance with all applicable federal, state, and local statutes and regulations. Therefore, the project would have **no impact**.

3.13.3 MITIGATION MEASURES

No significant impacts are anticipated; therefore, no mitigation measures are needed or proposed for utilities and service systems.

3.14 NOISE

3.14.1 ENVIRONMENTAL SETTING

CITY OF STOCKTON

General Plan: The Noise Element of the City of Stockton General Plan contains the following policies and standards applicable to the proposed project and project refinements:

HS-2.11 Limiting Construction Activities: The City shall limit construction activities to the hours of 7 a.m. to 7 p.m., Monday through Saturday. No construction shall occur on Sundays or national holidays without a written permit from the City.

Municipal Code: The City of Stockton Municipal Code contains the following standards applicable to the proposed project and project refinements:

Division 16-340 Noise Standards: 16-340.020 – Activities Exempt from Noise Regulations: The following activities shall be exempt from the provisions of this Division:

A. Emergency exemption. The emission of sound for the purpose of alerting persons to the existence of an emergency, or the emission of sound in the performance of emergency work. Does not include permanently installed emergency generators.

E. State or Federal pre-exempted activities. Any activity, to the extent the regulation of it has been preempted by State or Federal law.

F. Public health and safety activities. All transportation, flood control, and utility company maintenance and construction operations at any time on public rights-of-way, and those situations that may occur on private property deemed necessary to serve the best interest of the public and to protect the public's health and wellbeing, including, debris and limb removal, removal of damaged poles and vehicles, removal of downed wires, repairing traffic signals, repair of water hydrants and mains, gas lines, oil lines, and sewers, restoring electrical service, street sweeping, unplugging sewers, vacuuming catch basins, etc. The regular testing of motorized equipment and pumps shall not be exempt.

16-340.030 – Activities Deemed Violations of this Division: The following acts are a violation of this Division and are therefore prohibited:

16-340.030A – Construction Noise. Operating or causing the operation of tools or equipment on private property used in alteration, construction, demolition, drilling, or repair work between the hours of 10 p.m. and 7 a.m., so that the sound creates a noise disturbance across a residential property line, except for emergency work of public service utilities.

SAN JOAQUIN COUNTY

San Joaquin County has adopted a noise ordinance and noise level guidelines (San Joaquin County, 1978) for land uses within its unincorporated territory. In the Ordinance Code of San Joaquin County for Zoning and Subdivision Regulations (Ordinance Nos. 2831 and 3005), the county has set noise limits for various land uses, summarized as follows (San Joaquin County, 1988):

- a) The sound level within the Commercial-Manufacturing, Restricted-Manufacturing, Manufacturing-1, and Manufacturing-2 zones must not exceed 75 dB Ldn at property lines of the property being developed.
- b) No sound level must exceed 65 dB Ldn at property lines of properties that abut areas developed as residential, areas zoned residential, or areas shown for residential use on the General Plan.

- c) No sound level must exceed 65 dB Ldn at the property lines of properties that abut local parks, schools, hospitals, homes for the care of the aged and infirm, and rest homes.

The county also adopted the California Airport Noise Standards, which set the 65 dB CNEL and Ldn maximum exterior noise level for residential land uses, and the California Sound Transmission Control Standards, which require developers within areas of 60 dB CNEL and Ldn to submit acoustical studies demonstrating that a 45 dB CNEL and Ldn will be achieved (San Joaquin County, 1978).

CITY OF RIO VISTA

The Rio Vista site lies outside the Rio Vista City limit line, but abuts it on the south, west, and north. Materials stockpiled on the site would be trucked to the dock facilities owned by the Dutra Group along the waterfront to the south, which lie within the City limit. Accordingly, this assessment considers the potential for impacts on sensitive receptors in the City and the thresholds for impact established by the City.

The City of Rio Vista Municipal Code establishes requirements for noise in several categories. The categories relevant to the project include highway noise and construction equipment noise. The criteria are shown below:

17.52.020 Highway noise.

Noise along the highways is to be related to the land use and distance from the highway.

- A. Noise Standards. The relationship of land use on highways and noise level is established as follows:

Table 3.13-1. City of Rio Vista Design Noise Thresholds		
Land Use Category	Design Noise Level	Description of Land Use Category
A	60 dBA (exterior)	Tracts of lands in which serenity and quiet are of extraordinary significance and serve an important public need, and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose. Such areas could include amphitheaters, particular parks or portions of parks, or open spaces which are dedicated or recognized by appropriate local officials for activities requiring special qualities of serenity and quiet.
B	70 dBA (exterior)	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, picnic areas, recreation areas, playgrounds, active sports areas and parks.
C	75 dBA (exterior)	Developed lands, properties or activities not included in categories A and B above.
D	55 dBA (interior)	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals and auditoriums.

- B. Method of Application for Land Use Category D. Although State Highway 12 is planned to bypass Rio Vista in the future, applications along the now existing route through the city may be processed and noise standards may have to be verified with the State Department of Highways, Stockton. This is part of the environmental impact report to be prepared by the applicant. Noise reduction factors higher than those shown below may be used when field measurements of the structure in question indicate that a higher value is justified. In determining whether to use open or closed windows, the

choice should be governed by the normal condition of the windows. That is, any building having year round air treatment should be treated as the closed window case. Buildings not having air conditioning and which have open windows a substantial amount of time should be treated as the open window case.

Building Type	Window Condition	Noise Reduction Due to Exterior of the Structure	Corresponding Highest Exterior Noise Level Which Would Achieve an Interior Design Noise Level of 55 dBA
All	Open	10 dBA	65 dBA
Light Frame	Ordinary sash, closed	20	75
Light Frame	Ordinary sash, with storm windows	25	80
Masonry	Single glazed	25	80
Masonry	Double glazed	35	90

Exceptions. The design noise levels set out in these standards represent the highest desirable noise level conditions. State highway departments shall endeavor to meet the design noise levels in planning, locating, and designing highway improvements. However, there may be sections of highway where it would be impracticable to apply noise abatement measures. This could occur where abatement measures would not be feasible or effective due to physical conditions, where the costs of abatement measures are high in relation to the benefits achieved or where the measures required to abate the noise condition conflict with other important values, such as desirable esthetic quality, important ecological conditions, highway safety, or air quality.

- C. Noise Reducers. Highway noise can be reduced in sensitive locations by putting up noise barriers. A twelve (12) foot high wall along the route may reduce noise by about twenty (20) percent (from eighty (80) decibels to sixty-five (65) decibels), but may produce an unattractive appearance. Small artificial hills properly landscaped may provide a more attractive appearance, but that approach would need more right-of-way lands. Other effective barriers are buffer planting strips on easements along the highway.
- D. Existing Structures. A structure existing prior to coming into force of this title shall not be deemed nonconforming by reason of failure to meet the noise requirements of this section.
- E. Location of Noise Contours. According to State Law Title 7, Section 65302(g) the State Highway Department is to undertake any highway traffic noise measurement in order to verify exact location of the noise contours for use by applicants. Noise measurements along other roads than state highways are to be provided by the applicant as part of the environmental impact report information. (Prior code Appendix B § 513(B))

17.52.030 Construction equipment noise.

It is unlawful for any person within a residential zone, or within a radius of five hundred (500) feet therefrom to operate equipment or perform any outside construction or repair work on buildings or structures within the city between the hours of seven p.m. and seven a.m. or on Sundays. Emergency works are excepted. (Ord. 612 § 1 Exh. A (part), 2006: prior code Appendix B § 513(C)).

SOLANO COUNTY

General zoning requirements for all land uses in Solano County prohibit noise that exceeds 65dBA LDN at any property line (Solano County Code Section. 28.70.10(B)(1)(b). In addition, for "...construction storage yards, incidental to construction or public works projects, shall show that adequate controls or measures will be taken to prevent offensive noise, odor, dust, fumes, smoke or vibration; shall be so located that generated traffic will not constitute a hazard or nuisance to surrounding property (Solano County Code Section 28.78.40 (B)(2)).

Additional environmental setting information is presented in DWR (2013).

3.14.2 ENVIRONMENTAL EFFECTS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. Noise. Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) Would the proposed Project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards?

Project-generated noise levels would be primarily associated with construction activities including site preparation, installation of concrete pads and foundations, material transport (e.g., hauling of riprap to the stockpile areas), stockpile construction, and other miscellaneous construction activities. These activities, including delivery of riprap to the stockpile sites, would occur during normal working hours (7 a.m. to 7 p.m., Mondays through Saturdays). Additional project-generated noise would occur temporarily during emergency events that require use of the stockpiled riprap and during replenishment of stockpiles following use of the rock during an emergency. However, as with the original stockpiling activity, delivery of riprap to replenish stockpiles following an emergency event would occur during normal working hours.

According to the Federal Highway Administration, the noise levels typically associated with the activities above can range from 79 to 91 dBA at 50 feet (Table 3.13-3). The simultaneous operation of on-site construction equipment associated with the proposed project and project refinements could result in combined intermittent noise levels higher than the noise level of the individual pieces of equipment. However, the noise levels would be expected to be below the thresholds set by both the City of Rio Vista and by Solano County for the sensitive receptors located along the waterfront south of the Dutra Group's dock facilities. Construction of site improvements and operation of the Stockton West Weber site would not increase noise levels above current uses. The Stockton West Weber site is located near the intersection of Interstate 5 and State Route 4 and near the Port of Stockton, areas of significant truck and transportation traffic within the City of Stockton, and San Joaquin County experiences significant noise levels from heavy vehicular and truck traffic passing through the Delta along Scenic SR 160.

All construction activities, including delivery of rock riprap to establish the stockpiles would occur during the daytime hours (working hours would be from 7 a.m. to 7 p.m., Monday through Saturday). Construction activities would not occur during the noise-sensitive hours (e.g., evening, nighttime, early morning, and Sunday), and construction-generated source noise would not result in the annoyance and/or sleep disruption to occupants of any existing noise-sensitive land uses in the project vicinity.

The proposed project refinements include new construction not originally identified in DWR (2013) at both the Stockton West Weber and Rio Vista sites; however, proposed project refinements are within the original project footprint and within the construction and operational schedules identified in DWR (2013). The proposed project and project refinements would not cause impacts that would expose persons to or generate noise levels in excess of standards established in local general plans; noise ordinances; or other applicable local, state, or federal standards. Therefore, the proposed project and project refinements would result in noise impacts that would be **less than significant**.

b) Result in exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?

Construction activities have the potential to result in varying degrees of temporary ground borne vibration, depending on the specific construction equipment used and operations involved. Vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance.

Equipment	Typical Noise Level (dBA) 50 ft. from Source*
Air Compressor	81
Backhoe	80
Compactor	82
Concrete Mixer	85
Concrete Pump	82
Concrete Vibrator	76
Crane Derrick	88
Crane Mobile	83
Dozer	85
Generator	81
Grader	85
Impact Wrench	85
Jack Hammer	88
Loader	85
Paver	89
Pneumatic Tool	85
Pump	76
Rail Saw	90
Rock Drill	98
Roller	74
Saw	76
Scarifier	83
Scraper	89
Shovel	82
Spike Driver	77
Tie Cutter	84
Tie Handler	80
Tie Inserter	85
Truck	88

With respect to the proposed project and project refinements, the use of trucks at the site would generate the maximum ground borne vibration in comparison to the other equipment mentioned. According to the Federal Transit Administration (FTA), vibration levels associated with the use of trucks is 0.076 inch per second (in/sec) peak particle velocity (PPV) and 86 vibration decibels VdB referenced to 1 microinch per second ($\mu\text{in}/\text{sec}$) and based on the root mean square (RMS) velocity amplitude] at 25 feet (DWR, 2007). Vibration levels decrease with distance from the source to receptor.

These vibration levels would not exceed Caltrans' recommended standards with respect to the prevention of structural building damage (0.2 and 0.08 in/sec PPV for normal and historical buildings) or FTA's maximum

acceptable vibration standard with respect to human response (80 VdB for residential uses) at nearby existing vibration-sensitive land uses. In addition, the long-term operation of the proposed project and project refinements would not include any major sources of vibration. Thus, project implementation would not result in the exposure of persons to or generation of excessive groundborne vibration or ground borne noise levels. Therefore, vibration and noise levels from the proposed project and project refinements would be **less than significant**.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Normal operations of the proposed project and project refinements would be temporary in nature. All construction activities would be short-term in nature and would not cause a permanent increase in ambient noise levels. Under an emergency response situation, levee repair and flood-fight materials would be delivered to flood locations and thus increase noise levels from truck traffic and barge-loading activities. Even during these flood-fighting activities, however, increased noise levels are episodic and not permanent. Consequently, there would not be a permanent increase in noise levels in the project vicinity from the proposed project and project refinements. This impact would be **less than significant**.

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

A temporary substantial increase in ambient noise levels in the project vicinity could be expected due to on-site construction from the proposed project and project refinements. Widening of the access road at the Rio Vista location could also result in temporary substantial ambient noise impacts. Implementation of construction Best Management Practices (BMPs) described in Mitigation Measure NOI-1 in Appendix B, "Mitigation Monitoring and Reporting Program," would mitigate short-term construction noise impacts to **less than significant with mitigation incorporated**.

e, f) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, and for a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

The Rio Vista site is approximately 1.7 miles south of Rio Vista Municipal Airport. It would not be anticipated that people residing near or working at the Rio Vista site would be exposed to excessive aviation noise levels. There would be **no impact**.

3.14.3 MITIGATION MEASURES

Mitigation Measure NOI-1: Implement Measures to Control Construction Equipment Noise Levels.

The contractor and/or DWR shall properly maintain construction equipment and equip it with noise control devices, such as exhaust mufflers or engine shrouds, in accordance with manufacturers' specifications. For non-emergency activities such as site construction and stockpiling quarry rock, operations will be limited to the periods 7:00 AM to 7:00 PM, Mondays through Saturdays.

3.14.4 IMPACTS AFTER APPLICATION OF MITIGATION MEASURES

As previously discussed, a mitigation measure was designed to reduce potentially significant impacts to a less-than-significant level. Consequently, all noise and vibration impacts are **less than significant with mitigation incorporated**.

3.15 POPULATION AND HOUSING

3.15.1 ENVIRONMENTAL SETTING

The population of the Delta region when the 2000 Census was conducted was 515,000, and minimal population growth has occurred since 2000. The Delta is comprised of portions of Alameda, Contra Costa, Sacramento, San Joaquin, Solano and Yolo Counties and the major cities located within the Delta area include Sacramento, Stockton, West Sacramento, and Oakley. Smaller communities such as Elk Grove, Tracy, Brentwood, and Rio Vista have seen rapid growth recently (California Water Plan, 2009). The populations of cities close to the project sites are shown in Table 3.14-1.

Table 3.14-1. Populations of Cities Close to Project Sites	
Stockton	279,513 ¹
Antioch	100,219 ²
Rio Vista	4,571
Notes:	
¹ California Department of Finance 2009	
² U.S. Census Bureau 2008	

3.15.2 ENVIRONMENTAL EFFECTS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. Population and Housing. Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Implementation of the proposed project refinements would include site grading and clearing; fencing; barge docking and loading facilities; new buildings, including a 7,000-square-foot steel framed building for warehouse use; parking; temporary office trailers; utilities (water, power, communications, and wastewater); lighting; and security improvements. All construction activities would be performed by DWR staff and contractors.

Any new utility infrastructure required to serve the project sites would be sized to accommodate project-related demands and would not be intended to serve any demands beyond the project needs. In addition, the proposed project and project refinements would not involve constructing new homes or businesses that could increase the population in the project vicinity. For these reasons, implementing the proposed project and project refinements would not directly or indirectly induce substantial population growth. Therefore, the proposed project and project refinements would have **no impact**.

b) Displace substantial numbers of existing homes, necessitating the construction of replacement housing elsewhere?

There are no existing homes located on either of the project sites and implementing the proposed project and project refinements would not displace existing housing or necessitate the construction of replacement housing elsewhere. Therefore, the project would have **no impact**.

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

For the reasons described in response to question 3.14(b) above, implementing the proposed project and project refinements would not displace a substantial number of people or necessitate the construction of replacement housing elsewhere. Therefore, the project would have **no impact**.

3.15.3 MITIGATION MEASURES

No significant impacts are anticipated; therefore, no mitigation measures are needed or proposed for population and housing.

3.16 PUBLIC SERVICES

3.16.1 ENVIRONMENTAL SETTING

The proposed Stockton West Weber and Rio Vista sites are previously developed industrial or industrial agricultural sites. The project activities would not result in the need for new or physically altered governmental facilities or related public services.

3.16.2 ENVIRONMENTAL EFFECTS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. Public Services. Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services.

The proposed project and project refinements would not result in the need for new fire and police protection services and facilities. The proposed project and project refinements would include site grading, fencing, barge docking and loading facilities, new buildings, parking, temporary office trailers, utilities (water, power, communications, and wastewater), lighting, and security improvements. Existing equipment at the project sites are in place to fight fires on-site, if needed. In the event of a fire requiring emergency response, existing public roadways and on-site access roads could be used to accommodate firefighting crews and equipment.

Implementation of the proposed project and project refinements would not provide any new housing that would generate new residents that increase demand for schools, parks, or other public services. Therefore, the proposed project and project refinements would not require the construction of new or expansion of existing government facilities that could have adverse impacts on the physical environment. The proposed project and project refinements would have **no impact**.

3.16.3 MITIGATION MEASURES

No significant impacts are anticipated; therefore, no mitigation measures are needed or proposed for public services.

3.17 RECREATION

3.17.1 ENVIRONMENTAL SETTING

The proposed project would provide stockpiles of levee repair materials, establish transfer facilities, and provide infrastructure to support emergency flood-fighting capabilities at three strategic locations in the Delta; proposed project refinements would occur at the Stockton West Weber and Rio Vista sites. Both of the proposed sites are previously disturbed and have been used in the past for industrial activities. No recreation facilities or activities are present on the Stockton West Weber or the Rio Vista sites.

3.17.2 ENVIRONMENTAL EFFECTS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. Recreation. Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

The proposed project and project refinements would not induce population growth, and therefore would not contribute to any increased use of recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. Therefore, the proposed project and project refinements would have **no impact**.

b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

The proposed project and project refinements do not include or require the construction or expansion of recreational facilities, and therefore an adverse effect on the environment from such construction would not occur. By preparing and responding more quickly and effectively to an emergency response in the event of a levee breach or failure in the Delta, the proposed project and project refinements would reduce the effects of water inundation to the existing land uses; therefore, the proposed project and project refinements could potentially provide beneficial impacts to recreational resources located in the vicinity of a levee failure. Therefore, the proposed project and project refinements would have **no adverse impact**.

3.17.3 MITIGATION MEASURES

No significant impacts are anticipated at the Stockton West Weber and Rio Vista sites; therefore, no mitigation measures are needed to address impacts to recreation for these two sites. (Mitigation Measure REC-1 is presented

in Appendix B, “Mitigation Monitoring and Reporting Program,” but is specific only to the BISRA site, which project refinements are not affecting.).

3.18 TRANSPORTATION/TRAFFIC

3.18.1 ENVIRONMENTAL SETTING

The proposed project activities consist of acquiring one site (Stockton West Weber site) and securing long-term use agreements with the CVFPB (Rio Vista site) and California Department of Parks and Recreation (DPR) (Brannan Island site), then constructing improvements on each site to facilitate storage and transfer of flood-fight materials, operation of Incident Command Posts, and related emergency operations. After construction, the sites would only be mobilized during emergency flood fighting activities and response. Once the project sites are prepared, no haul truck trips would be necessary and no additional traffic would be created until a flood emergency occurs. During a declared flood emergency, trucks would haul materials to the sites on an as-needed basis to support emergency operations. Following the emergency response activities, the stockpiles would be replenished to maintain the desired tonnage of material necessary at the proposed stockpile locations.

Additional environmental setting information is presented in DWR (2013).

3.18.2 ENVIRONMENTAL EFFECTS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. Transportation/Traffic. Would the project:				
a) Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

The proposed project and project refinements could result in a slight increase of truck traffic at the Stockton West Weber and Rio Vista sites during the construction phase and during replenishment of rock during or after a flood fight. The temporary nature of stockpiling operation at the project sites would not create a permanent or significant increase in traffic in relation to traffic load and capacity of the street systems conflicting with any plans, ordinances, and policies establishing measures of effectiveness for the performance of the circulation system. The proposed project and project refinements would not result in any conflicts with applicable transportation plans. Consequently, this impact would be **less than significant**.

b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Congestion resulting from construction and hauling levee repair and flood-fight materials during an emergency response situation could potentially conflict with applicable congestion management programs, level of service standards, and travel demand measures, or any other standards established by the county congestion management agency. The proposed project and project refinements would result in an increase in truck traffic during the construction phase at the Stockton West Weber and Rio Vista sites that could be potentially significant during construction or flood-fighting activities. Implementation of Mitigation Measure TRANS-1 in Appendix B, "Mitigation Monitoring and Reporting Program." would ensure potentially significant impacts will be reduced to **less than significant with mitigation incorporated**.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?

Neither the Stockton West Weber or Rio Vista sites are within an airport land use zone nor would the proposed project and project refinements result in a change of air traffic patterns; therefore, there would be **no impact**.

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The proposed project refinements include the widening of an existing access road at the Rio Vista site. The access road widening and other project features would remain compatible with surrounding land uses as evaluated in

DWR (2013) and could be deemed safer with the road widening improvements. No project design features would substantially increase transportation hazards. There would be **no impact**.

e) Result in inadequate emergency access?

The proposed project refinements could result in a slight increase of truck traffic during the construction phase at the Stockton West Weber and Rio Vista sites; however, the increase would remain limited in volume and duration as evaluated in DWR (2013). Therefore, the proposed project and project refinements would result in **no impact**.

f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

The Stockton West Weber and Rio Vista sites are not located within the immediate vicinity of any transit, bicycle, or pedestrian facilities. Any increased truck traffic resulting from the proposed project and project refinements would continue to use haul routes identified and evaluated in DWR (2013). There would be **no impact**.

3.18.3 MITIGATION MEASURES

TRANS-1: DWR, in Consultation with Caltrans Regional Offices, will Prepare a Traffic Management Plan (TMP) to Guide Activities during Construction Phase and Restocking Phase of the Proposed Project.

This plan will be prepared and support procurement of necessary Caltrans permits for the transport of heavy construction equipment and/or materials to/from the projects site, or any movement of oversized or excessive lad vehicles on the State Highway System. At a minimum, this plan shall define how to minimize the amount of time spent on construction transportation activities; how to minimize disruption of vehicle and alternative modes of traffic at all times, but particularly during periods of high traffic volumes; adequate signage and other controls, including flag persons, to ensure that traffic can flow adequately during construction; the identification of alternative routes that can meet the traffic flow requirements of a specific area, including communication (signs, webpages, etc.) with drivers and neighborhoods where construction activities will occur; and at the end of each construction day roadways shall be prepared for continued utilization without any significant roadway hazards remaining.

3.18.4 IMPACTS AFTER APPLICATION OF MITIGATION MEASURES

As previously discussed, a mitigation measure was designed to reduce potentially significant impacts to a less-than-significant level. Consequently, all transportation impacts are **less than significant with mitigation incorporated**.

3.19 MANDATORY FINDINGS OF SIGNIFICANCE

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. Mandatory Findings of Significance.				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Authority: Public Resources Code Sections 21083 and 21083.05.

Reference: Government Code Section 65088.4; Public Resources Code Sections 21080(c), 21080.1, 21080.3, 21083, 21083.05, 21083.3, 21093, 21094, 21095 and 21151; *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296; *Leonoff v. Monterey Board of Supervisors* (1990) 222 Cal.App.3d 1337; *Eureka Citizens for Responsible Govt. v. City of Eureka* (2007) 147 Cal.App.4th 357; *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th at 1109; *San Franciscans Upholding the Downtown Plan v. City and County of San Francisco* (2002) 102 Cal.App.4th 656.

- a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?**

The proposed project and project refinements would have the potential to significantly affect the environment in the areas described above. Mitigation has been proposed, however, for aesthetics, biological resources, cultural resources, hydrology and water quality, hazards and hazardous materials, noise, and recreation for the proposed project (DWR 2013). Furthermore, the project refinements have resulted in modification of Mitigation Measures BIO-2 and BIO-5 from DWR (2013) and two additional mitigation measures for biological resources (BIO-7 and BIO-8). Implementation of mitigation measures proposed in Appendix B, “Mitigation Monitoring and Reporting Program,” would reduce all adverse impacts to **less-than significant** levels. Therefore, the proposed project and

project refinements would not substantially degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; reduce the number or restrict the range of an endangered, rare, or threatened species; or eliminate important examples of the major periods of California history or prehistory.

b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

DWR (2013) identifies project-related impacts related to aesthetics, hydrology and water quality, and biological resources that would potentially result in cumulatively considerable impacts without mitigation. Mitigation is proposed in DWR (2013) and included in Appendix B, “Mitigation and Monitoring Program.” These effects remain **less than significant with mitigation incorporated**.

Aesthetics-related cumulative impacts are specific to the BISRA site; project refinements are not proposed for the BISRA site so therefore there would be no additional adverse effects from project refinements on aesthetic effects on the BISRA site. These effects remain **less than significant with mitigation incorporated**.

Relating to hydrology and water quality, the proposed project and project refinements with site improvements taking place on three separate sites within the Delta has the potential to threaten water quality; however, mitigation measures for the proposed project and project refinements require DWR to implement construction BMPs for all land clearing, land leveling, excavation, and fill operations associated with each set of site improvements. These effects remain **less than significant with mitigation incorporated**.

Relating to biological resources, the proposed project and project refinements would potentially have an impact on several threatened and endangered species located in riparian and wetland habitat areas. However, mitigation measures in DWR (2013) would require pre-construction sensitive species surveys to take place, potential sensitive habitat areas be fenced off to protect the species within, and DWR to secure Section 1600 Lake or Streambed Alteration permits for any activities waterside of the top of banks bordering Delta waterways. Two additional mitigation measures for project refinements would further minimize impacts to biological species, including potential impacts to special-status fish species during project construction. These effects remain **less than significant with mitigation incorporated**.

DWR would replenish the proposed stockpiles following use of the materials for emergency response actions, and could use additional sites in the future for storage of additional emergency flood fight materials; however, the use of additional sites would require compliance with all relevant ordinances and codes and would be subject to CEQA and other relevant environmental review processes. It is also speculative to identify the specific need and locations of any additional sites. Therefore, the proposed project and project refinements would not create a mandatory finding of significance from cumulative impacts for these issue areas and affects from the proposed project and project refinements would not be considered cumulatively considerable. Therefore, these effects from the proposed project and project refinements remain **less than significant with mitigation incorporated**.

c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?

The preceding analysis clearly demonstrates that the proposed project and project refinements would have beneficial direct effects on human beings by preparing the Delta for quick response to potentially catastrophic levee failures that would potentially put lives of people within the flooded area in danger as well as cause limited to substantial property damage. The proposed project and project refinements could also have environmental effects that, without mitigation, could affect human beings. Implementing the mitigation measures proposed herein and presented in Appendix B, “Mitigation Monitoring and Reporting Program,” however, reduce these impacts to **less than significant with mitigation incorporated.**

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*Assemblymember Jim Frazier
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Sacramento CA 94249-0011

*Assemblymember Susan Eggman
PO Box 942829, Room 2003
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*Assemblymember Susan Bonilla
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*State Senator Cathleen Galgiani
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Sacramento CA 95814

*Senate President pro Tem Darrell Steinberg
State Capitol, Room 205
Sacramento CA 95814

*State Senator Mark DeSaulnier
State Capitol, Room 5035
Sacramento CA 95814

Reclamation Districts

*Reclamation District 1 (Union Island)
311 East Main Street, Suite 504
Stockton, CA 95202

*Reclamation District 2 (Union Island)
311 East Main Street, Suite 504
Stockton, CA 95202

*Reclamation District 3 (Grand Island)
P. O. Box 1011,
Walnut Grove, CA 95690

*Reclamation District 17 (Mossdale)
P.O. Box 1461,
Stockton, CA 95201

*Reclamation District 38 (Staten Island)
P. O. Box 408
Walnut Grove, CA 95690

*Reclamation District 150 (Merritt Island)
37783 County Road 144,
Clarksburg, CA 95612

*Reclamation District 307 (Lisbon Island)
P. O. Box 518,
Clarksburg, CA 95612

*Reclamation District 317 (Lower Andrus Island)
P. O. Box 929,
Walnut Grove, CA 95690-0929

*Reclamation District 341 (Sherman Island)
18419 State Highway 160,
Rio Vista, CA 94571

*Reclamation District 348 (New Hope)
311 East Main Street, Suite 400
Stockton, CA 95202

*Reclamation District 349 (Sutter Island)
Office P.O. Box 368
Courtland, CA 95615

*Reclamation District 369 (Libby McNeil)
13952 Main Street,
Locke, CA 95690

*Reclamation District 403 (Rough and Ready Island)
P. O. Box 20
Stockton, CA 95201-3020

*Reclamation District 404 (Boggs Tract)
P. O. Box 1461
Stockton, CA 95201-1461

*Reclamation District 407 (Andrus Island)
P. O. Box 929,
Walnut Grove, CA 95690-0929

*Reclamation District 501 (Ryer Island)
3554 State Highway 84
Walnut Grove, CA 95690

*Reclamation District 536 (Egbert Tract)
P. O. Box 785
Rio Vista, CA 94571

*Reclamation District 537 (Lovdal District)
P. O. Box 822
West Sacramento, CA 95691

*Reclamation District 544 (Upper Roberts Island)
311 East Main Street, Suite 504
Stockton, CA 95202

*Reclamation District 548 (Terminus)
P.O. Box 1461
Stockton, CA 95201-1461

*Reclamation District 551 (Pearson District)
P. O. Box 123
Walnut Grove, CA 95690

*Reclamation District 554 (Walnut Grove)
P. O. Box 222
Walnut Grove, CA 95690

*Reclamation District 556 (Upper Andrus Island)
*P. O. Box 1046
Walnut Grove, CA 95690

*Reclamation District 563 (Tyler Island)
P. O. Box 470
Walnut Grove, CA 95690-0470

*Reclamation District 684 (Lower Roberts Island)

P. O. Box 1461
Stockton, CA 95201

*Reclamation District 744
P. O. Box 517
Clarksburg, CA 95612

*Reclamation District 755 (Randall Island)
11275 State Highway 160
Courtland, CA 95615

*Reclamation District 756 (Bouldin Island)
311 East Main Street, Suite 504
Stockton, CA 95202

*Reclamation District 773 (Fabian Tract)
P. O. Box 20
Stockton, CA 95201-3020

*Reclamation District 799 (Hotchkiss Tract)
P. O. Box 353,
Bethel Island, CA 94511

*Reclamation District 800 (Byron) (Byron Tract)
P. O. Box 262
Byron, CA 94514

*Reclamation District 813 (Ehrhardt Club)
P. O. Box 557
Courtland, CA 95615

*Reclamation District 828 (Weber Tract)
221 Tuxedo Court, Suite F
Stockton, CA 95204

*Reclamation District 830 (Jersey Island)
P. O. Box 1105
Oakley, CA 94561-1105

*Reclamation District 833 (Gridley)
P. O. Box 247
Gridley, CA 95948

*Reclamation District 900 (West Sacramento)
P. O. Box 673
West Sacramento, CA 95691

*Reclamation District 999 (Netherlands)
38563 Netherlands Road
Clarksburg, CA 95612-5003

*Reclamation District 1007 (Pico and Nagle)
P. O. Box 1129
Tracy, CA 95378

*Reclamation District 1601 (Twitchell Island)
2360 West Twitchell Island Road
Rio Vista, CA 94571

*Reclamation District 1607 (Van Sickle Island)
P. O. Box 350
Pittsburg, CA 94565

*Reclamation District 1608 (Smith Tract)
P. O. Box 4857
Stockton, CA 95204

*Reclamation District 1614 (Smith Tract)
ML Office
P. O. Box 4807
Stockton, CA 95204

*Reclamation District 1667 (Prospect Island)
3310 El Camino Avenue, Suite 300
Sacramento, CA 95821

*Reclamation District 2023 (Venice Island)
1440 Arundel Court
Lodi, CA 95242

*Reclamation District 2024 (Orwood and Palm
Tracts)
P.O. Box 1461
Stockton, CA 95201

*Reclamation District 2025 (Holland Tract)
311 East Main Street, Suite 504
Stockton, CA 95202

*Reclamation District 2026 (Webb Tract)
311 East Main Street, Suite 504
Stockton, CA 95202

*Reclamation District 2027 (Mandeville Island)
P. O. Box 248
Holt, CA 95234

*Reclamation District 2028 (Bacon Island)
311 East Main Street, Suite 504
Stockton, CA 95202

*Reclamation District 2029 (Empire Tract)
421 South El Dorado Street, Suite E
Stockton, CA 95203

*Reclamation District 2030 (McDonald Island)
3425 Brookside Road, Suite A
Stockton, CA 95219

*Reclamation District 2033 (Brack Tract)
165 West Cleveland Street
Stockton, CA 95204

*Reclamation District 2037 (Rindge Tract)
P. O. Box 7424
Stockton, CA 95267

*Reclamation District 2038 (Lower Jones Tract)
P.O. Box 1461
Stockton, CA 95201

*Reclamation District 2039 (Upper Jones Tract)
221 Tuxedo Court, Suite F
Stockton, CA 95204

*Reclamation District 2040 (Victoria Island)
P. O. Box 1461
Stockton, CA 95201-1461

*Reclamation District 2041 (Medford Island)
P. O. Box 1461
Stockton, CA 95201

*Reclamation District 2042 (Bishop Tract)
10100 Trinity Parkway, 5th Floor
Stockton, CA 95219

*Reclamation District 2044 (King Island)
421 South El Dorado Street, Suite E
Stockton, CA 95203

*Reclamation District 2058 (Pescadero District)
3650 West Canal Boulevard
Tracy, CA 95304

*Reclamation District 2059 (Bradford Island)
P. O. Box 34
Bethel Island, CA 94511

*Reclamation District 2060 (Hastings Tract)
1143 Crane Street, Suite 200

Menlo Park, CA 94025

*Reclamation District 2062 (Stewart Tract)
73 West Stewart Road
Lathrop, CA 95330

*Reclamation District 2064 (River Junction)
P. O. Box 690695
Stockton, CA 95269

*Reclamation District 2065 (Veale Tract)
P. O. Box 1461
Stockton, CA 95201

*Reclamation District 2067 (Brannan Island)
P. O. Box 338
Walnut Grove, CA 95690

*Reclamation District 2068 (Yolano)
7178 Yolano Road
Dixon, CA 95620-9621

*Reclamation District 2072 (Woodward Island)
P. O. Box 1461
Stockton, CA 95201-1461

*Reclamation District 2074 (Sargent-Barnhart Tract)
P. O. Box 7576
Stockton, CA 95267

*Reclamation District 2085 (Kasson District)
2291 West March Lane
Stockton, CA 95207

*Reclamation District 2086 (Canal Ranch)
11292 N. Alpine Road
Stockton, CA 95212

*Reclamation District 2089 (Stark Tract)
311 East Main Street, Suite 504
Stockton, CA 95202

*Reclamation District 2090 (Quimby Island)
311 East Main Street, Suite 504
Stockton, CA 95202

*Reclamation District 2095 (Paradise Junction)
7541 West Rena Drive
Tracy, CA 95304

*Reclamation District 2096 (Wetherbee Lake)
P. O. Box 909
Manteca, CA 95337

*Reclamation District 2098 (Cache Haas Area)
7178 Yolano Road
Dixon, CA 95620

*Reclamation District 2110 (McCormack
Williamson Tract)
P. O. Box 408
Walnut Grove, CA 95690

*Reclamation District 2111 (Deadhorse Island)
P. O. Box 248
Walnut Grove, CA 95690

*Reclamation District 2113 (Fay Island)
P. O. Box 1461
Stockton, CA 95201

*Reclamation District 2114 (Rio Blanco Tract)
10100 Trinity Parkway, 5th Floor
Stockton, CA 95219

*Reclamation District 2115 (Shima Tract)
P. O. Box 20
Stockton, CA 95201-3020

*Reclamation District 2116 (Holt Station)
P. O. Box 1461
Stockton, CA 95201

*Reclamation District 2117 (Coney Island)
P. O. Box 1461
Stockton, CA 95201-1461

*Reclamation District 2118 (Little Mandeville
Island)
P. O. Box 1267
Hollister, CA 95024

*Reclamation District 2119 (Wright-Elmwood
Tract)
P. O. Box 1461
Stockton, CA 95201

*Reclamation District 2121 (Bixler Tract)
2030 Newton Drive
Brentwood, CA 94513

*Reclamation District 2122 (Winter Island)
293 Pueblo Drive
Pittsburg, CA 94565

*Reclamation District 2126 (Atlas Tract)
P. O. Box 4776
Stockton, CA 95204

*Reclamation District 2127 (Simmons/Wheeler)
P. O. Box 2207
Walnut Creek, CA 94595

*Reclamation District 2130 (Honker Bay)
2146 Colfax Street
Concord, CA 94520

*Reclamation District 2137
311 East Main Street, Suite 504
Stockton, CA 95202

*Reclamation District 2136 (Grizzly West)
P. O. Box 33
Suisun City, CA 9458

*Brannan-Andrus Levee Maintenance District
(BALMD)
P. O. Box 338
Walnut Grove, CA 95690

*Bethel Island Municipal Improvement District
(BIMID)
P. O. Box 244
Bethel Island, CA 94511-0244

*Parties only receiving notification of IS/MND; not direct recipient of IS/MND.

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APPENDIX B

Mitigation Monitoring and Reporting Program

B.1 INTRODUCTION

In accordance with the California Environmental Quality Act (CEQA), the California Department of Water Resources (DWR) has prepared an initial study/proposed mitigated negative declaration (IS/MND) that identifies adverse environmental impacts related to the Delta Flood Emergency Facilities Improvement Project (proposed project) and project refinements. The IS/MND also identifies mitigation measures that would be implemented to reduce potential significant impacts to a less-than-significant level.

Section 21081.6 of the California Public Resources Code, and Sections 15091(d) and 15097 of the State CEQA Guidelines, require public agencies “to adopt a reporting and monitoring program for changes to the project which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment.” A Mitigation Monitoring and Reporting Program (MMRP) is required for the proposed project refinements because the IS/MND identifies potentially significant adverse impacts related to the proposed project refinements, and mitigation measures have been identified to mitigate those impacts.

DWR is the lead agency that must adopt the MMRP for the proposed project refinements. Adoption of this MMRP would occur along with approval of the proposed project refinements.

B.2 PURPOSE OF MITIGATION MONITORING AND REPORTING PROGRAM

This MMRP has been prepared to ensure that all required mitigation measures are implemented and completed according to schedule and maintained in a satisfactory manner during implementation of the proposed project and project refinements. The MMRP may be modified by DWR during project implementation, as necessary, in response to permit conditions by regulatory and permitting agencies, changing conditions, or other refinements. Table B-1 has been prepared to assist the responsible parties in implementing the MMRP. The table identifies individual mitigation measures, the person and/or agency responsible for implementing the measure, and monitoring and mitigation timing.

B.3 ROLES AND RESPONSIBILITIES

DWR is responsible for taking all actions necessary to implement the mitigation measures according to the specifications provided for each measure and for demonstrating that the action has been successfully completed. DWR, at its discretion, may delegate implementation responsibility or portions thereof to a licensed contractor or other designated agent as long as DWR maintains final responsibility for ensuring that the actions are taken.

DWR will be responsible for overall administration of the MMRP and for verifying that DWR staff members and/or the construction contractor has completed the necessary actions for each measure.

B.4 REPORTING

DWR staff or assigned personnel shall prepare monitoring report on completing construction of the proposed project and project refinements addressing compliance with the required mitigation measures. Information regarding inspections and other requirements shall be compiled and explained in the report. The report shall be designed to simply and clearly describe whether mitigation measures have been adequately implemented. At a minimum, the report shall identify the mitigation measures or conditions to be monitored for implementation,

whether compliance with the mitigation measures or conditions has occurred, the procedures used to assess compliance, and whether further action is required.

B.5 MITIGATION MONITORING AND REPORTING PROGRAM

Table B-1 presents the Mitigation Monitoring and Reporting Program (MMRP) for the Delta Flood Emergency Facilities Improvement Project and project refinements. This MMRP updates and replaces the MMRP adopted by the California Department of Water Resources (DWR) in June 2013 for the original proposed project. All mitigation measures remain the same as in the *Delta Flood Emergency Facility Improvement Project* Initial Study/Mitigated Negative Declaration (IS/MND) (DWR 2013), with the exception of Mitigation Measures BIO-2, BIO-4, and BIO-5, which are modified, and Mitigation Measures BIO-7 and BIO-8, which are added.

After further evaluation in the IS, it was determined that Mitigation Measure BIO-2 was unnecessary as a mitigation measure for the proposed project and project refinements at the Stockton West Weber and Rio Vista sites because the impacts to trees were less than significant without mitigation. Furthermore, Mitigation Measure BIO-2 is not a feasible mitigation measure at the Stockton West Weber and Rio Vista sites as some tree removal is required to construct the proposed project and project refinements, and meet most of the project objectives. Mitigation Measure BIO-2 is hereby modified to be specific to the BISRA site only.

After further evaluation in the IS, it was determined that Mitigation Measures BIO-4 and BIO-5 had unnecessary language and was henceforth clarified by deleting these terms but maintaining essential components that restrict project activities from wetland and riparian habitats. Mitigation Measures BIO-4 and BIO-5 are hereby modified.

Mitigation Measures BIO-7 and BIO-8 are new mitigation measures proposed to minimize impacts to biological resources as discussed in Section 3.5, “Biological Resources,” in Chapter 3, “Environmental Checklist,” of the 2014 IS.

Mitigation Measure HAZ-1 has been modified to reflect the progress of the DWR and State Department of Toxic Substances Control (DTSC) interagency agreement since the publication of the 2013 IS/MND, specifying that Soil Management Plans (SMPs) and Health and Safety Plans (HASPs) have been prepared since the publication of the 2013 IS/MND.

Table B-1. Mitigation Monitoring and Reporting Program: Delta Flood Emergency Facilities Improvement Project				
Mitigation Measure(s)	Mitigation Description	Timing, Milestone	Responsible Entity	Monitoring and Enforcement Responsibility
AES-1: Design BISRA Joint Use Facility with DPR Incorporating Architectural and Landscaping Technics to Minimize Impacts to Scenic Vistas and Visual Resources.	DWR will consult and coordinate with DPR staff and architect to facilitate the location and design of the joint use facility and steel warehouse within the BISRA so as not to harm the natural aesthetics, scenic vistas, and visual character available within the BISRA and from the nearby Scenic SR 160. Potential design measures may include utilizing natural earth tones for building exteriors, incorporating earthen berms and planting native plants to help screen project building features from recreational areas and from Scenic SR 160.	Design, Pre-construction	DWR	DPR
AES-2: Locate and Design Quarry Rock Stockpile(s) at BISRA to Minimize Impacts to Scenic Vistas and Visual Resources.	DWR will consult and coordinate with DPR staff to facilitate the location, placement, shape, and visual treatment of quarry rock stockpile(s) that will be located near the southern tip of the BISRA peninsula. The quarry rock stockpiles will be located and configured so as not to harm the natural aesthetics, scenic vistas, and visual character available within and adjacent to the BISRA and from the nearby river, sloughs and Scenic SR 160. Potential visual treatments may include screening by natural, native vegetation of trees and shrubs, utilizing natural berms, or covering the rock stockpiles with a layer of native soil and sand materials from nearby within the BISRA.	Pre-construction	DWR	DPR
AES-3: Locate and Treat Exterior of Warehouse and Cargo Storage Containers at BISRA to Minimize Light and Glare Impacts to Day and Nighttime Views.	DWR will consult and coordinate with DPR staff to facilitate the location and exterior visual treatment of the project warehouse on BISRA to minimize light and glare impacts to day and nighttime views, and not to harm the natural aesthetics, scenic vistas, and visual character available within and adjacent to the BISRA and from Scenic SR 160. Potential visual treatments may include treating the exterior of the warehouse walls and roof in natural earth tones and screening by natural, native vegetation of trees and shrubs.	Design, Pre-construction	DWR	DPR
BIO-1: Conduct Burrowing Owl Surveys at all Three of the Project Sites Prior to Development.	Prior to any land clearing operations, a burrowing owl survey following standard guidelines (The California Burrowing Owl Consortium, CBOC, 1993) shall be conducted by a qualified biologist. The survey shall entail walking throughout the entire site, including a 500-foot buffer, to identify adjacent suitable habitat that could be affected by noise and vibration from heavy	Pre-construction	DWR	DFW

Table B-1. Mitigation Monitoring and Reporting Program: Delta Flood Emergency Facilities Improvement Project				
Mitigation Measure(s)	Mitigation Description	Timing, Milestone	Responsible Entity	Monitoring and Enforcement Responsibility
	equipment operation. If no burrows are observed, no impact is expected and results of the survey shall be submitted to the California Department of Fish and Wildlife (DFW). If burrows or owls are observed, a nesting season (15 April – 15 July) survey shall also be conducted, the results of which shall determine whether a winter survey will be further required or whether the results of the survey can be submitted to the DFW following the nesting survey. If the surveys confirm occupied burrowing owl habitat, the Incidental Take Minimization Measure for Burrowing Owls (Measure 5.2.4.15) in the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (November 14, 2000) will be implemented.			
BIO-2: Retain all Mature Trees on the Proposed <u>Brannon Island State Recreation Area</u> Project Sites.	Mature trees that are potential nest trees and native oak trees greater than 8 inches diameter at breast height ^{2 dbh} will not be removed at the proposed <u>Brannon Island State Recreation Area</u> project site from any of the project sites. If a nest tree becomes occupied during stockpiling and site development activities, then depending upon the bird species involved, appropriate monitoring and mitigation measures as specified by the <u>California Department of Fish and Wildlife</u> DFW will be instituted. At a minimum, all construction activities shall remain a distance of at least two times the drip line radius of active nest trees, as measured from the nest.	Pre-construction, Construction	DWR	DFW
BIO-3: Conduct Special Status Surveys.	DWR will consult with DFW prior to project construction to determine the extent for pre-construction sensitive species survey on the proposed project sites. For those sites determined for specific surveys, a qualified biologist shall conduct the sensitive species survey on the sites and within buffer areas of the sites. Special status bird species that could potentially nest in trees in or near the project area include Swainson’s hawk, tricolored blackbird, white-tailed kite, double-crested cormorant, California black rail, saltmarsh common yellowthroat, song sparrow, Cooper’s hawk, ferruginous hawk, merlin, yellow-headed blackbird, and western yellow-billed cuckoo. Potential habitat for special status reptiles/amphibians including the giant garter snake (GGS) and the western pond turtle exists at all three sites necessitating the need to conduct pre-construction surveys at all	Pre-construction	DWR	DFW

Table B-1. Mitigation Monitoring and Reporting Program: Delta Flood Emergency Facilities Improvement Project				
Mitigation Measure(s)	Mitigation Description	Timing, Milestone	Responsible Entity	Monitoring and Enforcement Responsibility
	<p>three sites. In addition, the western red bat could potentially roost in trees in or near the Rio Vista site and the Brannan Island site. The surveys shall be conducted no more than two weeks prior to the start of operations and depending on the expected duration of the activities a follow-up survey may also be required. All observed sensitive species shall be reported to the DFW. The proposed project will be adjusted to avoid impacting these species, or to relocate the individuals under the guidance of the DFW. Preconstruction surveys will also include botanical survey to identify the presence of elderberry shrubs and Antioch dunes evening primrose.</p>			
<p>BIO-4: Conduct Pre-Construction Riparian Habitat Surveys at All Three of the Project Sites Prior to Development.</p>	<p>Prior to any land clearing operations, riparian habitat surveys shall be conducted by a qualified biologist. to confirm that construction activities will not impact riparian habitat. The survey shall entail walking throughout the entire site, including a 100-foot buffer, to identify adjacent suitable riparian habitat that could be affected by construction activities, particularly along the top of waterside banks or slopes. or low lying areas. <u>Riparian habitat shall be avoided, if feasible. If it is determined that construction would result in the removal of</u> The riparian habitat, surveys shall be submitted to DFW, along with each of the site development plans to confirm that isolated project activities, inclusive of piling installations, utility installations and road/ramp improvements near or adjacent to riparian habitat or other sensitive natural communities will not result in a significant impact to riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service. DWR will mitigate for impacts through restoration of riparian habitat on the Brennan Island, or similar of other state-owned property based on a replacement ratio of 1:1.</p>	Pre-construction	DWR	DFW
<p>BIO-5: Conduct Pre-Design Wetlands and Riparian Habitat Surveys for each of the Sites and Install and Maintain Exclusionary Fencing at the Sites to Ensure Full Avoidance of Seasonal and</p>	<p>a) DWR shall retain a qualified biologist to conduct a wetland delineation of the project sites. This delineation shall be submitted to the Corps, and verification received prior to any ground disturbing activities beyond the existing on-site roadways. b) DWR, will preserve, and not disturb the existing wetlands, and</p>	Pre-design, Preconstruction	DWR	DFW

Table B-1. Mitigation Monitoring and Reporting Program: Delta Flood Emergency Facilities Improvement Project				
Mitigation Measure(s)	Mitigation Description	Timing, Milestone	Responsible Entity	Monitoring and Enforcement Responsibility
Permanent Wetlands and Jurisdictional Riparian Habitat.	<p>wherever possible, establish 25-foot minimum buffers around all sides of these features. In addition, the final project design shall not cause significant changes to the pre-project hydrology, water quality or water quantity in any wetland that is to be retained on site. This shall be accomplished by avoiding or repairing any disturbance to the hydrologic conditions supporting these wetlands, as verified through wetland protection plans.</p> <p>c) DWR, prior to construction activities, shall install <u>conduct an updated wetland delineation for its potential disturbance area, install orange exclusion fencing on T-posts (or equivalent), with silt fence or exclusion fencing around wetlands to be retained on-site where wetlands are adjacent to construction activities. material installed along the bottom, and w</u>Wherever possible, a 25-foot buffer adjacent to seasonal and permanent wetlands <u>shall be established identified within and adjacent to the proposed site work.</u> The fencing shall be maintained for the duration of the site work, and the DWR Operations and Maintenance Manual for the Rio Vista site shall include the pre-construction delineation of jurisdictional wetlands and riparian habitat and note that all future traffic within the project site is limited to improved surface areas and stockpile areas, and all other areas are deemed off limits to vehicular and construction equipment.</p> <p>a) DWR shall retain a qualified biologist to conduct a wetland delineation of the project sites. This delineation shall be submitted to the Corps, and verification received prior to any ground disturbing activities beyond the existing on-site roadways.</p> <p>b) DWR, will preserve, and not disturb the existing wetlands, and wherever possible, establish 25-foot minimum buffers around all sides of these features. In addition, the final project design shall not cause significant changes to the pre-project hydrology, water quality or water quantity in any wetland that is to be retained on site. This shall be accomplished by avoiding or repairing any disturbance to the hydrologic conditions supporting these wetlands, as verified through wetland protection plans.</p> <p>c) DWR, prior to construction activities, shall conduct an updated wetland delineation for its potential disturbance area, install</p>			

Table B-1. Mitigation Monitoring and Reporting Program: Delta Flood Emergency Facilities Improvement Project				
Mitigation Measure(s)	Mitigation Description	Timing, Milestone	Responsible Entity	Monitoring and Enforcement Responsibility
	orange exclusion fencing on T-posts (or equivalent), with silt fence material installed along the bottom, and wherever possible a 25-foot buffer adjacent to seasonal and permanent wetlands identified within and adjacent to the proposed site work. The fencing shall be maintained for the duration of the site work, and the DWR Operations and Maintenance Manual for the Rio Vista site shall include the pre-construction delineation of jurisdictional wetlands and riparian habitat and note that all future traffic within the project site is limited to improved surface areas and stockpile areas, and all other areas are deemed off-limits to vehicular and construction equipment.			
BIO-6: Secure Section 1600 Lake or Streambed Alteration (LSA) Agreement from DFW.	Prior to any ground-disturbing site improvements, DWR shall consult with DFW and secure any applicable Section 1600 Lake or Streambed Alteration (LSA) agreement(s) for any permanent site improvements waterward of the top of bank at Threemile Slough for the BISRA site or at the Stockton Deep Water Ship Channel or Mormon Slough at the Stockton West Weber Avenue site.	Pre-design, Preconstruction,	DWR	DFW
BIO-7: Avoid and Minimize Underwater Sound Pressure due to Pile Driving	<p>Underwater sound monitoring shall be performed during pile-driving activities. A qualified biologist/natural resource specialist shall be present during such work to monitor construction activities and compliance with terms and conditions of permits.</p> <p>Underwater sound reduction measures shall be employed, as needed, to ensure that levels do not exceed the threshold levels established by USFWS and NMFS (for fish greater than 2 grams):</p> <ul style="list-style-type: none"> • Peak Pressure – 206 decibels • Accumulated Sound Exposure Level (SEL) – 187 decibels <p>These underwater sound reduction measures shall include use of an impact hammer cushion block. Additionally, hammers shall be used only during daylight hours and initially shall be used at low energy levels and reduced impact frequency. Applied energy and frequency shall be gradually increased until necessary full force and frequency are achieved.</p> <p>If necessary, one or more of the following shall be implemented to further reduce sound:</p>	Pre-construction	DWR	DFW

Table B-1. Mitigation Monitoring and Reporting Program: Delta Flood Emergency Facilities Improvement Project				
Mitigation Measure(s)	Mitigation Description	Timing, Milestone	Responsible Entity	Monitoring and Enforcement Responsibility
	<ul style="list-style-type: none"> • Pipe caissons shall be used to isolate the piles from waters to buffer underwater sound pressure levels if underwater sound monitoring indicates that underwater sound levels exceed threshold levels. The caissons shall be driven below the mud line using vibratory or hydraulic methods and the interior area dewatered before pipe piles are installed using impact methods. • The use of a bubble curtain surrounding the pile to be driven. 			
BIO-8: Ensure No Net Loss of Functions and Values of Wetlands, other Waters of the United States, and Waters of the State at the Stockton West Weber and Rio Vista sites.	<p>Before the start of any ground-disturbing activity associated with the construction of any project feature that would affect waters of the United States, including wetlands, or waters of the State, DWR will obtain all necessary permits under Sections 404 and 401 of the Clean Water Act or the State’s Porter-Cologne Act for the proposed project and project refinements at the Stockton West Weber and Rio Vista sites, and Section 10 authorization under Rivers and Harbors Act for work within the Stockton Deep Water Ship Channel at the Stockton West Weber site.</p> <p>All permits, regulatory approvals, and permit conditions for impacts on wetland habitats shall be secured before implementation of any construction activities within waters of the United States or wetland habitats, including waters of the State. DWR will commit to replace, restore, or enhance on a “no net loss” basis, in accordance with U.S. Army Corps of Engineers (USACE) and the Central Valley Regional Water Quality Control Board (RWQCB), the acreage of all wetlands and other waters of the United States that would be removed, lost, and/or degraded with implementation of project plans. Wetland habitat shall be restored, enhanced, and/or replaced at an acreage and location and by methods agreeable to USACE and the Central Valley RWQCB, as determined during the Section 404 and Section 401 permitting processes. Final mitigation ratios will be determined during the permitting process.</p>	Pre-construction	DWR	DFW
CUL-1: Pre-construction Field Survey.	Prior to ground disturbing activities, a field survey will be conducted by a qualified archeologist to identify any prehistoric or historic cultural resources within the project site areas. The survey	Preconstruction	DWR	DWR

Table B-1. Mitigation Monitoring and Reporting Program: Delta Flood Emergency Facilities Improvement Project				
Mitigation Measure(s)	Mitigation Description	Timing, Milestone	Responsible Entity	Monitoring and Enforcement Responsibility
	<p>may reveal a lack of resources. No further identification effort will need to be made. If resources are found in one of the selected sites during the survey, it will be necessary to determine whether the resource is an important resource. This determination will be made by a qualified archeologist based upon surface evidence, if possible. If surface evidence is not conclusive, additional studies, including archival research or subsurface testing, will be conducted. If the additional studies are undertaken and a resource is found to be important under the criteria of the California Register of Historical Resources (CRHR), avoidance will be the preferred method of mitigation. The use of the site with the significant resource might need to be limited to a smaller portion of the site, with protective measures designed for the resource, such as fencing or monitoring site use. The determination of appropriate mitigation will be made by DWR.</p>			
CUL-2: Worker Cultural Resource Awareness.	<p>Construction personnel will be informed of the potential for encountering significant archaeological resources and instructed in the identification of artifacts, bone, and other potential resources. All construction personnel will be informed of the need to stop work on the project site if cultural resources are found, and until a qualified archaeologist has been provided the opportunity to assess the significance of the find and implement appropriate measures to protect or scientifically remove the find. Construction personnel will also be informed of the requirement that unauthorized collection of cultural resources is prohibited.</p>	Preconstruction, Construction	DWR	DWR
CUL-3: Immediately Halt Construction if any Cultural Resources are Discovered.	<p>DWR shall implement the following mitigation measure to reduce the potential impacts to buried historic cultural resources to a less-than-significant level. If cultural materials (e.g., unusual amounts of shell, animal bone, glass, ceramics, etc.) are discovered during project-related construction activities, ground disturbances in the area of the find shall be halted and a qualified professional archaeologist shall be notified regarding the discovery. The archaeologist, to be retained by DWR, shall determine whether the resource is potentially significant per the CRHR and develop appropriate mitigation. Mitigation may include, but not be limited to, in-field documentation, archival research, archaeological</p>	Construction	DWR	DWR

Table B-1. Mitigation Monitoring and Reporting Program: Delta Flood Emergency Facilities Improvement Project				
Mitigation Measure(s)	Mitigation Description	Timing, Milestone	Responsible Entity	Monitoring and Enforcement Responsibility
	testing, data recovery excavations, or recordation, and shall be implemented before resuming construction in the immediate vicinity.			
CUL-4: Immediately Halt Construction if any Human Remains are Discovered.	<p>DWR shall implement the following mitigation measure to reduce the potential impacts to human remains to a less-than-significant level. In accordance with the California Health and Safety Code, if human remains are uncovered during ground-disturbing activities, the contractor and/or DWR shall immediately halt potentially damaging excavation in the area of the burial and notify the County Coroner and a professional archaeologist to determine the nature of the remains. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or State lands (Health and Safety Code Section 7050.5[b]).</p> <p>If the coroner determines that the remains are those of a Native American, he or she must contact the Native American Heritage Commission (NAHC) by phone within 24 hours of making that determination (Health and Safety Code Section 7050[c]). Following the coroner’s findings, DWR, an archaeologist, and the NAHC designated Most Likely Descendent (MLD) shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments are not disturbed. The responsibilities for acting upon notification of a discovery of Native American human remains are identified in California Public Resources Code Section (PRC) 5097.9.</p>	Construction	DWR	DWR
CUL-5: Determination of Significance of Cultural Resources.	<p>If previously unknown cultural resources are discovered during project construction, all work in the area of the find should cease and a qualified archaeologist should be retained by DWR or consultant to assess the significance of the find, make recommendations on its disposition, and prepare appropriate field documentation, including verification of the completion of required mitigation. If archaeological or paleontological resources are discovered during earth moving activities, all construction activities within 50 feet of the find should cease until the archaeologist evaluates the significance of the resource. In the</p>	Construction	DWR	DWR

Table B-1. Mitigation Monitoring and Reporting Program: Delta Flood Emergency Facilities Improvement Project				
Mitigation Measure(s)	Mitigation Description	Timing, Milestone	Responsible Entity	Monitoring and Enforcement Responsibility
	absence of a determination, all archaeological and paleontological resources should be considered significant. If the resource is determined to be significant, the archaeologist, as appropriate, should prepare a research design for recovery of the resources in consultation with the State Office of Historic Preservation that satisfies the requirements of Public Resources Code, Section 21083.2. The archaeologist should complete a report of the excavations and findings. Upon approval of the report, the project proponent should submit the report to the regional office of the California Historic Resources Information System.			
HYD-1: Institute Construction Best Management Practices (BMPs) for the Prevention of Erosion and Transport of Soil, Sand, and Silt Offsite During Runoff Events.	<p>DWR shall implement construction Best Management Practices (BMPs) for all land clearing, land leveling, excavation, and fill operations associated with site preparations at the three sites. These measures will be incorporated into the construction plans and specifications. They include avoidance of existing wetlands, including placement of exclusion fencing, creating on site catchments for surface runoff, using coir logs to intercept drainage, and hydroseeding slopes, as appropriate.</p> <p>Before the start of any construction work, clearing, or site grading associated with preparation, or any stockpiling activities at the sites, measures to control soil erosion and waste discharges will be prepared in accordance with BMPs. DWR will require all contractors conducting work at the sites to implement BMPs to control soil erosion and waste discharges of other construction-related contaminants. The general contractor(s) and subcontractor(s) conducting the work will be responsible for constructing or implementing, regularly inspecting, and maintaining the BMPs in good working order. In addition, the contractors will be required to submit and adhere to the applicable Storm Water Pollution Prevention Plan (SWPPP) associated with site development, preparation, and improvements.</p> <p>Sufficient buffers from wetlands, riparian habitat, and/or other sensitive areas shall be maintained throughout the construction improvement period(s) of the project.</p> <p>The plans developed by DWR or its contractor(s) will identify the grading, erosion, and tracking control BMPs and specifications</p>	Preconstruction, Construction	DWR, Contractor	County of Record

Table B-1. Mitigation Monitoring and Reporting Program: Delta Flood Emergency Facilities Improvement Project				
Mitigation Measure(s)	Mitigation Description	Timing, Milestone	Responsible Entity	Monitoring and Enforcement Responsibility
	<p>that are necessary to avoid and minimize water quality impacts to the extent practicable. Standard erosion control measures (e.g., management, structural, and vegetative controls) will be implemented for all construction activities that expose soil. Grading operations will be conducted to eliminate direct routes for conveying potentially contaminated runoff to drainage channels. Erosion control barriers such as silt fences and mulching material will be installed, and disturbed areas will be reseeded with native grasses or other plants where necessary. Tracking controls shall be required throughout the construction period, as needed, to reduce the tracking of sediment and debris from the construction site.</p> <p>At a minimum, entrances and exits shall be inspected daily, and controls implemented as needed. The following specific BMPs will be implemented, as described in the California BMP Handbook (www.cabmphandbook.com):</p> <ul style="list-style-type: none"> • Conduct all work according to site-specific construction plans that identify areas for clearing and grading so that ground disturbance is minimized. • Avoid riparian vegetation, cover cleared areas with mulches, and install silt fences near riparian areas or streams to control erosion and trap sediment, and reseed cleared areas with native vegetation. Sufficient buffers (minimum 20 feet when possible) from wetlands and/or other sensitive areas shall be maintained throughout the life of the project. • Stabilize disturbed soils before the onset of the winter rainfall season. • Stabilize and protect stockpiles from exposure to erosion and flooding. • Stabilize all construction access by providing a point of entrance/exit to the construction sites that is stabilized to reduce the tracking of mud and dirt onto public roads by construction vehicles. • Grade each construction entrance/exit to prevent runoff from leaving the construction site, and ensure that all runoff from the stabilized entrances/exits are routed through a sediment- 			

Table B-1. Mitigation Monitoring and Reporting Program: Delta Flood Emergency Facilities Improvement Project				
Mitigation Measure(s)	Mitigation Description	Timing, Milestone	Responsible Entity	Monitoring and Enforcement Responsibility
	<p>trapping device before discharge.</p> <ul style="list-style-type: none"> Ensure that entry/exit ways are able to support the heaviest vehicles and equipment that will use them. <p>BMPs will also specify appropriate hazardous materials handling, storage, and spill response practices to reduce the possibility of adverse impacts from use or accidental spills or releases of contaminants. Specific measures applicable to the project include, but are not limited to, the following:</p> <ul style="list-style-type: none"> Develop and implement strict onsite handling rules to keep construction and maintenance materials out of drainages and waterways. Conduct all refueling and servicing of equipment with absorbent material or drip pans underneath to contain spilled fuel. Collect any fluid drained from machinery during servicing in leak-proof containers and deliver to an appropriate disposal or recycling facility. Maintain controlled construction staging, site entrance, concrete washout, and fueling areas at least 100 feet away from stream channels or wetlands to minimize accidental spills and runoff of contaminants in storm water. Prevent raw cement; concrete or concrete washings; asphalt, paint, or other coating material; oil or other petroleum products; or any other substances that could be hazardous to aquatic life from contaminating the soil or entering watercourses. <p>Maintain spill cleanup equipment in proper working condition. Clean up all spills immediately according to the spill prevention and response plan, and immediately notify DFW and the Regional Water Quality Control Board (RWQCB) of any spills and cleanup procedures.</p>			

Table B-1. Mitigation Monitoring and Reporting Program: Delta Flood Emergency Facilities Improvement Project				
Mitigation Measure(s)	Mitigation Description	Timing, Milestone	Responsible Entity	Monitoring and Enforcement Responsibility
HAZ-1: Develop and Implement Environmental Remediation Plans	DWR has entered into an interagency agreement with the State Department of Toxic Substances Control (DTSC) <u>and has conducted to conduct</u> applicable supplemental site investigations (SSIs), <u>and has developed Soil Management Plans (SMPs) and Health and Safety Plans (HASPs) approved by DTSC for the Stockton West Weber site parcels. The noted SMPs and HASPs must be implemented shall develop environmental remediation plans that will be incorporated into the site plans and improvements proposed for the Stockton West Weber Avenue parcel(s) prior to and during</u> any ground-disturbing activities that may pose a toxic substance hazardous risk during construction of site improvements and subsequent <u>ground-disturbing operations facility operations</u> that will <u>remain</u> be consistent with current commercial and industrial zoning land uses.	Preconstruction	DWR	DTSC
NOI-1: Implement Measures to Control Construction Equipment Noise Levels	The contractor and/or DWR shall properly maintain construction equipment and equip it with noise control devices, such as exhaust mufflers or engine shrouds, in accordance with manufacturers' specifications. For non-emergency activities such as site construction and stockpiling quarry rock, operations will be limited to the periods 7:00 AM to 7:00 PM, Mondays through Saturdays.	Construction	Contractor	DWR
REC-1: Implement Measures to Minimize Impacts on Recreation within Brannan Island State Recreation Area (BISRA)	DWR shall inter into a Memorandum of Understanding with the State Department of Parks and Recreation (DPR) to design project elements in coordination with DPR to minimize impacts on recreational quality and visual resources within the BISRA, and to improve facilities that could jointly benefit recreational services and emergency response capabilities. These include potential features such as developing architectural treatments to blend new structures (multi-use and warehouse facilities) within the park setting, screening the placement and storage of quarry rock stockpiles with vegetation, earthen berms, and/or placing a layer of sand over the quarry rock stockpile, planting native plants to help screen project features, improving service facilities such as restrooms and roads, and collectively implement a 2,500-5,000 sf. joint use facility within the BISRA that could serve as Multi-Agency Center (MAC).	Preconstruction	DWR	DPR

Table B-1. Mitigation Monitoring and Reporting Program: Delta Flood Emergency Facilities Improvement Project				
Mitigation Measure(s)	Mitigation Description	Timing, Milestone	Responsible Entity	Monitoring and Enforcement Responsibility
<p>TRANS-1: DWR, in Consultation with Caltrans Regional Offices, will Prepare a Traffic Management Plan (TMP) to Guide Activities during Construction Phase and Restocking Phase of the Proposed Project.</p>	<p>This plan will be prepared and support procurement of necessary Caltrans permits for the transport of heavy construction equipment and/or materials to/from the projects site, or any movement of oversized or excessive lad vehicles on the State Highway System. At a minimum this plan shall define how to minimize the amount of time spent on construction transportation activities; how to minimize disruption of vehicle and alternative modes of traffic at all times, but particularly during periods of high traffic volumes; adequate signage and other controls, including flag persons, to ensure that traffic can flow adequately during construction; the identification of alternative routes that can meet the traffic flow requirements of a specific area, including communication (signs, webpages, etc.) with drivers and neighborhoods where construction activities will occur; and at the end of each construction day roadways shall be prepared for continued utilization without any significant roadway hazards remaining.</p>	Preconstruction	DWR	Caltrans

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ATTACHMENT D

Copy of 404 Application

U.S. Army Corps of Engineers South Pacific Division



Nationwide Permit Pre-Construction Notification (PCN) Form

This form integrates requirements of the U.S. Army Corps of Engineers Nationwide Permit Program within the South Pacific Division (SPD), including General and Regional Conditions. You MUST fill out all boxes related to the work being done. Fillable boxes in this form expand if additional space is needed.

Box 1 Project Name Delta Flood Emergency Facilities Improvement Project, Rio Vista			
Applicant Name Kristin Richmond		Applicant Title Project Manager	
Applicant Company, Agency, etc. DWR, Division of Flood Management		Applicant's internal tracking number (if any)	
Mailing Address 3310 El Camino Avenue, Suite 200 Sacramento, CA 95821			
Work Phone with area code (916) 574-2167	Mobile Phone with area code	Home Phone with area code	Fax # with area code (916) 574-2767
E-mail Address kristin.richmond@water.ca.gov	Relationship of applicant to property: <input type="checkbox"/> Owner <input type="checkbox"/> Purchaser <input checked="" type="checkbox"/> Lessee <input type="checkbox"/> Other:		
Application is hereby made for verification that subject regulated activities associated with subject project qualify for authorization under a U.S. Army Corps of Engineers Nationwide Permit or Permits as described herein. I certify that I am familiar with the information contained in this application and, that to the best of my knowledge and belief, such information is true, complete, and accurate. I further certify that I possess the authority to undertake the proposed activities. I hereby grant to the agency to which this application is made the right to enter the above-described location to inspect the proposed, in-progress or completed work. I agree to start work <u>only</u> after all necessary permits have been received and to comply with all terms and conditions of the authorization.			
Signature of applicant <i>Kristin C. Richmond</i>			Date (mm/dd/yyyy) 3/2/2015

If anyone other than the person named as the Applicant will be in contact with the U.S. Army Corps of Engineers representing the Applicant regarding this project during the permit process, Box 2 MUST be filled out.

Box 2 Authorized Agent/Operator Name Sarah A. N. Bennett		Agent/Operator Title Regulatory Specialist, Biologist	
Agent/Operator Company, Agency, etc. AECOM Inc.		E-mail Address sarah.bennett@aecom.com	
Mailing Address 2020 L Street, Suite 400 Sacramento CA, 95811			
Work Phone with area code (916) 266-4922	Mobile Phone with area code	Home Phone with area code	Fax # with area code (916) 414-5850
I hereby authorize the above named authorized agent to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application. I understand that I am bound by the actions of my agent and I understand that if a federal or state permit is issued, I, or my agent, must sign the permit.			
Signature of applicant <i>Kristin C. Richmond</i>			Date (mm/dd/yyyy) 3/2/2015
I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief, such information is true, complete, and accurate.			
Signature of authorized agent			Date (mm/dd/yyyy)

Box 3 Name of Property Owner(s), if other than Applicant: Central Valley Flood Protection Board		
Owner Title	Owner Company, Agency, etc.	
Mailing Address 3310 El Camino Avenue, Suite 151 Sacramento, CA 95821		
Work Phone with area code (916) 574-0609	Mobile Phone with area code	Home Phone with area code

Box 4 Name of Contractor(s) (if known): Unknown at this time		
Contractor Title	Contractor Company, Agency, etc.	
Mailing Address		
Work Phone with area code	Mobile Phone with area code	Home Phone with area code

Box 5 Site Number <u>1</u> of <u>1</u>. Project location(s), including street address, city, county, state, zip code where proposed activity will occur: The project site is located north of the city of Rio Vista, north of Airport Road in Solano County California. See Attachment A for a Regional Map.	
Waterbody (if known, otherwise enter "an unnamed tributary to"): Forested seasonal wetlands located adjacent to Sacramento River	
Tributary to what known, downstream waterbody: NA, no surface connection <input type="checkbox"/>	
Latitude & Longitude (D/M/S, DD, or UTM with Zone): 38°10'29.68" N, -121°40'46.57" W	Section, Township, Range: Unsectioned, Township 4N, Range 2E
County Assessor Parcel Number (Include County name): 0177-110-060 (Solano County)	USGS Quadrangle map name: Rio Vista
Watershed (HUC and watershed name ¹): Lower Sacramento ¹ http://water.usgs.gov/GIS/regions.html HUC 18020109	Size of permit area or project boundary: 27.45 acres linear feet
Directions to the project location and other location descriptions, if known: From Sacramento, the site is readily accessible from I-5 via Highway 12. From Highway 12, turn north onto River Road. Turn west at Airport Road. Arrive at the project site. See Figure 2 in Attachment A for the Site and Vicinity Map.	
Nature of Activity (Description of the project, include all features): See Attachment A.	
Project Purpose (Description of the reason or purpose of the project): The purpose of the Facilities Improvement Project (FIP) is to ensure that the State has the appropriate infrastructure and supplies in the Delta to respond to and recover quickly and effectively from major flood or earthquake disasters in the Sacramento-San Joaquin River Delta.	

Box 6 Reason(s) for discharge into Waters of the United States (Description of why dredged and/or fill

material needs to be placed in Waters of the United States):

Widening existing road from 20 to 24 feet to a consistent 28 foot wide road would result in impacts to 0.009 acre of forested seasonal wetland. A total of 14.5 CY of aggregate base and 392 square feet of geotextile fabric would be placed in forested seasonal wetland.

Proposed discharge of dredge and/or fill material. Indicate total surface area in **acres** and **linear feet** (where appropriate) of the proposed impacts to Waters of the United States, indicate water body type (tidal wetland, non-tidal wetland, riparian wetland, ephemeral stream/river, intermittent stream/river, perennial stream/river, pond/lake, vegetated shallows, bay/harbor, lagoon, ocean, etc.), and identify the impact(s) as permanent and/or temporary for each requested Nationwide Permit¹:

¹ Enter the intended permit number(s). See Nationwide Permit regulations for permit numbers and qualification information:

<http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits/NationwidePermits.aspx>

Water Body Type	Requested NWP Number: 39				Requested NWP Number:				Requested NWP Number:			
	Permanent		Temporary		Permanent		Temporary		Permanent		Temporary	
	Area	Length	Area	Length	Area	Length	Area	Length	Area	Length	Area	Length
Non-tidal Wetland	0.009											
Total:												

Total volume (in cubic yards) and type(s) of material proposed to be dredged from or discharged into Waters of the United States:

Material Type	Total Volume Dredged	Total Volume Discharged
Rock Slope Protection (RSP)		
Clean spawning gravel		
River rock		
Soil/Dirt/Silt/Sand/Mud		
Concrete		
Structure		
Stumps/Root wads		
Other: Aggregate Base		14.5
Total:		14.5

Activity requires a written waiver to exceed specified limits of the Nationwide Permit? Yes No

If yes, provide Nationwide Permit number and name, limit to be exceeded, and rationale for each requested waiver:

Activity will result in the loss of greater than 1/2-acre of Waters of the United States? Yes No

If yes, provide an electronic copy (compact disc) or multiple hard copies (7) of the complete PCN for appropriate Federal and State Pre-discharge Notification (See General Condition #31, Pre-construction Notification,

Agency Coordination, Section 2 and 4).

Describe direct and indirect effects caused by the activity and how the activity has been designed (or modified) to have minimal adverse effects on the aquatic environment (See General Condition #31, Pre-construction Notification, District Engineer's Decision, Section 1):

Direct effects include temporary impacts to water quality. As part of the proposed action, BMPs will be installed prior to the start of construction.

Potential cumulative impacts of proposed activity(if any):

None.

Required drawings and figures (see each U.S. Army Corps of Engineers District's Minimum Standards Guidance):

Vicinity map: Attached (or mail copy separately if applying electronically)

To-scale Plan view drawing(s): Attached (or mail copy separately if applying electronically)

To-scale elevation and/or Cross Section drawing(s): Attached (or mail copy separately if applying electronically)

Numbered and dated pre-project color photographs: Attached (or mail copy separately if applying electronically)

Sketch drawing(s) or map(s): Attached (or mail copy separately if applying electronically)

Has a wetlands/waters of the U.S. delineation been completed?

Yes, Attached² (or mail copy separately if applying electronically) No

If a delineation has been completed, has it been verified in writing by the Corps?

Yes, Date of preliminary or approved jurisdictional determination (mm/dd/yyyy):

Corps file number: SPK-2008-00648

No

²If available, provide ESRI shapefiles (NAD83) for delineated waters

For proposed discharges of dredged material resulting from navigation dredging into inland or near-shore waters of the U.S. (including beach nourishment), please attach³ a proposed Sampling and Analysis Plan (SAP) prepared according to Inland Testing Manual (ITM) guidelines (including Tier I information, if available), or if disposed offshore, a proposed SAP prepared according to the Ocean Disposal Manual. Attached (or mail copy separately if applying electronically)

³Or mail copy separately if applying electronically

Is any portion of the work already complete? YES NO

If yes, describe the work:

Box 7 Authority:

Is Section 10 of the Rivers and Harbors Act applicable?: YES NO

Is Section 404 of the Clean Water Act applicable?: YES NO

Is the project located on U.S. Army Corps of Engineers property or easement?: YES NO

If yes, has Section 408 process been initiated?: YES NO

Would the project affect a U.S. Army Corps of Engineers structure?: YES NO

If yes, has Section 408 process been initiated?: YES NO

Is the project located on other Federal Lands (USFS, BLM, etc.)?: YES NO

Is the project located on Tribal Lands?: YES NO

Box 8 Is the discharge of fill or dredged material for which Section 10/404 authorization is sought part of a larger plan of development?: YES NO

If discharge of fill or dredged material is part of development, name and proposed schedule for that larger development (start-up, duration, and completion dates):

Location of larger development (if discharge of fill or dredged material is part of a plan of development, a map of suitable quality and detail of the entire project site should be included):

Box 9 Measures taken to avoid and minimize impacts to waters of the United States:

See Attachment A for additional detail.

Box 10 Proposed Compensatory Mitigation related to fill/excavation and dredge activities. Indicate in **acres** and **linear feet** (where appropriate) the total quantity of Waters of the United States proposed to be created, restored, enhanced and/or preserved for purposes of providing compensatory mitigation. Indicate water body type (tidal wetland, non-tidal wetland, riparian wetland, ephemeral stream/river, intermittent stream/river, perennial stream/river, pond/lake, vegetated shallows, bay/harbor, lagoon, ocean, etc.) or non-jurisdictional (uplands¹). Indicate mitigation type (permittee-responsible on-site/off-site, mitigation bank, or in-lieu fee program). If the mitigation is purchase of credits from a mitigation bank, indicate the bank to be used, if known: Cosumnes River Floodplain Mitigation Bank

¹For uplands, please indicate if designed as an upland buffer.

Site Number	Water Body Type	Created		Restored		Enhanced		Preserved		Mitigation Type
		Area	Length	Area	Length	Area	Length	Area	Length	
Cosumnes River Floodplain	Non-tidal Wetland	0.01								Mitigation Bank
Total:		0.01								Mitigation Bank

If no mitigation is proposed, provide detailed explanation of why no mitigation would be necessary:

If permittee-responsible mitigation is proposed, provide justification for not utilizing a Corps-approved mitigation bank or in-lieu fee program:

Has a draft/conceptual mitigation plan been prepared in accordance with the April 10, 2008, Final Mitigation Rule² and District Guidelines?

²http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits/mitig_info.aspx

³**Sacramento and San Francisco Districts**-http://www.spk.usace.army.mil/organizations/cespk-co/regulatory/pdf/Mitigation_Monitoring_Guidelines.pdf

⁴**Los Angeles District**-http://www.spl.usace.army.mil/regulatory/mmg_2004.pdf

⁵**Albuquerque District**-http://www.spa.usace.army.mil/reg/mitigation/SPA%20Final%20Mitigation%20Guidelines_OLD.pdf

Yes, Attached (or mail copy separately if applying electronically) No

If no, a mitigation plan must be prepared and submitted, if applicable.

Mitigation site(s) Latitude & Longitude (D/M/S, DD, or UTM with Zone): USGS Quadrangle map name(s):

Assessor Parcel Number(s): Section(s), Township(s), Range(s):

Other location descriptions, if known:

Directions to the mitigation location(s):

Box 11 Threatened or Endangered Species

Please list any federally-listed (or proposed) threatened or endangered species or critical habitat (or proposed critical habitat) within the project area (include scientific names (e.g., Genus species), if known):

- a. None
- b.
- c.
- d.
- e.
- f.

Have surveys, using U.S. Fish and Wildlife Service/NOAA Fisheries protocols, been conducted?

Yes, Report attached (or mail copy separately if applying electronically) No

If a federally-listed species would be impacted, please provide a description of the impact and a biological evaluation, if available.

Yes, Report attached (or mail copy separately if applying electronically) Not attached

Has Section 7 consultation been initiated by another federal agency?

Yes, Initiation letter attached (or mail copy separately if applying electronically) No

Has Section 10 consultation been initiated for the proposed project?

Yes, Initiation letter attached (or mail copy separately if applying electronically) No

Has the USFWS/NOAA Fisheries issued a Biological Opinion?

Yes, Attached (or mail copy separately if applying electronically) No

If yes, list date Opinion was issued (m/d/yyyy):

Box 12 Historic properties and cultural resources:

Are any cultural resources of any type known to exist on-site? Yes No

Please list any known historic properties listed, or eligible for listing, on the National Register of Historic Places:

- a.
- b.
- c.
- d.
- e.
- f.

Has a cultural resource records search been conducted?

Yes, Report attached (or mail copy separately if applying electronically) No

Has a cultural resource pedestrian survey been conducted for the site?

Yes, Report attached (or mail copy separately if applying electronically) No

Has another federal agency been designated the lead federal agency for Section 106 consultation?

Yes, Designation letter/email attached (or mail copy separately if applying electronically) No

Has Section 106 consultation been initiated by another federal agency?

Yes, Initiation letter attached (or mail copy separately if applying electronically) No

Has a Section 106 MOA or PA been signed by another federal agency and the SHPO?

Yes, Attached (or mail copy separately if applying electronically) No

If yes, list date MOA or PA was signed (m/d/yyyy):

Box 13 Section 401 Water Quality Certification:

Applying for certification? Yes, Attached (or mail copy separately if applying electronically) No

Certification issued? Yes, Attached (or mail copy separately if applying electronically) No

Certification waived? Yes, Attached (or mail copy separately if applying electronically) No

Certification denied? Yes, Attached (or mail copy separately if applying electronically) No

Exempted activity? Yes No

Agency concurrence? Yes, Attached No

If exempt, state why:

Box 14 Coastal Zone Management Act:

Is the project located within the Coastal Zone? Yes No

If yes, applying for a coastal commission-approved Coastal Development Permit?

Yes, Attached (or mail copy separately if applying electronically) No

If no, applying for separate CZMA-consistency certification?

Yes, Attached (or mail copy separately if applying electronically) No

Permit/Consistency issued? Yes, Attached (or mail copy separately if applying electronically) No

Exempt? Yes No

Agency concurrence? Yes, Attached No

If exempt, state why:

Box 15 List of other certifications or approvals/denials received from other federal, state, or local agencies for work described in this application:

Agency	Type of Approval ⁴	Identification Number	Date Applied	Date Approved	Date Denied
RWQCB	401 Water Quality Certification		concurrent		

⁴Would include but is not restricted to zoning, building, and flood plain permits

Nationwide Permit General Conditions (GC) checklist:

(<http://www.gpo.gov/fdsys/pkg/FR-2012-02-21/pdf/2012-3687.pdf>)

Check	General Condition	Rationale for compliance with General Condition
<input checked="" type="checkbox"/>	1. Navigation	Project implementation will not result in impact to any streams. Project is in compliance with GC.
<input checked="" type="checkbox"/>	2. Aquatic Life Movements	Aquatic life movements will not be disrupted by project implementation. Impacts to forested seasonal wetlands would occur adjacent to existing developed road. Project is in compliance with GC.
<input checked="" type="checkbox"/>	3. Spawning Areas	Proposed project is not within a spawning area. Project is in compliance with GC.
<input checked="" type="checkbox"/>	4. Migratory Bird Breeding Areas	Proposed impacts to WOUS are not in migratory bird breeding areas. Project is in compliance with GC.
<input checked="" type="checkbox"/>	5. Shellfish Beds	Proposed project is not located within a shellfish bed. Project is in compliance with GC.
<input checked="" type="checkbox"/>	6. Suitable Material	Proposed project involves road widening. Only suitable materials will be placed within wetlands. Project is in compliance with GC.
<input checked="" type="checkbox"/>	7. Water Supply Intakes	Water supply intakes are not located within the proposed project area. Project is in compliance with GC.
<input checked="" type="checkbox"/>	8. Adverse Effects from Impoundments	Proposed project is not located within an impoundment. Project is in compliance with GC.
<input checked="" type="checkbox"/>	9. Management of Water Flows	Proposed project will not alter condition, capacity, or location of open waters. Project is in compliance with GC.
<input checked="" type="checkbox"/>	10. Fills Within 100-Year Floodplains	Project is located within the 100-Year floodplain. Project is in compliance with GC.
<input checked="" type="checkbox"/>	11. Equipment	Not applicable. Work in WOUS is restricted to forested seasonal wetland. Project is in compliance with GC.
<input checked="" type="checkbox"/>	12. Soil Erosion and Sediment Controls	Construction will not occur within actively flowing streams or drainages. Project is in compliance with GC.
<input checked="" type="checkbox"/>	13. Removal of Temporary Fills	Temporary fills are not anticipated. Project is in compliance with GC.
<input checked="" type="checkbox"/>	14. Proper Maintenance	Project is in compliance with GC.

<input checked="" type="checkbox"/>	15. Single and Complete Project	Project is in compliance with GC.
<input checked="" type="checkbox"/>	16. Wild and Scenic Rivers	No designated Wild and Scenic Rivers are present within the project site. Project is in compliance with GC.
<input checked="" type="checkbox"/>	17. Tribal Rights	Project is in compliance with GC.
<input checked="" type="checkbox"/>	18. Endangered Species	See Box 11 above.
<input checked="" type="checkbox"/>	19. Migratory Bird and Bald and Golden Eagle Permits	Suitable nesting habitat for raptors is present within the project site and vicinity. Pre-construction nesting surveys will be completed prior to the start of construction. Project is in compliance with GC.
<input checked="" type="checkbox"/>	20. Historic Properties	See Box 12 above.
<input checked="" type="checkbox"/>	21. Discovery of Previously Unknown Remains and Artifacts	Project is in compliance with GC.
<input checked="" type="checkbox"/>	22. Designated Critical Resource Waters	Not applicable. Project is in compliance with GC.
<input checked="" type="checkbox"/>	23. Mitigation	See Box 10 above.
<input checked="" type="checkbox"/>	24. Safety of Impoundment Structures	Not applicable. Project is in compliance with GC.
<input checked="" type="checkbox"/>	25. Water Quality	See Box 13 above.
<input checked="" type="checkbox"/>	26. Coastal Zone Management	See Box 14 above.
<input checked="" type="checkbox"/>	27. Regional and Case-by-Case Conditions	Project is in compliance with Regional Conditions.
<input checked="" type="checkbox"/>	28. Use of Multiple Nationwide Permits	Not Applicable. Project is in compliance with GC.
<input checked="" type="checkbox"/>	29. Transfer of Nationwide Permit Verifications	DWR is aware of GC. Project is in compliance with GC.
<input checked="" type="checkbox"/>	30. Compliance Certification	Mitigation is anticipated. Credits would be purchased at Cosumnes Floodplain Mitigation Bank, operated by Westervelt. Project in compliance with GC.
<input checked="" type="checkbox"/>	31. Pre-Construction Notification	PCN submitted to Sacramento District USACE.



Sacramento District Nationwide Permit Program Regional Conditions Checklist for California

U.S. ARMY CORPS OF ENGINEERS

BUILDING STRONG®

On March 18, 2012, the U.S. Army Corps of Engineers' South Pacific Division approved 26 regional conditions for the 2012 Nationwide Permits (NWP) in California, excluding the Lake Tahoe Basin, within the Sacramento District. This checklist is intended to assist applicants with completing the South Pacific Division Pre-Construction Notification Checklist and to ensure compliance with the regional conditions. This checklist does not include the full text of each regional condition.

Please refer to the *Final Sacramento District Nationwide Permit Regional Conditions for California, excluding the Lake Tahoe Basin* (http://www.spk.usace.army.mil/Portals/12/documents/regulatory/nwp/2012_nwps/2012-NWP-RC-CA.pdf) and the *List of Additional Information Required for Complete Pre-Construction Notification for California, Nevada and Utah*, when completing this checklist.

Please check the box to indicate you have read and have/will comply with the regional condition and provide a rationale on how you have/will comply with the condition.

Check	Regional Condition	Compliance Rationale
<input checked="" type="checkbox"/>	1. Pre-construction Notification. PCN must include: <input checked="" type="checkbox"/> Avoidance & minimization statement. <input checked="" type="checkbox"/> Plan & cross-section drawings. <input checked="" type="checkbox"/> Pre-project photos.	The information has been submitted with the PCN. Pre-project photos are included in the wetland delineation report submitted to USACE on January 14, 2015.
<input checked="" type="checkbox"/>	2. Pre-construction Notification. PCN must be submitted for: <input type="checkbox"/> Activities in a vernal pool. <input type="checkbox"/> Activities in the Primary or Secondary Zone of the Legal Delta, Sacramento River, and San Joaquin River, and immediate tributaries. <input type="checkbox"/> Crossings of perennial or intermittent waters. <input type="checkbox"/> Activities within 100 feet of a natural spring. <input type="checkbox"/> Activities located in areas designated as EFH.	PCN submitted in accordance with GC 31.
<input checked="" type="checkbox"/>	3. Recordation. Permittee will record the NWP verification.	Project site is maintained by CVFPB and operated by DWR.
<input checked="" type="checkbox"/>	4. Avoided Waters. Permittee shall: <input type="checkbox"/> Establish & maintain a preserve. <input type="checkbox"/> Place avoided waters & buffers into a separate parcel; and <input type="checkbox"/> Establish permanent legal protection.	Permanent impacts to WOUS are limited to areas with existing culverts and one isolated wetland.
<input checked="" type="checkbox"/>	5. Temporary Fill. PCN must include: <input type="checkbox"/> Avoidance practicability statement. <input type="checkbox"/> Description of the fill. <input type="checkbox"/> Plan for restoration and/or revegetation. Permittee will: <input type="checkbox"/> Use clean & washed gravel, <input type="checkbox"/> Place a horizontal marker. <input type="checkbox"/> Remove all temporary fill within 30 days.	All impacts are permanent. Proposed project does not include temporary fill.

Check	Regional Condition	Compliance Rationale
<input checked="" type="checkbox"/>	6. Stream Crossings. <input type="checkbox"/> For Federally-listed fish species habitat, span the stream or river, or use bottomless arch culvert. <input type="checkbox"/> Ensure only minor impacts would occur to fish and wildlife passage or expected high flows. <input checked="" type="checkbox"/> No work within standing or flowing waters. <input type="checkbox"/> Dewatering plans must be approved by the Corps. <input type="checkbox"/> Will comply with Regional Condition 19; <input type="checkbox"/> Will not result in a reduction of bankfull width or depth of streams or negatively alter the flood control capacity.	Proposed project will not impact streams. No streams are present within the project site.
<input checked="" type="checkbox"/>	7. Lead Federal Agency. Must submit documentation pertaining to the Corps Permit Area for ESA and Area of Potential Effect for NHPA.	Documents for NHPA compliance are provided as attachments to 404 application.
<input checked="" type="checkbox"/>	8. Compliance Certificate. Must submit: <input checked="" type="checkbox"/> As-built drawings. <input checked="" type="checkbox"/> Post-construction photographs.	DWR agrees to submit as-built drawings and post-construction photographs with the compliance certification.
<input checked="" type="checkbox"/>	9. Permittee Responsible Mitigation. Must submit a final compensatory mitigation & monitoring plan.	The activity does not involve permittee-responsible mitigation. Compensatory mitigation is proposed at Cosumnes River Floodplain Mitigation Bank.
<input checked="" type="checkbox"/>	10. Mitigation. Must complete mitigation construction before or concurrent with commencement of project construction and/or submit proof of mitigation bank or ILF payment.	Compensatory mitigation is proposed at Cosumnes River Floodplain Mitigation Bank.
<input checked="" type="checkbox"/>	11. Contractor Awareness. Responsible for awareness and shall ensure permit & drawing availability.	DWR agrees to have a copy of the permit and drawings available for review at the project site.
<input checked="" type="checkbox"/>	12. Limits of Disturbance. Must clearly identify & ensure no work takes place outside of limits.	The project limits will be identified in the field.
<input checked="" type="checkbox"/>	13. Notification. Must notify 10 days prior to initiation of project construction.	DWR agrees to comply with this condition.
<input checked="" type="checkbox"/>	14. Inspections. Must allow inspection of activity(s).	DWR agrees to allow USACE representatives to inspect the project.
<input checked="" type="checkbox"/>	15. Mather Core Recovery Area (Sacramento County). NWP's (see list) revoked from use in vernal pools.	The activity does not involve impacts to vernal pools in the Mather Core Recovery Area.
<input checked="" type="checkbox"/>	16. Legal Delta. NWP's (see list) revoked.	The activity does not involve impacts in the Legal Delta.
<input checked="" type="checkbox"/>	17. Secondary Zone. Impacts must be mitigated within the Secondary Zone of the Legal Delta.	The activity would not occur within the Secondary Zone of the Legal Delta.
<input checked="" type="checkbox"/>	18. NWP 12 (Utility Lines). <input type="checkbox"/> Activity will not drain wetlands or waters. <input type="checkbox"/> Permittee will stockpile top 6-12" of topsoil. <input type="checkbox"/> Permittee will replace topsoil, and then re-seed. PCN must be submitted when a utility line: <input type="checkbox"/> Results in a discharge of fill into perennial or intermittent waters, or special aquatic sites <input type="checkbox"/> Results in a discharge of fill into greater than 100 linear feet of ephemeral waters; <input type="checkbox"/> Includes construction of an access road, substation or foundation within waters; or <input type="checkbox"/> Does not involve restoration of trenches to pre-project contours and conditions.	The activity will not involve NWP 12.

Check	Regional Condition	Compliance Rationale
☒	<p>19. NWPs 13 & 14. For bank stabilization activity(s):</p> <p><input type="checkbox"/> Activity will use native vegetation, bioengineering design techniques, or a combination thereof.</p> <p>PCN must be submitted when stabilization:</p> <p><input type="checkbox"/> Involves hard-armoring or non-vegetated/non-bioengineered technique.</p>	The activity will not involve NWP 13 or 14.
☒	<p>20. NWP 23 (Categorical Exclusions).</p> <p><input type="checkbox"/> Submit a PCN for all activities.</p> <p><input type="checkbox"/> Include a copy of the CE.</p> <p><input type="checkbox"/> Include final agency determinations for ESA, EFH, and NHPA.</p>	The activity will not involve NWP 23.
☒	<p>21. NWP 27 (Aquatic Habitat Restoration). PCN must be submitted when the activity:</p> <p><input type="checkbox"/> Results in a discharge of fill into perennial or intermittent waters, or special aquatic sites; or</p> <p><input type="checkbox"/> Results in a discharge of fill into greater than 100 linear feet of ephemeral waters.</p>	The activity will not involve NWP 27.
☒	<p>22. NWPs 29 and 39 (Residential & Commercial Development). Channelization or relocation of intermittent or perennial drainages is not authorized, except when relocation would result in a net increase in functions.</p>	No streams are present within the project site. Proposed action would not alter natural stream channels.
☒	<p>23. Waivers (300 & 500 linear foot): PCN must include:</p> <p><input type="checkbox"/> A narrative description;</p> <p><input type="checkbox"/> An analysis of the proposed impacts;</p> <p><input type="checkbox"/> Measures taken to avoid and minimize losses to waters; and</p> <p><input type="checkbox"/> A compensatory mitigation plan.</p>	No waiver is requested.
☒	<p>24. NWPs 29, 39, 40, 42, and 43: Must establish and maintain upland vegetated buffers.</p>	Proposed project would result in minimal impacts to wetland habitat.
☒	<p>25. NWP 46 (Discharge in Ditches): Will not cause the loss of greater than 0.5 acres of waters or the loss of more than 300 linear feet of ditch.</p>	The activity will not involve NWP 46.
☒	<p>26. All NWPs. All NWPs except (see list) are revoked for activities in histosols, fens, bogs and peatlands, and in wetlands contiguous with fens.</p>	The activity would not occur in a histosols, fen, bog, peatland or wetland contiguous with a fen.

ATTACHMENT E

Fee Calculator and Check

DREDGE AND FILL FEE CALCULATOR ¹ v14b 09/18/2014

This fee schedule is based on California Code of Regulations, Title 23, section 2200(a)(3). TO CALCULATE FEE: Enter the "Discharge Size" in Section A or, if the project qualifies, check the check-box in Section B according to the applicable Flat Fee category. If the project involves multiple discharges, then both Section A and Section B fee charges may apply. The project fee owed will appear in the "Total Fee For All Categories" box at the bottom of the Fee Calculator. Discharges to waters of the state from both temporary and permanent project impacts are subject to fees. In any case, dredge and fill operation fees shall not exceed \$90,000 for Fill and Excavation Applications and \$90,000 for Dredging Annual Active Discharge Fee.

Single Project Including Multiple Discharges

A. FEES BASED ON DISCHARGE SIZE

FEE CATEGORY	RATE	DISCHARGE SIZE		APPLICATION FEE ²	ANNUAL ACTIVE DISCHARGE FEE ³	ANNUAL POST DISCHARGE MONITORING FEE ⁴
(A) Fill & Excavation⁵ Discharges. Discharges will be assessed as the higher fee of "discharge length in feet" and "discharge area in acres". Discharge length shall be reported in Linear Feet. Includes linear discharges to drainage features and shorelines The size of the discharge area shall be rounded to two decimal places (0.01 acre = 436 square feet).	Discharge Length Feet x \$13.50		\$0	\$600	\$600	\$300
	Discharge Area Acres x \$5,670	0.009	\$600			
(B) Dredging Discharges (except Sand Mining-see (C) below)⁶ Dredge volume expressed in Cubic Yards.	Dredge Volume CY x \$0.21			\$0	\$0	\$0
Application Fee/Annual Active and Post Discharge Monitoring Fee: ^(b) Categories (A) and (B)				\$600	\$600	\$300

B. FEES BASED ON FLAT FEE CATEGORIES

(C) Sand Mining Dredging Discharges. Aggregate extraction in marine waters where the source material is free of pollutants and the dredging operation will not violate any Basin Plan Provisions.	Flat fee	Check if Applicable	<input type="checkbox"/>	\$0	\$0	\$0
(D) Ecological Restoration and Enhancement Projects Projects undertaken for the sole purpose of restoring or enhancing the beneficial uses of water. This schedule does not apply to projects required under a regulatory mandate or to projects that are not primarily intended for ecological restoration or enhancement, e.g., land development.	Flat fee	Check if Applicable	<input type="checkbox"/>	\$0	\$0	\$0
(E) Low Impact Discharges. Projects may be classified as low impact discharges if they meet the following criteria: 1. The discharge size is less than all of the following: (a) for fill, 0.1 acre, and 200 linear feet; and (b) for dredging, 25 cubic yards. 2. The discharger demonstrates that: (a) all practicable measures will be taken to avoid impacts; (b) where unavoidable temporary impacts take place, waters and vegetation will be restored to pre-project conditions as quickly as practicable; and (c) where unavoidable permanent impacts take place, there will be no net loss of wetland, riparian area, or headwater functions, including onsite habitat, habitat connectivity, floodwater retention, and pollutant removal. 3. The discharge will not do any of the following: (a) directly or indirectly destabilize a bed of a receiving water; (b) contribute to significant cumulative effects; (c) cause pollution, contamination, or nuisance; (d) adversely affect candidate, threatened, or endangered species; (e) degrade water quality or beneficial uses; (f) be toxic; or (g) include "hazardous" or "designated" material.	Flat fee	Check if Applicable	<input type="checkbox"/>	\$0	N/A	N/A
(F) General Orders For CEQA Exempt Projects Projects which are CEQA exempt and which are required to submit notification of a proposed discharge to the State and/or Regional Board pursuant to: (1) a general order authorizing impacts for the qualifying project CEQA exemption (e.g. Small Habitat Restoration General Permit); or (2) a general water quality certification permitting discharges authorized by a U.S. Army Corps of Engineers general permit (e.g., nationwide permit). Applies ONLY if a general order or general water quality certification was previously granted.	Flat Fee	Check if Applicable	<input type="checkbox"/>	\$0	N/A	N/A
(G) Emergency Projects authorized by a Water Board General Order	Flat Fee	Check if Applicable	<input type="checkbox"/>	\$0	N/A	N/A
Flat Fee: Categories (C) to (G)				\$0	\$0	\$0

C. FEES BASED ON AMENDED ORDERS

<p>Amended Orders. Amendments of WDR's or water quality certifications previously issued for one-time discharges not subject to annual billings. Fees charged as follows:</p>						
<p>(i) Minor project changes, not requiring technical analysis and involving only minimal processing time.</p>	<p>No fee required</p>					
<p>(ii) Changes to projects eligible for flat fees (fee categories C and D. above) where technical analysis is needed to assure continuing eligibility for flat fee and that beneficial uses are still protected.</p>	<p>Flat fee</p>	<p>Check if Applicable</p>	<input type="checkbox"/>	<p>\$0</p>		
<p>(iii) Project changes not involving an increased discharge amount, but requiring some technical analysis to assure that beneficial uses are still protected and that original conditions are still valid, or need to be modified</p>	<p>Flat fee</p>	<p>Check if Applicable</p>	<input type="checkbox"/>	<p>\$0</p>		
<p>(iv) Project changes involving an increased discharge amount and requiring some technical analysis to assure that beneficial uses are still protected and that original conditions are still valid, or need to be modified.</p>	<p>Additional fee assessed per increased amount of discharge(s) Complete Section A and B</p>	<p>Check if Applicable</p>	<input type="checkbox"/>	<p>\$0</p>		
<p>(v) Major project changes requiring an essentially new analysis and re-issuance of WDR's or water quality certification.</p>	<p>New fee assessed</p>					
<p align="center">Fees Based on Amended Orders</p>	<p>Amended Orders (i) to (v)</p>			<p>\$0</p>	<p>\$0</p>	<p>\$0</p>
<p>TOTAL FEE FOR ALL CATEGORIES</p>				<p>\$600</p>	<p>\$600</p>	<p>\$300</p>

1(a) For "excavation" the area of the discharge is the area of excavation; if the excavated material is then discharged to waters, an additional "fill" fee will be assessed.

1(b) When a single project includes multiple discharges within a single dredge and fill fee category, the fee for that category shall be assessed based on the total area, volume, or length of discharge (as applicable) of the multiple discharges. When a single project includes discharges that are assessed under multiple standard fee categories, the total application fee shall be the sum of the application fees assessed under each applicable fee category; however only a single annual active discharge fee or annual post-discharge monitoring fee, if required, shall be assessed for the project. The single annual active discharge fee and the single annual post-discharge monitoring fee for the project shall be based on the higher of the applicable fee categories. Single projects qualifying for a flat fee or amended order fee shall only be assessed the applicable flat fee or amended order fee.

1(c) Fees shall be based on the largest discharge size specified in the original or revised report of waste discharge or Clean Water Act (CWA) Section 401 water quality certification application, or as reduced by the applicant without any State Board or Regional Board intervention.

1(d) If water quality certification is issued in conjunction with dredge or fill WDRs or is issued for a discharge regulated under such preexisting WDRs, the current annual WDR fee as derived from this dredge and fill fee schedule shall be paid in advance during the application for water quality certification, and shall comprise the fee for water quality certification.

1(e) Discharges requiring water quality certification and regulated under a federal permit or license other than a US Army Corps of Engineers CWA Section 404 permit or a Federal Energy Regulatory Commission License shall be assessed a fee determined from CCR 23, Section 2200(a).

2 Dischargers shall pay a one-time application fee for each project at the time that the application or report of waste discharge is submitted. Notwithstanding section 2200.2, if discharges commence in a fiscal year other than the fiscal year in which the application or report of waste discharge is submitted, the application fee is in addition to the first annual active discharge fee for the project. If discharges commence in the same fiscal year as the application or report of waste discharge is submitted, the discharger shall pay only the greater of the application fee or the first annual active discharge fee. The application fee for category (A) fill and excavation discharges will be based on the discharger's estimate of project length and area. If, upon completion, the actual length or area is larger than the estimate, the discharger may receive an additional application fee invoice that is based on the actual project length and area, minus the application fee that was previously paid.

3 Dischargers shall pay an annual active discharge fee each fiscal year or portion of a fiscal year during which discharges occur until the regional board or the State Board issues a Notice of Completion of Discharges Letter to the discharger. The annual active discharge fee for category (B) dredging discharges will be invoiced after the annual dredge volume has been determined.

4 Dischargers shall pay an annual post-discharge monitoring fee each fiscal year or portion of a fiscal year commencing with the first fiscal year following the fiscal year in which the regional board or State Board issued a Notice of Completion of Discharges Letter to the discharger, but continued water quality monitoring or compensatory mitigation monitoring is required. Dischargers shall pay the annual post-discharge monitoring fee each fiscal year until the regional board or the State Board issues a Notice of Project Complete Letter to the discharger.

5 "Excavation" refers to removing sediment or soil in shallow waters or under no-flow conditions where impacts to beneficial uses are best described by the area of the discharge. It typically is done for purposes other than navigation. Examples include trenching for utility lines, other earthwork preliminary to discharge, removing sediment to increase channel capacity, and other flood control and drainage maintenance activities (e.g., debris removal, vegetation management and removal, detention basin maintenance and erosion control of slopes along open channels and other drainage facilities).

6 "Dredging" generally refers to removing sediment in deeper water to increase depth. The impacts to beneficial uses are best described by the volume of the discharge and typically occur to facilitate navigation. For fee purposes it also includes aggregate extraction within stream channels where the substrate is composed of coarse sediment (e.g., gravel) and is reshaped by normal winter flows (e.g., point bars), where natural flood disturbance precludes establishment of significant riparian vegetation, and where extraction timing, location and volume will not cause changes in channel structure (except as required by regulatory agencies for habitat improvement) or impair the ability of the channel to support beneficial uses.