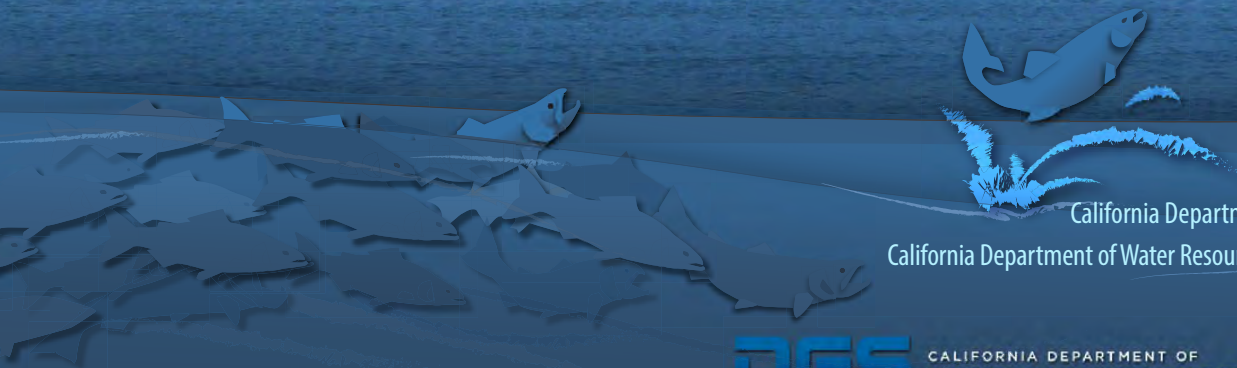


**Delta Research Station Project:
Estuarine Research Station and Fish Technology Center**
**Final Environmental Impact Report/
Environmental Impact Statement**
**Volume III: Comments and Responses to
Comments on the Draft EIR/EIS**

February 2017



Prepared for:

California Department of General Services on behalf of
California Department of Water Resources and U.S. Fish and Wildlife Service

DGS CALIFORNIA DEPARTMENT OF
GENERAL SERVICES



Prepared by:

Horizon Water and Environment

Delta Research Station – Estuarine Research Station and Fish Technology Center

Final Environmental Impact Report/Environmental Impact Statement

Volume 3 - Comments and Responses to Comments on the Draft EIR/EIS

SCH# 2014122017

Prepared for:

State of California
Department of General Services
707 Third Street
West Sacramento, CA 95605

On behalf of Lead Agencies:

California Department of Water Resources and U.S. Fish and Wildlife Service

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February 2017

Horizon Water and Environment. 2017. Delta Research Station – ERS and FTC Final Environmental Impact Report/Environmental Impact Statement. February. (HWE 13.014) Oakland, CA.

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Acronyms and Abbreviations

ABSC	Army Base Steering Committee
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CO ₂ e	carbon dioxide equivalents
CRHR	California Register for Historical Resources
DOF	California Department of Finance
DRS	Delta Research Station
DTSC	California Department of Toxic Substances Control
DWR	California Department of Water Resources
DWSC	Deep Water Ship Channel
EDD	California Employment Development Department
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
ERS	Estuarine Research Station
ESA	Endangered Species Act
FEIR	Final Environmental Impact Report
GHG	greenhouse gas
IEP	Interagency Ecological Program
IEPSG	Interagency Ecological Program Stakeholder Group
IPCC	Intergovernmental Panel on Climate Change
LO	Lack of Objections
MWD	Metropolitan Water District
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NOA	Notice of Availability
NOD	Notice of Determination
NO _x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System

OPR	State Office of Planning and Research
RCRA	Resource Conservation and Recovery Act
ROD	Record of Decision
RVFD	Rio Vista Fire Department
RVARC	Rio Vista Army Reserve Center
SHPO	State Historic Preservation Officer
SR	State Route
STA	Solano Transportation Authority
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service

Chapter 1

INTRODUCTION

The California Department of Water Resources (DWR) and U.S. Fish and Wildlife Service (USFWS) have prepared this Final Environmental Impact Report/Environmental Impact Statement (Final EIR/EIS) to provide the public, responsible agencies, and trustee agencies with information about the potential environmental effects of implementation of the proposed Delta Research Station (DRS or Proposed Project). DWR and USFWS's Final EIR/EIS was prepared in compliance with the California Environmental Quality Act (CEQA) of 1970 (as amended), the CEQA Guidelines (14 California Code of Regulations (CCR) 15000 et seq.), the National Environmental Policy Act (NEPA, 2 U.S. Code [USC] 432), and the Council on Environmental Quality's (CEQ's) regulations for implementing NEPA (Code of Federal Regulations [CFR] Sections 1500-1508).

Form and Organization of the Final EIR/EIS

This Final EIR/EIS contains the following components:

Chapter 1, *Introduction*. This chapter describes the organization of the Final EIR/EIS, and its preparation, review, and certification process. CEQA requires that a list of agencies and persons commenting on the Draft EIR/EIS be included in the Final EIR/EIS. In compliance with this requirement, Chapter 1 also presents a list of persons commenting. In addition, this chapter describes changes to Alternative 2 (Rio Vista Army Reserve Center – Configuration 1) that have been proposed by DWR and USFWS since publication of the Draft EIR/EIS.

Chapter 2, *Comments and Responses*. CEQA requires that written responses be prepared for all substantive comments received that raise environmental issues. Therefore, Chapter 2 contains all of the comments on the Draft EIR received, and DWR and USFWS's responses to those comments.

Chapter 3, *Revisions to the Draft EIR/EIS*. Chapter 3 is the location that would present revisions made to the Draft EIR/EIS as a result of oral and written comments received on it, as well as corrections of typographical errors and other minor errors in the text that were identified after the Draft EIR/EIS was published.

Chapter 4, *Report Preparation*. Chapter 4 lists the individuals involved in preparing this Final EIR/EIS and their responsibilities.

Attachment A, *Draft EIR/EIS Notices and Mailing List*. This appendix contains the CEQA Notice of Availability of the Draft EIR/EIS, the NEPA Notice of Availability of the Draft EIR/EIS, Federal Register notice, the Notice of Completion of the Draft EIR/EIS that was sent to the State Office of Planning and Research (OPR), the newspaper advertisements announcing the availability of the Draft EIR/EIS, details about public meetings for the Proposed Project, and the distribution list for the Notice of Availability of the Draft EIR/EIS.

Attachment B, *Meeting Materials*. This appendix contains the materials associated with the public meetings that were held during the public review period of the Draft EIR/EIS, including the Rio Vista meeting sign-in sheet, and comment and speaker forms.

Public Review of the Draft EIR/EIS

A Notice of Availability (NOA) was circulated to the public; to local, state, and federal agencies; and to other interested parties through direct mailing, by publication in general circulation newspapers, by posting on the Proposed Project's website (deltaresearchstation.com), and was also sent to the Solano County and Stanislaus County clerks offices. This NOA initiated a 45-day public review period, beginning October 30, 2015, and ending December 14, 2015. During this time, the Draft EIR/EIS was made available for review on the DRS website, at DWR's office in Sacramento (1415 Ninth Street, Room 315-3), the Rio Vista Library (44 South Second Street), and the Cesar Chavez Library in Stockton (605 N. El Dorado Street), and via mail by specific request.

The various Draft EIR/EIS notices and the associated mailing list are provided in Attachment A of this Final EIR/EIS.

Public Meetings on the Draft EIR/EIS

DWR and USFWS conducted two public meetings on the Draft EIR/EIS in Rio Vista and Stockton. The Rio Vista meeting was held on December 1, 2015, at the D.H. White Elementary School (500 Elm Way), and the Stockton meeting was held on December 3, 2015, at Arnold Rue Community Center (5758 Lorraine Avenue). The Rio Vista meeting was attended by members of the public and other interested parties. No members of the public or other interested parties attended the Stockton meeting. Meeting materials are provided in Appendix B of this Final EIR/EIS.

Preparation of the Final EIR/EIS

As stated previously, CEQA requires that an FEIR include responses to comments regarding the DEIR. Therefore, this Final EIR/EIS includes Chapter 2, *Comments and Responses*.

DWR will review the Final EIR/EIS, consider staff recommendations and public comment, and decide whether to certify the EIR and approve or deny the Proposed Project. USFWS will also review the Final EIR/EIS, consider staff recommendations and public comment, and prepare a Record of Decision (ROD) that states their decision on the Proposed Project.

After certification of the EIR and approval of the Proposed Project, DWR will file a Notice of Determination (NOD) with OPR.

List of Commenters on the Draft EIR/EIS

The following persons submitted written comments on the Draft EIR/EIS:

- Tadlock, Stephanie, Central Valley Regional Water Quality Control Board, letter dated November 19, 2015;
- Vink, Erik, Delta Protection Commission, letter dated December 14, 2015;

- 1 ▪ Eychaner, Jim, email dated December 5, 2015;
- 2 ▪ Goodman, Andrew, email dated December 1, 2015;
- 3 ▪ Kirkley, Judy, letter dated December 15, 2015;
- 4 ▪ Lambie, John, email dated November 30, 2015;
- 5 ▪ Arakawa, Stephen, Metropolitan Water District of Southern California, letter dated
6 December 14, 2015;
- 7 ▪ Morat, Richard, email dated November 12, 2015;
- 8 ▪ Mulligan, Terry, email dated December 5, 2015;
- 9 ▪ Rea, Maria C., National Oceanic and Atmospheric Administration, letter dated December 14,
10 2015;
- 11 ▪ Public, Jean, email dated November 2, 2015;
- 12 ▪ Morgan, Scott, Office of Planning and Research, California State Clearinghouse and Planning
13 Unit, letter dated December 15, 2015;
- 14 ▪ Vick, Jan, City of Rio Vista, Rio Vista Army Base Steering Committee, letter dated December
15 14, 2015;
- 16 ▪ McGinnis, Ashlen, San Joaquin County Department of Public Works, letter dated
17 December 14, 2015;
- 18 ▪ Solano County, letter dated December 16, 2015;
- 19 ▪ Person, Sandy, Solano Economic Development Corporation, letter dated December 14,
20 2015; and
- 21 ▪ Goforth, Kathleen Martyn, U.S. Environmental Protection Agency letter dated December 14,
22 2015.
- 23 ▪ Jones, Matthew R., Yolo-Solano Air Quality Management District, letter dated December 9,
24 2015.

25 In addition, oral comments were provided during the December 1, 2015, public meeting. Those
26 comments are provided in Chapter 2 of this Final EIR/EIS.

27 **Modifications to Alternative 2: Rio Vista Army Reserve Center,** 28 **Configuration 1 (Preferred Alternative)**

29 In spring of 2016, DWR and USFWS advanced the design process for Alternative 2 (Preferred
30 Alternative) and determined that the marina would need to be partially excavated inland as
31 opposed to being entirely located within the existing Sacramento River channel (as it was described
32 in the Draft EIR/EIS). Based on several meetings held with the U.S. Army Corps of Engineers

(USACE) regarding the layout of Alternative 2, USACE confirmed that the marina as presented in Figure 3-1 of the Draft EIR/EIS would exceed the pier head line. As such, in effort to conform with the USACE's pier head line policy, DWR and USFWS have decided to modify the conceptual layout of Alternative 2 by designing a partially excavated marina.

The facilities layout of modified Alternative 2 would be very similar to that which is described in the Draft EIR/EIS with the exception that some building footprints would be shifted westerly to accommodate the partially excavated marina. Construction of this modified alternative would involve greater excavation volumes in comparison to the in-channel marina (37,000 cubic yards for the marina). Because DWR and USFWS would like the option to consider approval and implementation of Alternative 2, modifications to this alternative and impact analyses are presented in Chapter 3, *Revisions to the Draft EIR/EIS*.

Operation and maintenance of modified Alternative 2 would be the same as that described in the Draft EIR/EIS.

The partially excavated marina is essentially a hybrid of Alternatives 2 and 3 from the Draft EIR/EIS (Alternative 2 considered an in-channel marina, while Alternative 3 considered a fully excavated marina). As such, the range of impacts of a partially excavated marina were considered and fully disclosed in the Draft EIR/EIS, and this modification to Alternative 2 would not result in any new significant impacts, or more significant impacts, than were disclosed in the Draft EIR/EIS. For this reason, recirculation of the Draft EIR/EIS is not necessary.

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Chapter 2**COMMENTS AND RESPONSES****Introduction**

This chapter contains the oral and written comments received on the Draft EIR/EIS and DWR and USFWS's responses to each substantive issue raised in the comments. Each comment letter and email has been assigned an alphabet letter, and comments within each letter and email are numbered consecutively (e.g., A-1, A-2, A-3) in the left margin, adjacent to each individual comment. Each comment letter and email is followed by DWR and USFWS's response(s) to that letter or email. The responses are numbered to correspond with the comments as identified in the left margin of the letter or email. Where the response indicates that a change has been made to the Draft EIR/EIS, those revisions are described briefly. Chapter 3 of the Final EIR/EIS presents the revised text.

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Public Comment A: Oral Comments Received During Public Meeting in Rio Vista, California (December 1, 2015)

1 The following comments were provided orally during the December 1, 2015, public meeting on the
2 Draft EIR/EIS in Rio Vista, California.

3 A-1. What internet access is available at the site? Internet service is spotty in Rio Vista.

4 A-2. How much dredging would be required for the proposed marina and how frequently
5 would it occur?

6 A-3. Would it be possible to have school tours at the facility?

7 A-4. The Army Base Steering Committee (ABSC) has been involved in this project for a long
8 time. At one point, the City of Rio Vista had plans to build recreational facilities on the
9 former army base. The Army has placed some restrictions on the deed.

10 A-5. The ABSC would prefer that an interpretive center be constructed on site with access
11 to the waterfront be available. For this reason, the ABSC prefers Configuration 1
12 (Alternative 2).

13 A-6. Appendix I of the Draft EIR/EIS (historic resources evaluation) was well done.

14 A-7. Where is the Rio Vista Army Reserve Center (RVARC) site located?

15 A-8. What sort of encumbrances will be placed on the land leased to the state to
16 accommodate the Delta Research Station (DRS)?

17 A-9. Is there discussion about the leasing terms with regards to how income would be
18 generated by the project?

19 A-10. What restrictions did the Army put on the land?

20 A-11. Will the project provide any storage for the public?

21 A-12. What is the total acreage of the facility in comparison to the remainder of the site?

**Public Comment A: Oral Comments Received During Public Meeting in
Rio Vista, California (December 1, 2015)**

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Public Comment A: Oral Comments Received During Public Meeting in Rio Vista, California (December 1, 2015)

Response to Comment A-1

The current internet provider can meet the projects connectivity needs, but it would ultimately be the internet provider and developer's responsibility for providing infrastructure to distribute internet service.

Response to Comment A-2

Maintenance dredging for all action alternatives is expected to occur every 10-15 years on an as-needed basis. As shown in Table 3-6 of the Draft EIR/EIS (page 3-28), under Alternative 2, it is estimated that approximately 7,000 to 11,000 cubic yards of sediment would be dredged. Under Alternative 2, approximately 10,000 cubic yards of sediment would be dredged.

The cross-reference to Table 3-5 in Section 3.2.7 was incorrect. To address this, the following sentence on page 3-31 is revised:

Marina maintenance volumes for each alternative are presented in Table 3-65, above.

Response to Comment A-3

The primary objectives of the Proposed Project are to construct a research station and co-locate it with a facility capable of studying fish in captivity (i.e., the Fish Technology Center [FTC]). As described in Table 20-3 of the Draft EIR/EIS (page 20-7), the City of Rio Vista envisions constructing the Delta Ecology Center on the Rio Vista Army Reserve Center (RVARC) site, which would serve as an interpretive center that provides the public an opportunity to learn about research pertaining to the Delta ecosystem. While the City of Rio Vista has not yet received funds for this facility, if built in the future, it is DWR and USFWS' understanding that this facility would likely be used to host educational tours for students.

Response to Comment A-4

The comment noting the Army Base Steering Committee's involvement in the DRS project is acknowledged. The background summary regarding the City of Rio Vista's past plans to build recreational facilities on the former RVARC site and restrictions on the deed is correct. Chapter 13 of the Draft EIR/EIS, *Land Use and Planning*, describes the Rio Vista Army Base Reuse Plan, prepared in 1998 and supplemented in 2001, which established a range of future uses of the site. The Reuse Plan primarily envisioned creation of recreational uses including a community center, outdoor recreation areas with soccer fields, a riverfront promenade, conference center, picnic areas, a public marina, and other uses. As described in Chapter 13, the Reuse Plan informed other land use plans that were later developed including the Rio Vista Army Reserve Center Redevelopment Plan and EIR, as well as the Army Base District Design Guidelines. Refer to Chapter 13 for additional details.

Public Comment A: Oral Comments Received During Public Meeting in Rio Vista, California (December 1, 2015)

Response to Comment A-5

The commenter's preference for Alternative 2 (RVARC, Configuration 1) is acknowledged.

Response to Comment A-6

The commenter's positive review of Appendix I (Historical Architectural Evaluation for the Delta Research Station) is acknowledged.

Response to Comment A-7

The RVARC site (location of the Preferred Alternative and Alternative 3) is located in the southern part of Rio Vista to the east of Beach Drive and north of the U.S. Coast Guard Station and Sandy Beach Park and Campground. The RVARC site is shown in Figures 1-1 and 1-2 of the Draft EIR/EIS.

Response to Comment A-8

In the event that the lead agencies select Alternatives 2 or 3, the lead agencies plan to lease a portion of the RVARC site from the City of Rio Vista. The terms of the lease have not yet been negotiated.

Response to Comment A-9

Refer to Response to Comment A-8, above. If Alternatives 2 or 3 is selected, the terms of a lease would be negotiated with the City of Rio Vista.

Response to Comment A-10

At the time the Secretary of the Army conveyed the former Army Reserve Base to the City of Rio Vista, a quitclaim deed was issued between the U.S. and the City of Rio Vista in 2003. According to the deed (No. DACA05-9-02-536), the City was restricted to using the property for "recreational purposes" which includes a broad range of uses such as passive open space uses (e.g., trails, viewpoints, shoreline access, and picnic facilities); natural resource conservation and habitat preservation/restoration; active public recreational facilities; indoor recreational and meeting facilities; public boat launch, marina and related facilities; interpretive center; amphitheater; a Delta Research Facility; and other public uses. In addition, the following commercial uses are permitted: lodging facilities; conference and meeting facilities; restaurants; marina and launch facilities; boat storage and repair; and other public educational programs and research facilities (e.g. class rooms, auditoriums, meeting rooms, displays, and data collection facilities and equipment).

Public Comment A: Oral Comments Received During Public Meeting in Rio Vista, California (December 1, 2015)

1 Response to Comment A-11

2 The DRS facilities would not include storage space available to the general public. As
3 described in Chapters 2 and 3 of the Draft EIR/EIS, the DRS facilities would serve as an aquatic
4 research and monitoring facility that would be used by staff at the California Department of
5 Water Resources (DWR), U.S. Fish and Wildlife Service (USFWS), California Department of
6 Fish and Wildlife (CDFW), and other agencies involved in the Interagency Ecological Program
7 (IEP). The facility would include storage space for boats, boat equipment, field equipment,
8 chemicals, and other items. However, this space would not be open to the general public.

9 Response to Comment A-12

10 As shown in Table 3-2 of the Draft EIR/EIS (page 3-10), the total approximate acreage of on-
11 land facilities for Alternative 2 (Preferred Alternative) is 14 acres and the total approximate
12 acreage of Alternative 3 on-land facilities is 18 acres. The Rio Vista Army Reserve Center
13 (RVARC) site is 28.16 acres (refer to Chapter 13, *Land Use and Planning*, in the Draft EIR/EIS).
14 Therefore, the remaining space available for future use on the RVARC would be 14.16 acres
15 under Alternative 2, and 10.16 acres under Alternative 3.




**Public Comment A: Oral Comments Received During Public Meeting in
Rio Vista, California (December 1, 2015)**

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Public Comment B: Letter from Stephanie Tadlock, Central Valley Regional Water Quality Control Board (November 19, 2015)

	 <small>EDMUND G. BROWN JR. GOVERNOR</small>  <small>MATTHEW RODRIGUEZ SECRETARY FOR ENVIRONMENTAL PROTECTION</small>
Central Valley Regional Water Quality Control Board	
<p>19 November 2015</p>	
<p>John Engstrom California Department of Water Resources 1416 Ninth Street, Room 315-3 Sacramento, CA 95814</p>	<p>CERTIFIED MAIL 91 7199 9991 7035 8420 5280</p>
<p>COMMENTS TO REQUEST FOR REVIEW FOR THE NOTICE OF AVAILABILITY FOR THE DRAFT ENVIRONMENTAL IMPACT REPORT/ENVIRONMENTAL IMPACT STATEMENT, ESTUARINE RESEARCH STATION AND FISH TECHNOLOGY CENTER PROJECT, SOLANO COUNTY</p>	
<p>B1</p>	<p>Pursuant to the California Department of Water Resources' 30 October 2015 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the <i>Request for Review for the Notice of Availability for the Draft Environment Impact Report/Environmental Impact Statement</i> for the Estuarine Research Station and Fish Technology Center Project, located in Solano County.</p> <p>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.</p> <p>I. Regulatory Setting</p> <p><u>Basin Plan</u></p> <p>The Central Valley Water Board is required to formulate and adopt Basin Plans for all areas within the Central Valley region under Section 13240 of the Porter-Cologne Water Quality Control Act. Each Basin Plan must contain water quality objectives to ensure the reasonable protection of beneficial uses, as well as a program of implementation for achieving water quality objectives with the Basin Plans. Federal regulations require each state to adopt water quality standards to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act. In California, the beneficial uses, water quality objectives, and the Antidegradation Policy are the State's water quality standards. Water quality standards are also contained in the National Toxics Rule, 40 CFR Section 131.36, and the California Toxics Rule, 40 CFR Section 131.38.</p> <p>The Basin Plan is subject to modification as necessary, considering applicable laws, policies, technologies, water quality conditions and priorities. The original Basin Plans were adopted in 1975, and have been updated and revised periodically as required, using Basin Plan amendments. Once the Central Valley Water Board has adopted a Basin Plan</p>
<small>KARL E. LONGLEY SCD, P.E., CHAIR PAMELA C. CREEDON P.E., BOEE, EXECUTIVE OFFICER</small> <small>11020 Sun Center Drive #200, Rancho Cordova, CA 95670 www.waterboards.ca.gov/centralvalley</small>	
<small>RECYCLED PAPER</small>	

Public Comment B: Letter from Stephanie Tadlock, Central Valley Regional Water Quality Control Board (November 19, 2015)

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cont.

amendment in noticed public hearings, it must be approved by the State Water Resources Control Board (State Water Board), Office of Administrative Law (OAL) and in some cases, the United States Environmental Protection Agency (USEPA). Basin Plan amendments only become effective after they have been approved by the OAL and in some cases, the USEPA. Every three (3) years, a review of the Basin Plan is completed that assesses the appropriateness of existing standards and evaluates and prioritizes Basin Planning issues.

For more information on the *Water Quality Control Plan for the Sacramento and San Joaquin River Basins*, please visit our website:
http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/.

Antidegradation Considerations

All wastewater discharges must comply with the Antidegradation Policy (State Water Board Resolution 68-16) and the Antidegradation Implementation Policy contained in the Basin Plan. The Antidegradation Policy is available on page IV-15.01 at:
http://www.waterboards.ca.gov/centralvalleywater_issues/basin_plans/sacsjr.pdf

In part it states:

Any discharge of waste to high quality waters must apply best practicable treatment or control not only to prevent a condition of pollution or nuisance from occurring, but also to maintain the highest water quality possible consistent with the maximum benefit to the people of the State.

This information must be presented as an analysis of the impacts and potential impacts of the discharge on water quality, as measured by background concentrations and applicable water quality objectives.

The antidegradation analysis is a mandatory element in the National Pollutant Discharge Elimination System and land discharge Waste Discharge Requirements (WDRs) permitting processes. The environmental review document should evaluate potential impacts to both surface and groundwater quality.

II. Permitting Requirements

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

Public Comment B: Letter from Stephanie Tadlock, Central Valley Regional Water Quality Control Board (November 19, 2015)

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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.

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

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

For more information on which Phase I MS4 Permit this project applies to, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/municipal_permits/.

For more information on the Phase II MS4 permit and who it applies to, visit the State Water Resources Control Board at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/phase_ii_municipal.shtml

Industrial Storm Water General Permit

Storm water discharges associated with industrial sites must comply with the regulations contained in the Industrial Storm Water General Permit Order No. 2014-0057-DWQ.

For more information on the Industrial Storm Water General Permit, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/industrial_general_permits/index.shtml.

Clean Water Act Section 404 Permit

If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed from the United States Army Corps of Engineers (USACOE). If a Section 404 permit is required by the USACOE, the Central Valley Water Board will review the permit application to ensure

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.

Public Comment B: Letter from Stephanie Tadlock, Central Valley Regional Water Quality Control Board (November 19, 2015)

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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.

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 10 of the Rivers and Harbors Act or Section 9 from the United States Coast Guard), is required for this project due to the disturbance of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications.

Waste Discharge Requirements – Discharges to Waters of the State

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 may require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation.

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

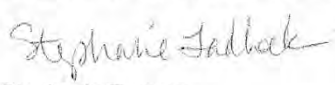
http://www.waterboards.ca.gov/centralvalley/help/business_help/permit2.shtml.

Regulatory Compliance for Commercially Irrigated Agriculture

If the property will be used for commercial irrigated agricultural, the discharger will be required to obtain regulatory coverage under the Irrigated Lands Regulatory Program. There are two options to comply:

1. **Obtain Coverage Under a Coalition Group.** Join the local Coalition Group that supports land owners with the implementation of the Irrigated Lands Regulatory Program. The Coalition Group conducts water quality monitoring and reporting to the Central Valley Water Board on behalf of its growers. The Coalition Groups charge an annual membership fee, which varies by Coalition Group. To find the Coalition Group in your area, visit the Central Valley Water Board's website at: http://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_lands/app_approval/index.shtml; or contact water board staff at (916) 464-4611 or via email at IrrLands@waterboards.ca.gov.

Public Comment B: Letter from Stephanie Tadlock, Central Valley Regional Water Quality Control Board (November 19, 2015)

<p>B1 cont.</p>	<p>Estuarine Research Station and Fish Technology Center Project Solano County</p> <p>- 5 -</p> <p>19 November 2015</p>
	<p>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.</p> <p><u>Low or Limited Threat General NPDES Permit</u></p> <p>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 <i>Dewatering and Other Low Threat Discharges to Surface Waters</i> (Low Threat General Order) or the General Order for <i>Limited Threat Discharges of Treated/Untreated Groundwater from Cleanup Sites, Wastewater from Superchlorination Projects, and Other Limited Threat Wastewaters to Surface Water</i> (Limited Threat General Order). A complete application must be submitted to the Central Valley Water Board to obtain coverage under these General NPDES permits.</p> <p>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</p> <p>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</p> <p>If you have questions regarding these comments, please contact me at (916) 464-4644 or Stephanie.Tadlock@waterboards.ca.gov.</p> <p> Stephanie Tadlock Environmental Scientist</p>

**Public Comment B: Letter from Stephanie Tadlock, Central Valley Regional
Water Quality Control Board (November 19, 2015)**

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Public Comment B: Letter from Stephanie Tadlock, Central Valley Regional Water Quality Control Board (November 19, 2015)

1 Response to Comment B-1

2 DWR and USFWS acknowledges and appreciates the Central Valley Regional Water Quality
3 Control's (Central Valley Water Board) review and comments on the Draft EIR/EIS, and its
4 input regarding the various regulatory permitting requirements which may apply to the
5 Proposed Project. The permitting requirements stated in the Central Valley Water Board's
6 letter are described in Section 12.2.2 in Chapter 12, *Hydrology and Water Quality*, of the Draft
7 EIR/EIS.

**Public Comment B: Letter from Stephanie Tadlock, Central Valley Regional
Water Quality Control Board (November 19, 2015)**

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Public Comment C: Letter from Erik Vink, Delta Protection Commission (December 14, 2015)

STATE OF CALIFORNIA – NATURAL RESOURCES AGENCY

EDMUND G. BROWN, JR., Governor

DELTA PROTECTION COMMISSION

2101 Stone Blvd., Suite 210
West Sacramento, CA 95691
Phone (916) 375-4800 / FAX (916) 376-3962
www.delta.ca.gov



Mary N. Piepho, Chair
Contra Costa County
Board of Supervisors

Skip Thomson, Vice Chair
Solano County
Board of Supervisors

Don Nottoli
Sacramento County
Board of Supervisors

Bob Elliott
San Joaquin County
Board of Supervisors

Oscar Villegas
Yolo County
Board of Supervisors

Norman Richardson
Cities of Contra Costa and
Solano Counties

Christopher Cabaldon
Cities of Sacramento and
Yolo Counties

Susan Loftus
Cities of San Joaquin County

Michael Scriven
Central Delta
Reclamation Districts

Justin van Loben Sels
North Delta Reclamation Districts

Robert Ferguson
South Delta Reclamation Districts

Brian Kelly
CA State Transportation Agency

Karen Ross
CA Department of Food and
Agriculture

John Laird
CA Natural Resources Agency

Brian Bugsch
CA State Lands Commission

Ex Officio Members

Honorable Jim Frazier
California State Assembly

Honorable Cathleen Galgiani
California State Senate

December 14, 2015

John Engstrom
California Department of Water Resources
P.O. Box 942836
Sacramento, CA 94236-0001
Email: comments@deltaresearchstation.com

RE: Draft EIR/EIS for Proposed Delta Research Station (SCH 2014122017)

Dear Mr. Engstrom:

The staff of the Delta Protection Commission (Commission) has reviewed the Draft EIR/EIS for the Delta Research Station (DRS). Under California Public Resources Code (PRC) Section 29703.5, the Commission makes recommendations to the Delta Stewardship Council on methods of preserving the Delta as an evolving place as the Council implements the Delta Plan. To that end, we offer these comments on the Draft EIR/EIS.

The proposed new research station would consolidate state and federal Interagency Ecological Program (IEP) research activities into one location. Construction and operation of the DRS would reduce IEP travel times and costs, and improve research and monitoring activity efficiency.

The preferred alternative in the plan would be to build the center on the Sacramento River at the Rio Vista Army Reserve Center, which lies outside of the legal Delta. However, the Commission supports the DRS because construction and operations would likely create jobs and increase economic opportunities in and around the City of Rio Vista. A recent study of the Delta's socio-economic opportunity (prepared by the UC Davis Center for Regional Change) found that in comparison to the state-wide average, the quality of jobs in the Delta is quite low. The authors recommended focusing economic development efforts on improving job quality and diversifying economic opportunities to higher wage industries.

Construction of the preferred alternative would create more than 200 jobs and over \$23 million in spending for Solano and San Joaquin counties. The economic impact on Rio Vista from employment relocation, the addition of new employees, and local spending would be positive. The Draft EIR/EIS

C1

Public Comment C: Letter from Erik Vink, Delta Protection Commission (December 14, 2015)

John Engstrom
California Department of Water Resources
December 14, 2015
Page 2 of 2

notes that the preferred alternative would be expected to result in total of \$2.2 million in new employee retail sales that would generate approximately a total of \$16,300 and \$2,720 in sales tax revenues for Rio Vista and Solano County, respectively (page 18-21). Although small, these long-term benefits of the proposed DRS would help to diversify and improve the economy of the Delta.

Thank you for considering our comments. If you have any questions, or would like a copy of The Delta Regional Opportunity Analysis prepared by the UC Davis Center for Regional Change, please do not hesitate to contact Jennifer Ruffolo at (916) 375-4882 or Jennifer.ruffolo@delta.ca.gov.

Sincerely,



Erik Vink
Executive Director

cc: Skip Thomson, Commission Vice-Chair and Solano County Supervisor
Bob Elliott, Commission Member and San Joaquin County Supervisor
Susan Lofthus, Commission Member and Stockton City Council Member
Norman Richardson, Commission Member and Mayor of Rio Vista
Randy Fiorini, Delta Stewardship Council Chair

↑
C1
cont.

Public Comment C: Letter from Erik Vink, Delta Protection Commission (December 14, 2015)

1 Response to Comment C-1

2 The commenter correctly describes the purpose and need of the DRS and the preferred
3 alternative. The DRS is intended to advance the interests of researchers, local communities
4 and other groups that are dependent on the Bay-Delta by facilitating coordinated monitoring
5 and research efforts on the Bay-Delta's aquatic resources. The Proposed Project is also
6 needed to improve the effectiveness and efficiency of scientific efforts related to Bay-Delta
7 rare fish species particularly since federal and state agency staff currently working on similar
8 Bay-Delta issues are distributed among different locations. By consolidating facilities
9 associated with the IEP (including boating facilities) in one centralized location in the Bay-
10 Delta, the DRS would reduce redundancies and costs related to operating existing IEP
11 facilities.

12 The commenter's expression of support of the DRS and the economic benefits associated with
13 the Proposed Project are acknowledged. Chapter 18, *Socioeconomics*, describes the estimated
14 direct and indirect economic impacts induced by the DRS. As the comment notes, the
15 Preferred Alternative is projected to directly employ 139 workers and indirectly induce 114
16 jobs (approximately 253 jobs total), result in construction spending of approximately \$26
17 million and generate another \$13.2 million in regional economic output activity from
18 supporting businesses' spending (indirect effects). Refer to Chapter 18, Section 18.3.3 for
19 additional information regarding the Preferred Alternative's potential effects on Solano
20 County and San Joaquin County's economy.

**Public Comment C: Letter from Erik Vink, Delta Protection Commission
(December 14, 2015)**

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Public Comment D: Email from Jim Eychaner (December 5, 2015)

From: Michael Stevenson
Sent: Wednesday, December 16, 2015 2:31 PM
To: allison@horizonh2o.com
Subject: Fwd: DEIR 12.1.2 RVAC Hydrology

Begin forwarded message:

From: JHBS Eychaner <knabe.ct@gmail.com>
Date: December 5, 2015 at 2:51:09 PM PST
To: comments@deltaresearchstation.com
Subject: DEIR 12.1.2 RVAC Hydrology

D1

Just a quibble, but worth cleaning up. At p. 12-4, lines 30-32, the draft states
From 1978 to 1997, the historical mean
and diurnal tidal ranges at the Rio Vista monitoring station were 32 and 48 feet,
respectively (NOAA 2015).

Given the RVARC site elevation of 18 ft above NGVD on the lower terrace, not regularly
inundated at present, it seems the tide ranges might be missing a decimal point (3.2 and 4.8?) or
might be in inches rather than feet.

Jim Eychaner
Carmichael, CA 95608

Public Comment D: Email from Jim Eychaner (December 5, 2015)

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Public Comment D: Email from Jim Eychaner (December 5, 2015)**1 Response to Comment D-1**

2 This comment correctly points out a typographical error on page 12-4, lines 30-32 of the Draft
3 EIR/EIS. In response to this comment, the following sentence on page 12-4 has been revised:

4 From 1978 to 1997, the historical mean and diurnal tidal ranges at the Rio Vista
5 monitoring station were 3.02 and 4.08 feet, respectively (NOAA 2015).

Public Comment D: Email from Jim Eychaner (December 5, 2015)

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Public Comment E: Email from Andrew Goodman (December 1, 2015)

From: Michael Stevenson
Sent: Tuesday, December 01, 2015 1:21 PM
To: Engstrom, John@DWR; ted.sommer@water.ca.gov; Parson, Jennifer@DGS; Beggs, Barbara; robert_clarke@fws.gov
Cc: Tom Engels; Allison Chan; Kevin Fisher; Craig Stevens
Subject: FW: Rio Vista Research Station

FYI on a DRS public comment. See you in Rio Vista in a bit!

Michael Stevenson, M.S.
Principal
Horizon Water and Environment, LLC
180 Grand Avenue, Suite 1405; Oakland, CA 94612 P.O. Box 2727; Oakland CA, 94602 michael@horizonh2o.com
510-986-1852
www.horizonh2o.com

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

From: Andrew Goodman [mailto:andrewcarlgoodman@gmail.com]
Sent: Tuesday, December 1, 2015 1:16 PM
To: comments@deltaresearchstation.com
Subject: Rio Vista Research Station

E1

To spend \$130 on a this research station in Rio Vista, CA is a HUGE waste of money and time. Gathering all the scientists under one roof 'to save the Delta' is a move that will not pay off. The Delta is in serious trouble because the state of California prioritizes big agriculture over its native fish populations. The fish need the water that big agriculture uses. It's as simple as that. Spending this money to build this facility is just plain stupid. Give the fish of the Delta cold clean water, and watch their populations recover naturally. Nevermind, that's too hard to do.. let's eat some Blue Diamond almonds instead.

Andrew Goodman
Lodi, CA

Public Comment E: Email from Andrew Goodman (December 1, 2015)

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Public Comment E: Email from Andrew Goodman (December 1, 2015)**1 Response to Comment E-1**

2 This comment expressing opposition to the Proposed Project is acknowledged. The DRS is
3 intended to advance the interests of researchers, local communities and other groups that
4 are dependent on the Bay-Delta by facilitating coordinated monitoring and research efforts
5 on the Bay-Delta's aquatic resources. The Proposed Project would improve the effectiveness
6 and efficiency of scientific efforts related to Bay-Delta rare fish species because federal and
7 state agency staff currently working on similar Bay-Delta issues are distributed among
8 different locations. By consolidating facilities associated with the IEP (including boating
9 facilities) in one centralized location in the Bay-Delta, the DRS would reduce redundancies
10 and costs related to operating existing IEP facilities. As this comment does not pertain to the
11 content of the Draft EIR/EIS, no additional response is provided.

Public Comment E: Email from Andrew Goodman (December 1, 2015)

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Public Meeting Comment Form

Name:	JUDY KIRKLEY
Group/Organization (optional):	
Mailing Address:	525 BLACK DIAMOND DR RIO VISTA CA 94571-2205
Telephone No. (optional):	
Email (optional):	JUDYKIRKLEY@yahoo.com

F1

[illegible]

Please use additional sheets if necessary.

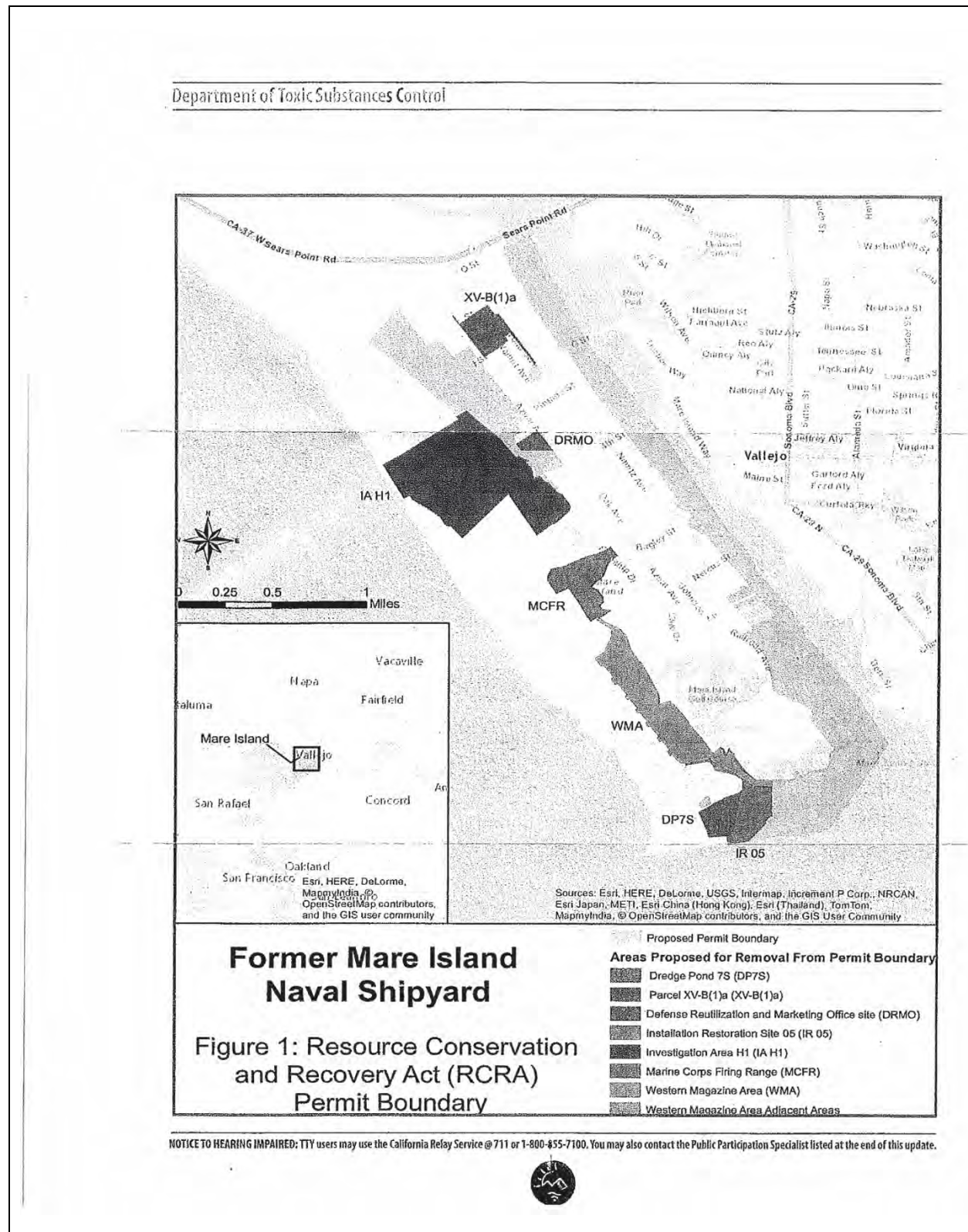
MAIL: California Department of Water Resources
Attn: John Engstrom, DRS Draft EIR/EIS Comments
1416 Ninth Street, Room 315-3
Sacramento, CA 95814

EMAIL: comments@deltaresearchstation.com

Public Comment F: Letter from Judy Kirkley (December 15, 2015)

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<p>California Department of Water Resources Attn: John Engstrom, DRS Draft EIR/EIS Comments 1416 Ninth Street, Room 315-3 Sacramento, CA 95814</p>	
<p>----- (fold here) -----</p>	
<div style="border: 1px solid black; padding: 10px; width: fit-content; margin: 0 auto;">Tape Here- Do not staple</div>	


Public Comment F: Letter from Judy Kirkley (December 15, 2015)



Public Comment F: Letter from Judy Kirkley (December 15, 2015)

Department of Toxic Substances Control

June 2015



The mission of DTSC is to protect California's people and environment from harmful effects of toxic substances through the restoration of contaminated resources, enforcement, regulation and pollution prevention.

MARE ISLAND NAVAL SHIPYARD

CORRECTIVE ACTION COMPLETE DETERMINATION AND PROPOSED CORRECTIVE ACTION PROCESS CHANGES





The Department of Toxic Substances Control (DTSC) invites you to review and comment on its proposal to issue Resource Conservation and Recovery Act (RCRA) Corrective Action Complete Determinations for five sites at the former United States (U.S.) Navy Mare Island Naval Shipyard (MINS) in Vallejo, Solano County, California.

These sites are Parcel XV-B(1)a, the Marine Corps Firing Range (MCFR), the Defense Reutilization and Marketing Office (DRMO), Installation Restoration Site 05, Dredge Pond 7S and Western Magazine Area (IR05/DP7S/WMA) and the Investigation Area (IA) H1. Each of these properties is owned by the U.S. Department of the Navy (Navy).

This determination would officially recognize all hazardous waste contamination has been cleaned up at these sites to standards appropriate for their reuse. DTSC makes this determination when the final remedy for a site is fully implemented and the public comment period has ended. Once DTSC finalizes its determination, DTSC will remove these parcels from the Mare Island hazardous waste facility Permit boundaries.

DTSC is also proposing corrective action process changes for future Corrective Action Complete determinations at MINS. In the future, DTSC proposes to combine the public comment periods for Corrective Action Complete determinations along with the public comment periods for the Proposed Plans that accompany such determinations, in order to run the comment periods concurrently.

Public Comment Period

**Public Comment Period
June 18 - August 4, 2015**




DTSC welcomes your comments during the public comment period for the Proposed Mare Island Corrective Action Complete Determination from **June 18, to August 4, 2015**

Please send your comments to:

Patrick Hsieh
DTSC Project Manager
700 Heinz Avenue
Berkeley, California 94710
(510) 540-3906, or email:
Patrick.Hsieh@dtsc.ca.gov

or

Jesus Cruz
Public Participation Specialist
(916) 255-3315
Toll Free (866) 495-5651
Jesus.Cruz@dtsc.ca.gov

Public Comment F: Letter from Judy Kirkley (December 15, 2015)

Department of Toxic Substances Control

WHAT IS RCRA CORRECTIVE ACTION?

Businesses operating under a hazardous waste facility permit for treatment, storage or disposal of hazardous waste onsite are required to clean up contamination that resulted from past practices on their entire property under a process called Corrective Action. The Corrective Action requirement applies to all property under the control of the facility owner or operator. MINS began operating as a RCRA hazardous waste facility in December 1981. Although MINS active facility operations ceased in 1996 and their RCRA facility permit expired in 2005, permit provisions for closure and corrective actions remain in effect.

WHAT IS THE RCRA CORRECTIVE ACTION COMPLETE DETERMINATION PROCESS?

When the final cleanup has been implemented, the facility permit is modified to incorporate a corrective action complete or corrective action complete with controls determination if:

- Option 1: the remedy has been implemented successfully and no further activity or controls are necessary to protect human health and the environment (corrective action complete determination); or
- Option 2: all that remains is performance of required operation and maintenance and monitoring actions, and/or compliance with and implementation of any institutional controls (i.e., corrective action complete with controls determination).
- At MINS, cleanup is generally done under the Comprehensive Environmental Response and Liability Act (CERCLA) process and is documented in a Proposed Plan. The Proposed Plan generally meets both RCRA and CERCLA cleanup requirements.

BACKGROUND

MINS was in continuous use as a U.S. Naval shipyard from 1854 until its closure in 1996. MINS operated as a hazardous waste facility under an Interim Status Permit beginning on December 11, 1981 to allow continued

operation of seven hazardous waste storage areas, three pre-treatment areas, one land disposal unit, surface impoundments, one industrial wastewater treatment plant, three wastewater accumulation areas, and several industrial wastewater treatment plant blending tanks. In 1988, both the U.S. Environmental Protection Agency (EPA) and DTSC denied RCRA operating permits for the surface impoundments and the RCRA landfill. The Navy submitted revisions to Part B of the RCRA permit application in 1993 and 1994 to include only hazardous waste storage units (Buildings 213, 759 and A195). DTSC issued a hazardous waste facility permit in April 1995 for the three storage units. DTSC certified that two of these storage units were properly closed in 1996 and the remaining one in 2002. However, certain permit provisions remain in effect, including the provisions for closure and corrective actions. Portions of Mare Island have been removed from the facility boundaries covered by the permit (see Figure 1, Page 5). The Eastern and Western Early Transfer Parcels were removed as part of the early transfer of these parcels to the City of Vallejo. Other parcels have been removed over time based upon a determination that no further action was required following investigation of the site or that the final remedy had been implemented and no further action, except for compliance with institutional controls, was required.

PROPOSED SITES FOR CORRECTIVE ACTION COMPLETE DETERMINATIONS

The proposed RCRA Corrective Action Complete Determination will officially recognize that all hazardous waste contamination on Parcels XV-B(1)a, the MCFR, the DRMO, IR05/DP7S/WMA, and IA H1 have been addressed. RCRA Closure and Corrective Action requirements would continue to apply to property still within the hazardous waste facility boundaries (See Figure 1 Page 5).

Parcel XV-B(1a) is approximately 17.2 acres of land in the northeastern part of Mare Island. Initially part of the tidal marshlands near the shoreline of Mare Island, it was later the site of the Navy Exchange Gas Station

NOTICE TO HEARING IMPAIRED: TTY users may use the California Relay Service @ 711 or 1-800-855-7100. You may also contact the Public Participation Specialist listed at the end of this update.



Public Comment F: Letter from Judy Kirkley (December 15, 2015)

Department of Toxic Substances Control

(Building 993). This parcel also contained a commissary (Building 1001), the CATS Repeater Facility (Building 663) and a skeet range. Based upon the results of the site investigation, no further action is required under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) and the Navy has prepared a draft Finding of Suitability for Transfer (FOST) to document past investigation/cleanup activities and to demonstrate that no further action is required under CERCLA. One petroleum site, UST 993-4, is the subject of ongoing site closure activities under the Water Board and will require petroleum-related land use restrictions. As no further action is required under CERCLA and the Water Board is overseeing the site closure of petroleum site UST 993-4, DTSC is proposing to remove this parcel from the facility permit boundaries upon DTSC concurrence with the FOST.

The Marine Corps Firing Range site (MCFR) covers approximately 48 acres between the boundaries of the Eastern and Western Early Transfer Parcels. It consists of the Rifle Range and three pistol range complexes (South, Central, and North). The MCFR was constructed in 1940 and the Rifle Range began operation at that time. The pistol ranges at MCFR began operation in 1949.

The final remedy approved by the Navy, DTSC and the Water Board in November 2013 consists of institutional controls that prohibit sensitive uses and restrict future invasive activities in the historic outfall and levee areas. These institutional controls also require inspection of the levees at least once every five years. These institutional controls are further described in the Navy's Land Use Control Remedial Design. DTSC is proposing to determine corrective action is complete and to remove this parcel from the facility permit boundaries upon DTSC concurrence with the Finding of Suitability to Transfer.

The Defense Reutilization and Marketing Office site (DRMO) is located at the intersection of Dump Road (an extension of A Street) and Azuar Drive (formerly

Cedar Avenue) on the north-central portion of the former MINS. The site is comprised of approximately 8.5 acres of land. Initial construction of the DRMO began in 1942 with the construction of railroad spurs, scrap bins, and a warehouse storage building, Building 661. A railroad scale house, a storehouse, an additional warehouse and office space were subsequent constructed. Currently only two steel Quonset huts remain onsite.

A Proposed Plan will be released for public comment that proposes no further action for this site. If the final remedy is approved, DTSC is proposing to determine corrective action is complete and to remove this parcel from the facility permit boundaries upon DTSC concurrence with the Final Record of Decision.

Installation Restoration Site 05, Dredge Pond 7S and Western Magazine Area (IR05/DP7S/WMA) cover approximately 165 acres in the southern part of the island adjacent to the Western Early Transfer Parcel (WETP). IR Site 05 was formerly used as a munitions storage and disposal area, DP7S is a former dredge pond, and WMA contains numerous buildings that were used as munitions storage magazines. A Proposed Plan is being released for public comment that proposes institutional controls to prohibit sensitive uses and restrict future invasive activities at all three sites unless approved by the Navy and DTSC. The institutional controls will also apply to the WMA adjacent areas shown on Figure 1, Page 5. If the final remedy is approved, DTSC is proposing to determine corrective action is complete and to remove this parcel from the facility permit boundaries upon DTSC concurrence with the Final Land Use Control Remedial Design.

NOTICE TO HEARING IMPAIRED: TTY users may use the California Relay Service @ 711 or 1-800-855-7100. You may also contact the Public Participation Specialist listed at the end of this update.



Public Comment F: Letter from Judy Kirkley (December 15, 2015)

Department of Toxic Substances Control

Investigation Area H1 (IA H1) covers approximately 236 acres and is located at the western end of Dump Road. For investigation and clean-up purposes, IA H1 was divided into three areas: the Containment Area, Upland Area and Non-Tidal Wetland Area. The former facility landfill, industrial wastewater treatment plant (IWTP) and IWTP ponds were formerly located at the Containment Area. A portion of the landfill was permitted under a RCRA interim status document to receive hazardous wastes. Portions of the Upland Area were used for waste storage and disposal. Dredge ponds were formerly located on the Non-Tidal Wetland Area.

In 2012, DTSC approved the completed final remedy for IA H1. For the Containment Area, this included construction of a groundwater containment system and a multilayer cap over the landfill. For the Upland Area, this included removal of contaminated soil in the area surrounding the landfill, and construction of a 2-foot soil cover. Contaminated soil was also removed from the Non-Tidal Wetland Area. In January 2015, DTSC approved a post-closure care plan to ensure the selected remedies are maintained in the future, including the use of land use controls. DTSC is proposing to determine corrective action is complete with controls and to remove this parcel from the facility permit boundaries.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

DTSC has determined that the proposed RCRA Corrective Action Complete Determination and the changes to the RCRA Facility Permit boundaries will not have a significant impact on the environment. A draft Notice of Exemption (NOE) has been prepared for this project and is available for review at the information repositories listed below.

INFORMATION REPOSITORIES

The Parcel XV-B(1)a FOST, IR05/DP7S/WMA Proposed Plan and MCFR, IA H1 and DRMO site documents are available for review at the following information repositories:

John F. Kennedy Library
505 Santa Clara Street
Vallejo, California 94590
(866) 572-7587, Call for hours

DTSC - Berkeley Regional Office
700 Heinz Avenue
Berkeley, California 94710
(510) 540-3800 ; Call for appointment

Or online on the DTSC's Envirostor website at <http://www.envirostor.dtsc.ca.gov/public/>. Enter "Vallejo" in the city section and select Mare Island Naval Shipyard Site from the alphabetical list of sites.

DTSC CONTACT INFORMATION

For information on this project, please call:

Patrick Hsieh
Project Manager
(510) 540-3906
Patrick.Hsieh@dtsc.ca.gov


Jesus Cruz
Public Participation Specialist
(916) 255-3315; (866) 495-5651
Jesus.Cruz@dtsc.ca.gov

Jorge Moreno
Public Information Officer
(916) 327-4383
Jorge.Moreno@dtsc.ca.gov

NOTICE TO HEARING IMPAIRED: TTY users may use the California Relay Service @ 711 or 1-800-855-7100. You may also contact the Public Participation Specialist listed at the end of this update.




Public Comment F: Letter from Judy Kirkley (December 15, 2015)



PROPOSED PLAN/ DRAFT REMEDIAL ACTION PLAN

*Defense Reutilization and Marketing Office
Former Mare Island Naval Shipyard, Vallejo, California*



July 18, 2014

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Words in ***bold italic font*** are defined in the glossary of terms on Page 11.

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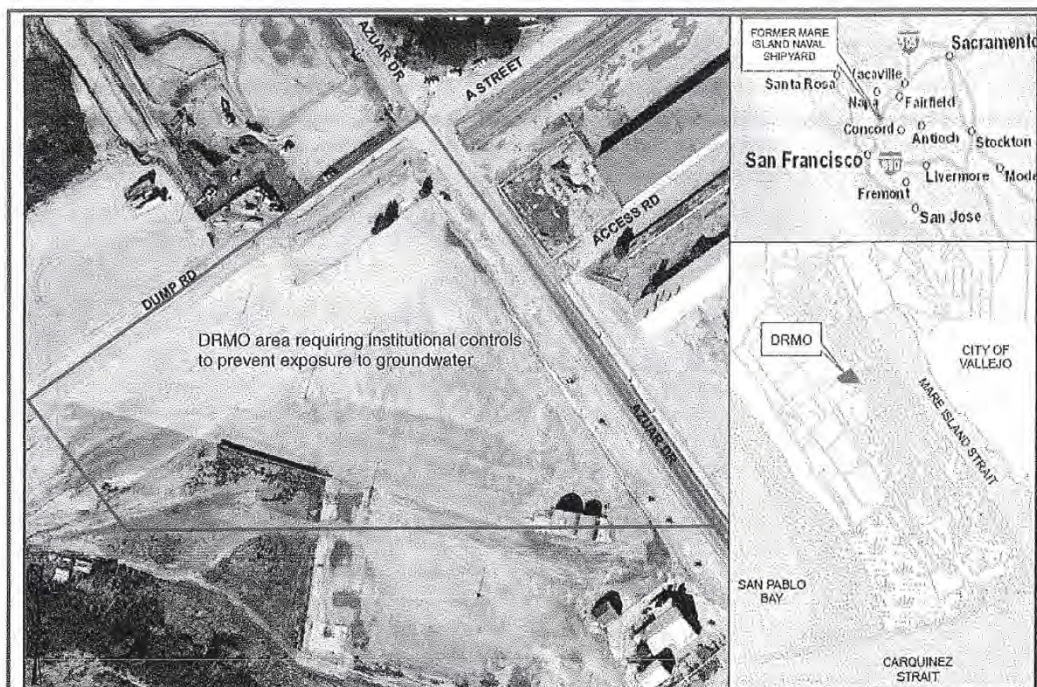


Figure 1. Site Location Map

explains the basis for the proposed cleanup plan. The Navy will take into consideration public comments on this PP/Draft RAP before making a final cleanup decision.

THE CERCLA PROCESS

The Navy is issuing this PP/Draft RAP as part of its public participation responsibilities under CERCLA and the *National Oil and Hazardous Substance Pollution Contingency Plan (NCP)* to ensure that the public has the opportunity to comment. Figure 2 shows the steps in the CERCLA process and the current phase of the DRMO site within the CERCLA process.

The proposed cleanup plan presented in this PP/Draft RAP is based on the numerous studies, including investigations, removal actions and risk assessments, performed to date. Documents describing the previous activities at the DRMO can be found at the John F. Kennedy Library located at 505 Santa Clara Street in Vallejo, California. Some documents may also be available online at the Navy website: <http://bracpmo.navy.mil>.

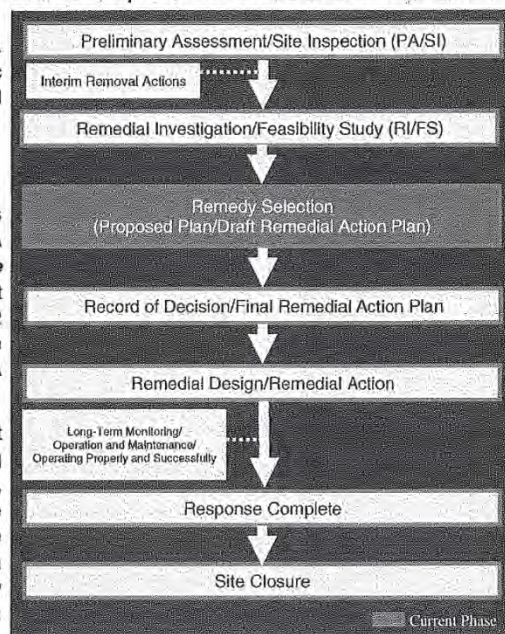


Figure 2. DRMO CERCLA Process

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THE CERCLA PROCESS (Continued)

In response to feedback from the community or new information, and in consultation with regulatory agencies, the Navy may modify the cleanup plan or select different remedies. Therefore, the community is encouraged to review and comment on this PP/ Draft RAP. A final cleanup decision, documented in the Record of Decision/Final Remedial Action Plan, will not be made until all community comments are considered.

SITE DESCRIPTION AND HISTORY

The Mare Island peninsula is located in Solano County, California, approximately 25 miles northeast of San Francisco in Vallejo (Figure 1). The Napa River (Mare Island Strait) lies to the east and separates the peninsula from the City of Vallejo; the remainder of the peninsula is bounded by Highway 37 to the north, the Carquinez Strait to the south, and San Pablo Bay to the west. The original Mare Island consisted of approximately 1,000 acres of dry land and 300 acres of wetlands. Over time, the placement of various fill materials and dredged sediments have increased the size of Mare Island to approximately 5,600 acres.

The Navy acquired Mare Island in 1853 and started shipbuilding operations the following year. The primary ship construction and maintenance area of the former MINS was established along the northeastern shore of the original island adjacent to Mare Island Strait. During World War II, the Former MINS reached peak capacity for shipbuilding, repair, overhaul, and maintenance. Due to the decreasing Navy needs in the postwar environment, shipyard activity decreased, and the Former MINS was closed on April 1, 1996, after 142 years of operation.

The DRMO is located at the southwest corner of the intersection of Dump Road (an extension of A Street) and Azuar Drive (formerly Cedar Avenue) on the north-central portion of the former MINS (Figure 1). The site consists of approximately 8.5 acres of land: 4.6 acres in the former **fenced scrapyard area (FSA)** and the remaining 3.9 acres outside of the FSA.

Initial development of the DRMO began in 1942 with the construction of railroad spurs, scrap bins, and a warehouse storage building, Building 661. Except for the two steel Quonset huts of unknown use and construction timeframe, additional structures built in 1942-1943 at the DRMO include the following:

- ◆ Building 675 used as a railroad scale house
- ◆ Building 679 used as a warehouse

- ◆ Building 691 used as a scrapyard office
- ◆ Building 715 used as a steel fabrication building until 1946 when its use was revised to a storehouse

As shown on the aerial photograph of the site in Figure 1, the only remaining structures at the DRMO are the two unnumbered steel Quonset huts located in the southeast corner of the site.

Historical use of the DRMO included storage of transformers, batteries, metal scrap, paper bailing, and handling of petroleum oils. The scrapyard handled surplus material and scrap from the shipyard and other military facilities until mid-1995, when the remaining inventory was removed. Although munitions items were not typically processed at the DRMO, several emergency removal actions were completed between 1987 and 1995 to remove material potentially presenting an explosive hazard encountered in scrap materials submitted to the facility for processing. Radiological work was not conducted at the DRMO; however, some of the equipment, material, and scrap processed through the yard contained radioactive material in the form of radioluminescent dials and deck markers.

RCRA SOLID WASTE MANAGEMENT UNITS

The 4.6 acre FSA, including Building 661, was established as **Solid Waste Management Unit (SWMU)** 129 under the historical **Resource Conservation and Recovery Act (RCRA)** permit for Mare Island. Portions of SWMU 93, the Storm Sewer System, and SWMU 106, the Sanitary Sewer System, were also formerly located within the DRMO boundaries. The entire area designated as SWMU 129 and the portions of SWMUs 93 and 106 located within the DRMO have been investigated and excavated through a series of removal actions under the CERCLA and petroleum programs. Once the final remedy is implemented, DTSC will issue a RCRA Corrective Action Complete Determination closing SWMU 129 and portions of SWMUs 93 and 106 within the DRMO and remove the DRMO from the facility permit boundaries.

SITE INVESTIGATIONS

Various environmental investigations have been performed for soil and groundwater at the DRMO. These studies have included investigating contamination as required under CERCLA, RCRA, petroleum, and polychlorinated biphenyl cleanup programs.

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SITE INVESTIGATIONS (Continued)

Key investigations and reports for the DRMO are as follows:

- ◆ Initial Assessment Study (1983)
- ◆ Preliminary Investigation of Lead Contamination (1985)
- ◆ Phase I Remedial Investigation (1990-1992)
- ◆ Lead Oxide Study (1992)
- ◆ Phase II Remedial Investigation (1993-1996)
- ◆ Basewide Environmental Baseline Survey, Supplement for Zone 02 (1996)
- ◆ Onshore Ecological Risk Assessment (1996-1999)
- ◆ Basewide Polychlorinated Biphenyl Confirmation Sampling (1998)
- ◆ Investigation Area H, Unexploded Ordnance Preliminary Assessment (1998)
- ◆ Remedial Investigation of Investigation Area H2 (1999-2000)
- ◆ Ambient Analyses of Metals in Soil and Groundwater (1995-2002)
- ◆ Railroad Track Corridor Sampling and Analysis (2004)
- ◆ Oil Sump Box Investigation (2005-2006)
- ◆ Geophysical Survey and Follow-on Total Petroleum Hydrocarbons Investigation of the DRMO Vicinity (2007-2009)
- ◆ Groundwater Sampling and Analysis (2012)

SITE REMOVAL ACTIONS

A variety of removal actions have been conducted to address environmental concerns at the DRMO. These actions are addressed in the following reports:

- ◆ General Radioactive Material Radiological Final Release Report Supplement to address radiological contaminants (1996)
- ◆ Non-Time Critical Removal Action to address **munitions and explosives of concern (MEC)** and chemical constituents (2005-2008)
- ◆ Petroleum Corrective Action to address petroleum contamination (2009-2010)

Reports describing the investigation and removal actions at the DRMO can be found at the information repositories listed on page 10. Some documents may also be available online at the Navy website: <http://bracprmo.navy.mil>.

CURRENT AND FUTURE SITE USE

The DRMO is currently inactive and remains property of the Navy. The site is planned for transfer to the City of Vallejo for commercial/

industrial land use.

EXCEPTION TO SOURCES OF DRINKING WATER POLICY

Shallow groundwater beneath the site does not meet California's minimum water quality criteria for a domestic or municipal freshwater supply due to salinity. On this basis, the Water Board granted an exception to the drinking water policy for shallow groundwater at the DRMO under State Water Resources Control Board Resolution 88-63.

SUMMARY OF CONTAMINANTS AND HAZARDS OF CONCERN

Agency concurrence for unrestricted release with respect to radiological materials at the DRMO was provided in April 1997, following site clearance for radiological materials as documented in the General Radioactive Material Radiological Final Release Report Supplement. Based on results of the Non-Time Critical Removal Action (2005-2008) and further soil removal performed during the Petroleum Corrective Action (2009-2010), there are no residual MEC hazards at the DRMO.

Soil and groundwater samples collected from the DRMO were analyzed for contaminants consistent with the historical uses of the site. Chemicals of potential concern include:

- ◆ Metals (Inorganic Constituents)
- ◆ Pesticides
- ◆ Polychlorinated Biphenyls
- ◆ Semivolatile Organic Compounds
- ◆ Volatile Organic Compounds
- ◆ Total Petroleum Hydrocarbons

RISK ASSESSMENT PROCESS

A human health risk assessment was conducted to estimate the theoretical levels of risk to humans from contamination remaining at the DRMO. Regulatory requirements were used to define what is considered acceptable and unacceptable risk.

The Onshore Ecological Risk Assessment (1996-1999) concluded that the DRMO posed a potential risk to ecological receptors from the presence of several metals. Excavation of soil performed during the Non-Time Critical Removal Action (2005-2008) and the Petroleum Corrective Action (2009-2010) have removed the majority of surface soil, including all soil within the FSA, to a minimum of 18 inches below ground surface.

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RISK ASSESSMENT PROCESS (Continued)

Given the extensive excavation and the backfill soil results, which were generally less than the naturally occurring metal concentrations for Mare Island, the potential ecological risks have been eliminated at the DRMO. In addition, the planned reuse of the DRMO is commercial/industrial and future ecological habitat is not anticipated.

HUMAN HEALTH RISK ASSESSMENT

A human health risk assessment estimates the theoretical risk to humans based on conservative assumptions. The conservative assumptions are designed to overestimate risk and result in conservative risk assessments that are protective of human health.

The human health risk assessment evaluated cancer risks and adverse non-cancer health effects associated with chemicals of potential concern in soil and groundwater for both current and future users. Based on the planned use of the site, anticipated future users include industrial/commercial workers and construction workers. Although residential use is not anticipated, potential risk to a hypothetical future resident was also evaluated.

Industrial/Commercial User. The most likely receptor at the DRMO is an industrial/commercial user. The risk to the industrial/commercial user was evaluated based on exposure to soil from soil ingestion, skin contact, and inhalation of dust in outdoor air.

Shallow groundwater beneath the site does not meet California's minimum water quality criteria for a domestic or municipal freshwater supply due to salinity; therefore, contact with groundwater was not considered a potential exposure route for the industrial/commercial user.

Construction Worker. The estimated potential risks/hazards for the construction worker scenario were evaluated to determine if workers need to take precautionary measures when working at the site. The potential routes of exposure to soil included soil ingestion, skin contact, and inhalation of dust in outdoor air.

A construction worker could be exposed to groundwater via incidental ingestion, skin contact, and inhalation of vapors during potential trenching/excavation activities. However these potential exposure routes did not pose a significant risk to human health.

Residential User. Risks were comprehensively evaluated for a residential user to assist in making risk management decisions. The potential routes of exposure to soil included soil ingestion, skin contact, and inhalation of dust in outdoor air.

Shallow groundwater beneath the site does not meet California's minimum water quality criteria for a domestic or municipal freshwater supply due to salinity. However to assist in making risk management decisions, risk to the residential user was evaluated assuming incidental groundwater ingestion, inhalation of vapors in indoor air, as well as skin contact and inhalation during showering.

Recreational User. Because the land adjacent to the DRMO is planned for potential recreational use, risk to the recreational user was evaluated assuming exposure through inhalation of vapors in outdoor air.

HUMAN HEALTH RISK ASSESSMENT RESULTS

Chemicals of concern posing a risk were identified based on results of the human health risk assessment and the planned future reuse of the DRMO. There were no chemicals of concern identified in soil for the industrial/commercial user, construction worker, or residential user scenarios. There were no chemicals of concern identified in groundwater for the industrial/commercial user, construction worker, or recreational user scenarios.

The evaluation for a hypothetical resident assumed the shallow groundwater was suitable for domestic use and that the resident would be in direct contact with the groundwater. The evaluation resulted in an unacceptable risk to a hypothetical resident assuming domestic use of the groundwater. Chemicals of concern in groundwater for the hypothetical residential scenario included manganese, 1-methylnaphthalene, benzene, and vinyl chloride.

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FOCUSED FEASIBILITY STUDY SUMMARY

The purpose of the Focused Feasibility Study Report is to ensure the development and evaluation of the appropriate **remedial alternatives** to address risks at a site. Remedial alternatives are cleanup options available to contain, remove, or treat hazardous waste to protect human health and/or the environment. Because previous actions have removed the principle risks, including radiological and MEC hazards and chemical constituents in soil, the focused feasibility study was streamlined to accelerate the cleanup process. Steps associated with the identification and screening of remedial technologies and development of screening alternatives normally included in a feasibility study were not required.

The remedial alternatives developed in the focused feasibility study were evaluated against seven of the nine CERCLA criteria, which are described in Figure 3. The comparison of the remedial alternatives against the first seven criteria (the threshold criteria and the primary balancing criteria) was presented in the Focused Feasibility Study Report. The two final criteria (modifying criteria) are State Acceptance and Community Acceptance. Although the State recommends the preferred groundwater remedy, presented in this PP/Draft RAP, State and community acceptance will be evaluated following the close of the public comment period.

REMEDIAL ACTION OBJECTIVE

Remedial action objectives are statements containing a cleanup goal for the protection of human or ecological receptors from contaminants in specific media, such as soil, groundwater, or air. The remedial action objective for the DRMO is to prevent unacceptable risk resulting from domestic use of site groundwater.

REMEDIAL ALTERNATIVE EVALUATION

Remedial alternatives are evaluated to provide decision-makers with adequate information to allow appropriate selection of a remedy for a site. Based on the numerous investigations and extensive removal activities at the DRMO to date, only two remedial alternatives were considered; no action and **institutional controls**.

Alternative 1—No Action

The No Action Alternative provides a baseline for comparing other alternatives. There are no remedial actions, monitoring, or reporting associated with this alternative.

Alternative 2—Institutional Controls

The Institutional Controls Alternative would implement legal and administrative mechanisms to restrict installation of groundwater wells and/or domestic use of groundwater unless approved by the Navy and DTSC. Upon conveyance of the property from Navy possession, the subsequent property owner will be responsible for enforcing the institutional controls. Proprietary controls in the form of deed restrictions and a **land use covenant** will be implemented to legally enforce the institutional controls.

COMPARISON OF ALTERNATIVES

Both alternatives were compared using the nine criteria shown in Figure 3, which are categorized into three groups: threshold criteria, primary balancing criteria, and modifying criteria. Threshold criteria are requirements that each alternative must meet to be eligible for selection as the preferred alternative and include overall protection of human health and the environment and compliance with **Applicable or Relevant and Appropriate Requirements (ARARs)**. Primary balancing criteria are used to weigh effectiveness and cost tradeoffs among alternatives. The primary balancing criteria include long-term effectiveness and permanence; reduction of toxicity, mobility, or volume through treatment; short-term effectiveness; implementability; and cost. The primary balancing criteria represent the main technical criteria upon which the alternative evaluation is based.

Modifying criteria include state acceptance and community acceptance, and may be used to modify aspects of the preferred alternative when preparing the Record of Decision/Final Remedial Action Plan. The modifying criteria will be evaluated after the public comment period discussed in this PP/Draft RAP.

Overall Protection of Human Health and the Environment

Under Alternative 2—Institutional Controls, groundwater wells would not be installed and/or groundwater would not be used for domestic purposes without regulatory approval. Therefore, Alternative 2 achieves a higher level of protection than Alternative 1—No Action by ensuring that the exposure pathway to groundwater is controlled.

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COMPARISON OF ALTERNATIVES (Continued)

Compliance with ARARs

Alternative 1—No Action is not evaluated for this criterion because ARARs are applicable only when a response action is taken. Alternative 2—Institutional Controls is compliant with all identified ARARs.

Long-term Effectiveness and Permanence

Under Alternative 2, risks to human health would be addressed through institutional controls. Implementation of this alternative would restrict domestic use of site groundwater and, in doing so, would ensure site conditions are protective. Ongoing effectiveness of institutional controls would be verified through annual inspections and the 5-year review process. Alternative 2 would be effective in the long term at mitigating risk, and mechanisms would be in place to ensure its continued effectiveness.

Reduction of Toxicity, Mobility, or Volume through Treatment

Neither of the proposed alternatives would reduce the toxicity, mobility, or volume of potential groundwater contamination through treatment, because treatment is not a component of either alternative. Contaminants and hazards from former activities at the DRMO that impacted soil above standards appropriate for future unrestricted use have been removed.

Short-Term Effectiveness

The short-term effectiveness evaluation addresses protection of human health and the environment during remedy implementation. Alternative 1 has no effect on human health or the environment in the short term because no action would be performed. Under Alternative 2, the only action is implementation of institutional controls to restrict use and it would be effective in short term.

Implementability

Both alternatives are straightforward to implement. Alternative 2—Institutional Controls can be readily prepared and implemented because the Navy currently retains ownership of the property. As the property owner, the Navy can implement land use controls and incorporate property controls in the deed when the land is transferred to a new owner.








Threshold Criteria	Overall Protection of Human Health and the Environment How the risks are eliminated, reduced, or controlled through treatment, engineering, or institutional controls.	
	Compliance with Applicable or Relevant and Appropriate Requirements Federal and state environmental statutes met or grounds for waiver provided.	
Primary Balancing Criteria	Long-term Effectiveness Maintain reliable protection of human health and the environment over time, and once cleanup goals are met.	
	Reduction of Toxicity, Mobility, or Volume Through Treatment Ability of a remedy to reduce the toxicity, mobility, and volume of the hazardous contaminants present at the site through treatment.	
	Short-term Effectiveness  Protection of human health and the environment during construction and implementation period including times to meet cleanup objectives.	
	Implementability Technical and administrative feasibility of a remedy, including the availability of materials and services needed to carry it out.	
Modifying Criteria	Cost Estimated capital, operation, and maintenance costs of each alternative.	
	State Acceptance  State concurs with, opposes, or has no comment on the preferred alternative.	
	Community Acceptance Community concerns addressed and community preferences considered.	

Figure 3. Criteria for Comparison of Cleanup Alternatives

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COMPARISON OF ALTERNATIVES (Continued)

Costs

No active construction or operational activities would occur under Alternative 1—No Action; therefore, there are no associated costs. The capital costs associated with Alternative 2—Institutional Controls include preparation of a remedial design to describe the institutional controls and administrative requirements that are assumed to occur in the first year of the operation and maintenance period. The operation and maintenance costs include annual compliance monitoring and 5-year reviews. The cost for Alternative 2—Institutional Controls is estimated to be \$350,000 over a 30-year period.

SUMMARY OF PREFERRED ALTERNATIVE

Based on an analysis of the alternatives, Alternative 2—Institutional Controls achieves an overall higher level of protectiveness than Alternative 1—No Action. Under Alternative 2, installation of groundwater wells and domestic use of groundwater are restricted through institutional controls. Alternative 2 would serve as an effective means to ensure site conditions at DRMO are protective.

REGULATORY SUMMARY

California Health and Safety Code

This PP/Draft RAP has been prepared to meet the requirements of the California Health and Safety Code section 25356.1 for hazardous substance release sites. The California Health and Safety Code requires preparation of a RAP for sites that are not listed on the *National Priorities List (NPL)*, such as the former MINS. Therefore, this document also serves as a Draft RAP to fulfill the public notice and comment requirement of the California Health and Safety Code. The Final RAP will be incorporated in the Record of Decision for the DRMO.

California Environmental Quality Act

As required by California state law (the California Environmental Quality Act or CEQA), DTSC has studied the risks associated with the residual chemical concentrations at the DRMO and possible effects of the proposed cleanup on human health and the environment. The findings of the study can be reviewed in a document called a *Notice of Exemption (NOE)*. The NOE is prepared by DTSC and documents that the proposed cleanup will have no negative impact on human health or the environment.

Nonbinding Allocation of Responsibility

California Health and Safety Code section 25356.1(e) requires DTSC to prepare a preliminary nonbinding allocation of responsibility among all identifiable potentially responsible parties. California Health and Safety Code section 25356.3(a) allows potentially responsible parties with an aggregate allocation in excess of 50 percent to convene an arbitration proceeding by submitting to binding arbitration before an arbitration panel. Based on the available information regarding the former MINS, DTSC determines that the Navy is a responsible party with aggregate alleged liability in excess of 50 percent of the costs of removal and remedial action pursuant to California Health and Safety Code section 25356.3. The Navy may convene arbitration if it so chooses.

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COMMUNITY PARTICIPATION

The Navy is issuing this PP/Draft RAP as part of its public participation responsibilities under CERCLA and the NCP to ensure that the public has the opportunity to comment. This PP/Draft RAP summarizes information detailed in the documents, including the Remedial Investigation/Focused Feasibility Study available in the Administrative Record for the DRMO. The Navy encourages the public to review these documents to gain an understanding of the environmental investigations, removal actions, and risk assessments that have been conducted. Key documents generated for the DRMO are listed on page 4 and are available for public review at the information repositories listed on page 10.

There are two ways for you to provide comments on this PP/Draft RAP:

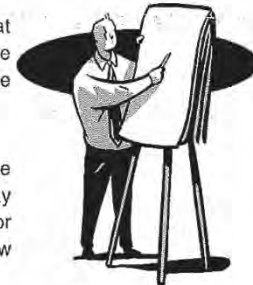
1. Public Comment Period



During the 30-day public comment period from July 21 to August 20, 2014, you may use the comment form included with this PP/Draft RAP to send written comments to the **Base Realignment and Closure (BRAC)** Environmental Coordinator, Navy BRAC Program Management Office West at 1455 Frazee Road, Suite 900, San Diego, California 92108-4310. You may also submit comments electronically via email to the BRAC Environmental Coordinator (janet.lear@navy.mil) or via fax to (619) 532-0780.

2. Public Meeting

You may provide written or oral comments during the public meeting at 7:00 PM on July 31, 2014, which will be held in the Mare Island Conference Center at 375 G Street, Vallejo, California. A stenographer will be at the meeting to record all public comments.



After the public comment period is over, the Navy will review and consider the comments and in consultation with the regulatory agencies, the Navy may modify the proposed cleanup plan based on feedback from the community or on new information. Therefore, the community is strongly encouraged to review and comment.

A final decision will not be made until all comments are considered. Community acceptance will be evaluated after the public comment period for this PP/Draft RAP. The Navy will address any comments in a responsiveness summary presented in the Record of Decision/Final Remedial Action Plan. A Public Notice will be published in the Vallejo Times-Herald announcing when the Record of Decision/Final Remedial Action Plan is available to the public in the information repositories.

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INFORMATION REPOSITORIES

The John F. Kennedy Library provides public access to technical reports and other former MINS environmental information that supports this PP/Draft RAP. The administrative record file is a collection of reports and historical documents used in the selection of cleanup or remedial alternatives.

John F. Kennedy Library

505 Santa Clara Street, Vallejo, California 94590
(866) 572-7587

Hours: Mon & Wed 10:00am - 9:00pm
Tues & Thurs 10:00am - 6:00pm
Fri & Sat 10:00am - 5:00pm
Sun 1:00pm - 5:00pm

Administrative Record File

Contact: Ms. Diane Silva, Records Manager
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Multi-Agency Environmental Team Concurs with DRMO Preferred Remedy

The **BRAC Cleanup Team (BCT)**, composed of representatives from the Navy, DTSC, Water Board, and EPA, was established with the primary goals of protecting human health and the environment, expediting the environmental cleanup, and coordinating the environmental investigation and cleanup at the installation.

The BCT obtains a consensus on issues regarding the installation's environmental activities and makes a concerted effort to integrate current and potential future uses into the cleanup decisions. The BCT has reviewed all major documents and activities associated with the DRMO. This review included the Removal Action Completion Reports and the Remedial Investigation and Focused Feasibility Study Report.

Based on reviews and discussions of key documents and activities, the multi-agency BCT recommends Alternative 2—Institutional Controls for the DRMO as stated in this PP/Draft RAP.

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Glossary of Terms

Applicable or Relevant and Appropriate Requirements (ARARs):

Federal, state, and local regulations and standards determined to be legally applicable or relevant and appropriate to remedial (cleanup) actions at a Comprehensive Environmental Response, Compensation, and Liability Act site.

Base Realignment and Closure (BRAC):

The process designed to realign, close, and dispose of military properties.

BRAC Cleanup Team (BCT):

The team of Navy, California Department of Toxic Substances Control, San Francisco Bay Regional Water Quality Control Board, and U.S. Environmental Protection Agency representatives coordinating the environmental investigations and cleanup at the Installation.

California Environmental Protection Agency Department of Toxic Substances Control (DTSC):

A part of the California Environmental Protection Agency and California's lead environmental regulatory agency. Its mission is to protect public health and the environment from toxic substances. DTSC is represented on the BCT for the former MINS.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA):

Also known as "Superfund," this federal law was passed in 1980 and regulates environmental investigation and cleanup of sites identified as possibly posing a risk to human health and/or the environment.

Defense Reutilization and Marketing Office (DRMO):

The trapezoidal area encompassing approximately 8.5 acres of land in the southwestern corner of the intersection of Dump Road (an extension of A Street) and Azuar Drive (formerly Cedar Avenue).

Fenced Scrapyard Area (FSA):

A 4.6-acre fenced area of the DRMO that was formerly used as a scrapyard.

Institutional Controls:

Non-engineering mechanisms established to limit human exposure to contaminated soil, sediment, and/or groundwater.

Land Use Covenants:

Proprietary controls that specify requirements or limit the use of real property and affect the title of the property.

Mare Island Naval Shipyard (MINS):

A naval shipyard established by the Navy in 1854 and closed in April 1996. The former MINS is located on a peninsula in Solano County, California, about 25 miles northeast of San Francisco.

Munitions and Explosives of Concern (MEC):

Discarded military munitions and munitions constituents present in high enough concentrations to pose an explosive hazard.

National Oil and Hazardous Substance Pollution Contingency Plan (NCP):

The federal regulation that guides determination of the sites to be corrected under both the Superfund Program and the program to prevent or control spills into surface waters or elsewhere.

National Priorities List (NPL):

The list of national priority sites among the known releases or threatened releases of hazardous substances, pollutants, or contaminants.

Notice of Exemption (NOE):

A form prepared by DTSC to document the site does not have potential impacts on the environment.

Proposed Plan (PP)/Draft Remedial Action Plan (RAP):

The document that reviews the remedial alternatives presented in the Feasibility Study, summarizes the proposed preferred remedial alternative, explains the reasons for recommending the alternative, and notifies the community of the preferred alternative.

Remedial Alternatives:

The cleanup options available to contain, remove, or treat hazardous waste to protect human health and/or the environment.

Resource Conservation and Recovery Act (RCRA):

A federal law passed in 1976 that established the framework for treatment, storage, transportation, and disposal of solid and hazardous wastes.

San Francisco Bay Regional Water Quality Control Board (Water Board):

The San Francisco Bay Regional Water Quality Control Board is part of the California Environmental Protection Agency. Its mission is to preserve, enhance, and restore California's water resources. The Water Board is represented on the BCT for the former MINS.

Solid Waste Management Unit (SWMU):

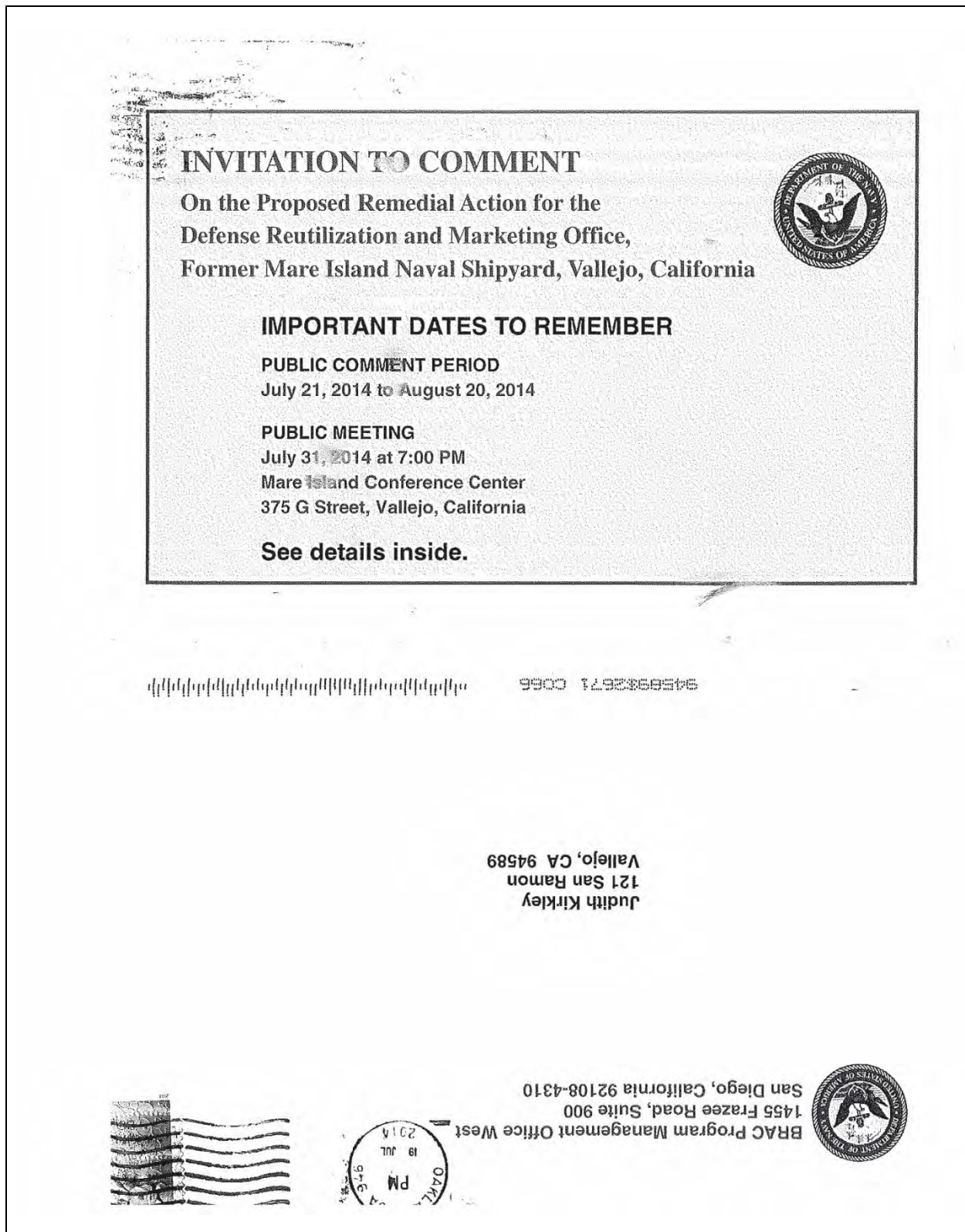
Any discernible area where solid waste may have been placed at any time, irrespective of whether the area was intended for the management of solid or hazardous waste.

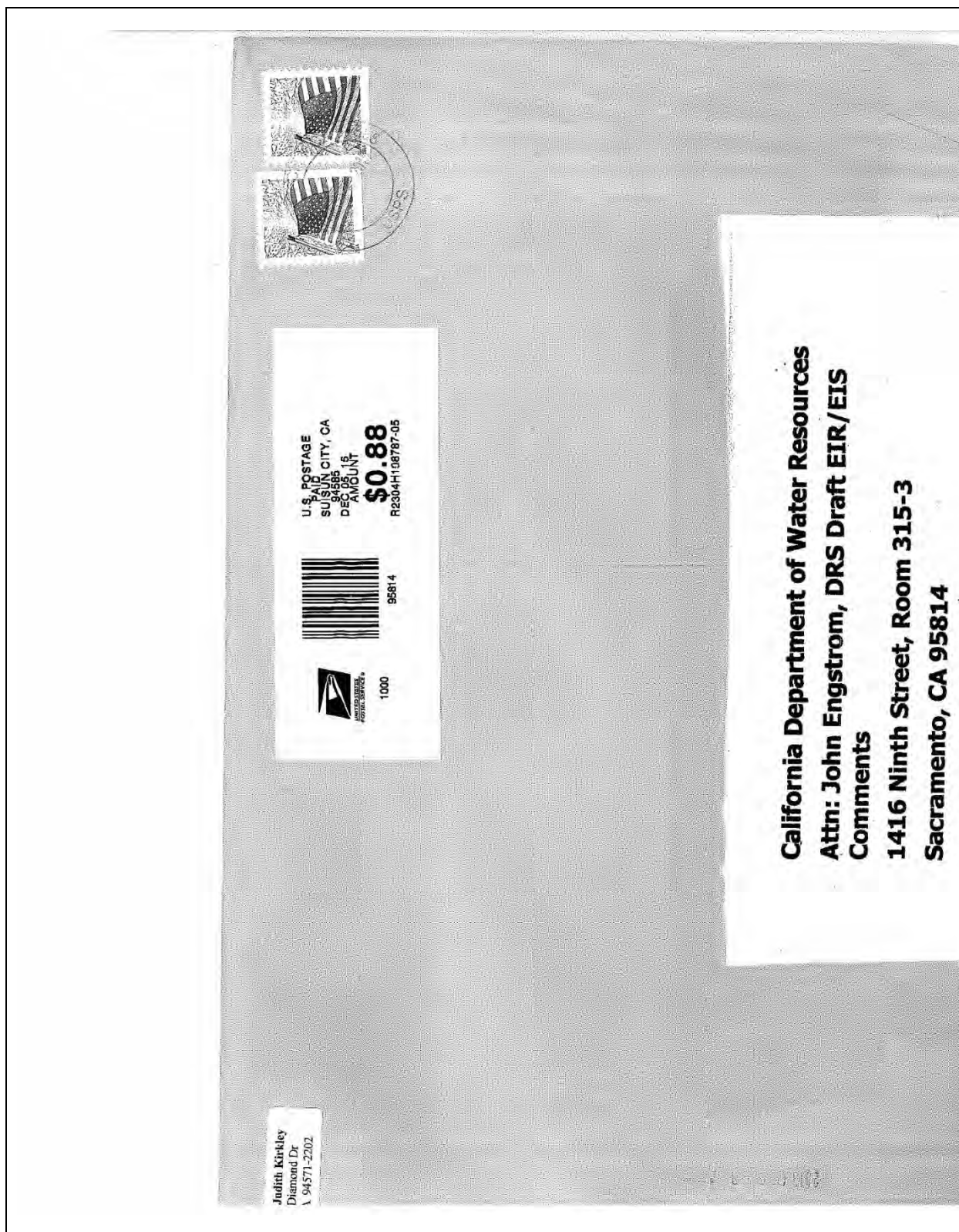
U.S. Environmental Protection Agency (EPA):

The federal agency that is charged with protecting human health and the environment. The EPA is represented on the BCT for the former MINS.


Public Comment F: Letter from Judy Kirkley (December 15, 2015)

Proposed Plan/Draft Remedial Action Plan Comment Form Defense Reutilization and Marketing Office Former Mare Island Naval Shipyard, Vallejo, California	
<p>The 30-day public comment period for this Proposed Plan/Draft Remedial Action Plan for the Defense Reutilization and Marketing Office located at the former Mare Island Naval Shipyard, Vallejo, California, is from July 21 to August 20, 2014. A public meeting to present this Proposed Plan/Draft Remedial Action Plan will be held at the Mare Island Conference Center at 375 G Street, Vallejo, California, on July 31, 2014 at 7:00 PM. You may provide comments verbally at the public meeting, where all comments will be recorded by a court reporter. Alternatively, you may provide written comments in the space provided below or on your own stationary. All written comments must be postmarked no later than August 20, 2014. After completing your comments and your contact information, please mail this form to the address provided on the cover page. You may also submit this form to a Navy representative at the public meeting. Comments are also accepted by email or fax; please address email messages to janet.lear@navy.mil or by fax to (619) 532-0780.</p>	
Name:	
Representing: (optional)	
Phone Number: (optional)	
Address: (optional)	
<p style="text-align: center;">Please check box if you would like to be added to the Navy's Environmental Mailing List for the former Mare Island Naval Shipyard.</p> <div style="display: flex; align-items: center;"><div style="width: 20px; height: 20px; border: 1px solid black; margin-right: 10px;"></div><div></div></div>	
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Public Comment F: Letter from Judy Kirkley (December 15, 2015)

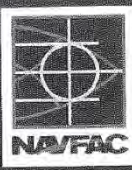
Public Comment F: Letter from Judy Kirkley (December 15, 2015)

Public Comment F: Letter from Judy Kirkley (December 15, 2015)



PROPOSED PLAN/ DRAFT REMEDIAL ACTION PLAN

*Installation Restoration Site 05, Dredge Pond 7S and
Western Magazine Area,
Former Mare Island Naval Shipyard, Vallejo, California*



March 18, 2015

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**U.S. NAVY ANNOUNCES PROPOSED PLAN/
DRAFT REMEDIAL ACTION PLAN**

The U.S. Department of the Navy Base Realignment and Closure Program Management Office West encourages the public to provide comments on its proposed cleanup plan for the **Installation Restoration Site 05 (IR05), Dredge Pond 7S (DP7S), and Western Magazine Area (WMA)** sites located at the former **Mare Island Naval Shipyard (MINS)**, Vallejo, California (Figure 1). The public comment period and meeting information are found at the bottom of this page. The Navy has worked with the **California Environmental Protection Agency, Department of Toxic Substances Control (DTSC)**, the **San Francisco Bay Regional Water Quality Control Board (Water Board)**, and the **U.S. Environmental Protection Agency (EPA)** to evaluate cleanup options for the IR05, DP7S, and WMA sites including the proposed cleanup plan.

INTRODUCTION

This **Proposed Plan (PP)/Draft Remedial Action Plan (RAP)** announces the recommended cleanup plan for the IR05, DP7S, and WMA sites. Several extensive removal actions to address contaminated soil, **munitions and explosives of concern (MEC)**, and radiological items have been performed at the IR05, DP7S, and WMA sites. Chemical contaminants from former activities at the sites that impacted soil above standards appropriate for future use as recreational and wetland areas have been removed. The proposed cleanup plan involves **land-use controls** to restrict soil disturbance thereby protecting future human receptors from the low residual risk posed by contact with potential buried MEC.

Groundwater beneath the site does not meet California's minimum water quality criteria for a domestic or municipal freshwater supply due to salinity. On this basis, the Water Board granted an exception to the drinking water policy for shallow groundwater at the IR05, DP7S, and WMA sites under State Water Resources Control Board Resolution 88-63 (Resolution 88-63). Because the groundwater is not suitable for domestic use due to salinity, the potential risk to a hypothetical user from ingestion and dermal contact with groundwater was not fully evaluated.

PUBLIC COMMENT PERIOD

March 18, 2015
through
April 17, 2015

For more information:
<http://bracpmo.navy.mil>

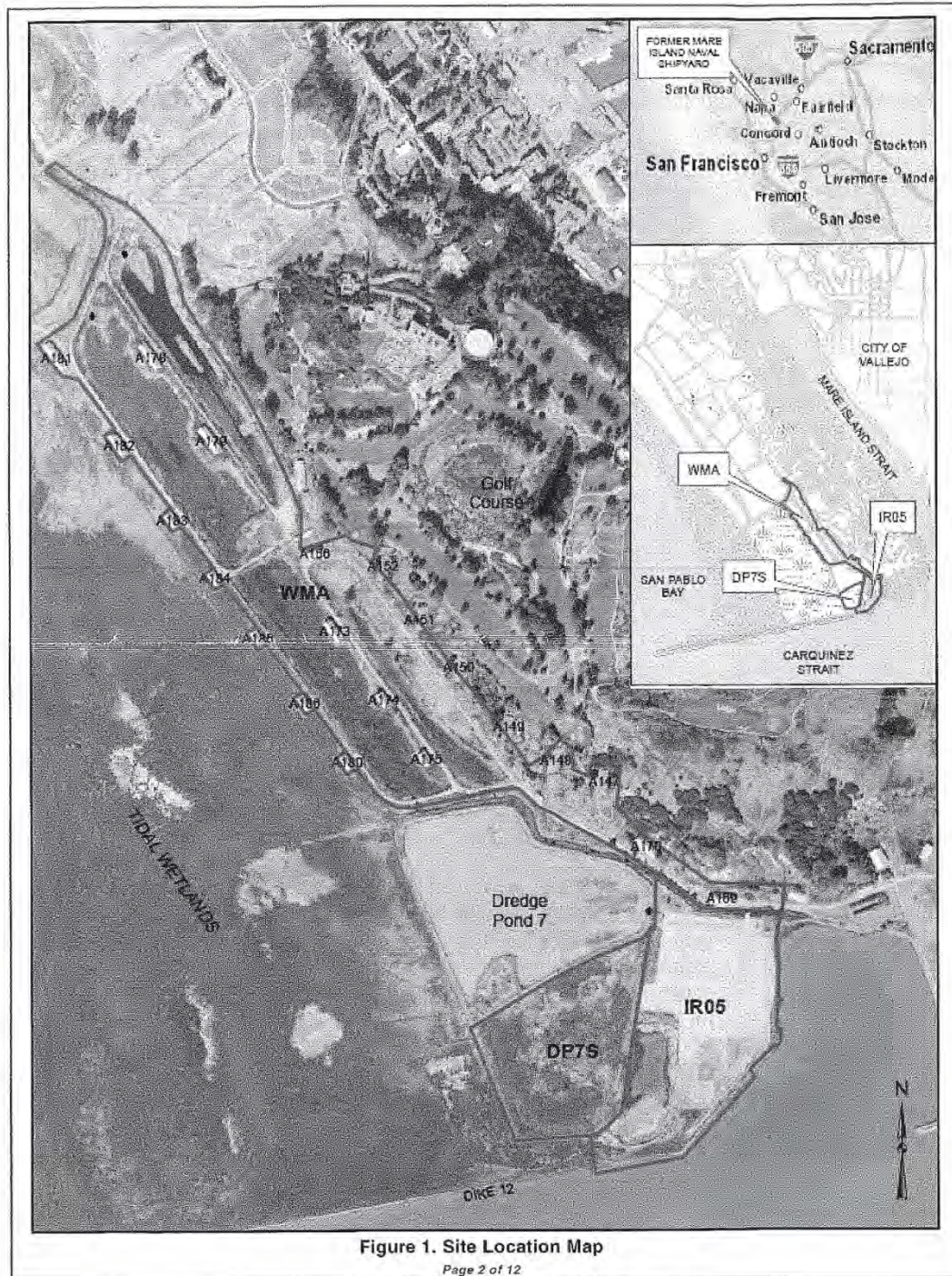
PUBLIC MEETING

March 26, 2015 @ 7:00pm

Mare Island Conference Center,
375 G Street, Vallejo, California

Words in **bold italic font** are defined in the glossary of terms on pages 10 and 11.

Public Comment F: Letter from Judy Kirkley (December 15, 2015)



Public Comment F: Letter from Judy Kirkley (December 15, 2015)

INTRODUCTION (Continued)

This PP/Draft RAP details the Navy's cleanup plan for soil and summarizes the site history, environmental investigations, and removal actions performed to date at the IR05, DP7S, and WMA sites (Figure 1). As required by the **Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)**, this PP/Draft RAP explains the basis for the proposed cleanup plan. The Navy will take into consideration public comments on this PP/Draft RAP before making a final cleanup decision.

THE CERCLA PROCESS

The Navy is issuing this PP/Draft RAP as part of its public participation responsibilities under CERCLA and the **National Oil and Hazardous Substance Pollution Contingency Plan (NCP)** to ensure that the public has the opportunity to comment on the proposed cleanup plan. Figure 2 shows the steps in the CERCLA process and the current phase of the IR05, DP7S, and WMA sites within the CERCLA process.

The proposed cleanup plan presented in this PP/Draft RAP is based on the numerous investigations, removal actions and risk assessments performed to date. Documents describing the previous activities at the IR05, DP7S, and WMA sites can be found at the John F. Kennedy Library located at 505 Santa Clara Street in Vallejo, California. Some documents may also be available online at the Navy website: <http://bracpmo.navy.mil>.

In response to feedback from the community or new information, and in consultation with regulatory agencies, the Navy may modify the cleanup plan or select different remedies. Therefore, the community is encouraged to review and comment on this PP/Draft RAP. A final cleanup decision, documented in the Record of Decision/Final Remedial Action Plan, will not be made until all community comments are considered.

SITE DESCRIPTION AND HISTORY

The Mare Island peninsula is located in Solano County, California, northeast of San Francisco in Vallejo (Figure 1). The Napa River (Mare Island Strait) lies to the east and separates the peninsula from the City of Vallejo; the remainder of the peninsula is bounded by Highway 37 to the north, the Carquinez Strait to the south, and San Pablo Bay to the west. The original Mare Island consisted of approximately 1,000 acres of dry land and 300 acres of wetlands. Over time, the placement of various fill materials and dredged sediments have increased the size of Mare Island to approximately 5,600 acres.

The Navy acquired Mare Island in 1853 and started shipbuilding operations the following year. The primary ship construction and maintenance area of the former MINS was established along the northeastern shore of the original island adjacent to Mare Island Strait. During World War II, the former MINS reached peak capacity for shipbuilding, repair, overhaul, and maintenance. Due to the decreasing Navy needs in the postwar environment, shipyard activity decreased, and the former MINS was closed on April 1, 1996, after 142 years of operation.

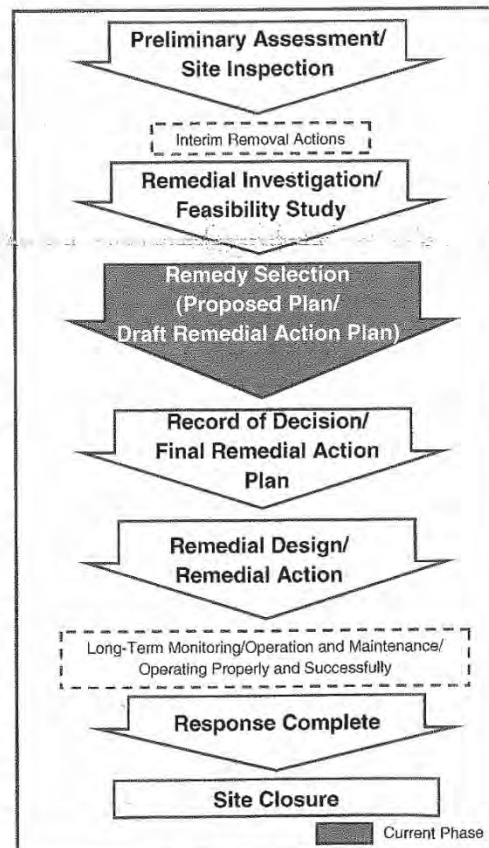


Figure 2. IR05, DP7S, and WMA CERCLA Process

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SITE DESCRIPTION AND HISTORY (Continued)

IR05 consists of 35 acres created by the natural deposition of sediments north of Dike 12 in addition to fill from hillside excavations and dredge spoils. A formerly used dredge spoils pipeline runs along the northern border and crosses the northernmost portion of IR05, before ending at the outfall location in Dredge Pond 7. There are no known or suspected outfall locations at IR05. Other facilities historically at IR05 included temporary structures and two storm sewer lines. Between 1947 and 1975, IR05 was used as a munitions storage and disposal area. From 1947 until 1951, the northeastern portion of IR05 was most likely used for open storage of munitions. By 1953, this area was established as an inert materials storage area used to store empty cartridge cases, ammunition containers, and miscellaneous ordnance-related material. The southeastern portion of IR05 was established as an ordnance burning, detonation, and disposal area. Burning and detonation facilities included smokeless powder burn pads, high explosives burn pads, detonation pits, primer/tracer burning ovens, and pyrotechnic burn pits. Currently there are no buildings at IR05.

DP7S consists of 24 acres, which were originally the southern portion of Dredge Pond 7. With the exception of a suspected historic dredge outfall in the northeastern corner of DP7S, there has been no infrastructure. DP7S and adjacent Dredge Pond 7 were used as an active dredge spoils disposal area through the 1970s, when a berm was built to divide the large area into two smaller ponds. Since then DP7S was no longer used for sediment deposition and it reverted back to native habitat.

The WMA consists of 106 acres, created by the natural deposition of sediments north of Dike 12 in addition to fill from upland borrow pits. Initial development at the WMA began in 1931 with the construction of seven buildings (Buildings A147 through A152, and A170) cut into the hillside on the east side of the site. An additional 14 buildings (Buildings A166, A169, A173 through A175, and A178 through A186) and a system of roads and railroad lines were constructed on the fill material in former wetlands between 1938 and 1939. There are two historic outfall locations in the northern WMA. The WMA buildings served as munitions storage magazines with a combined capacity of more than 132,500 square feet. The munitions storage magazines remain at the site; however, the railroad lines were removed in 1994. In the central portion of the WMA is the Horse Stables Area, which was historically used as a horse stables and corral area. Building A166A, the horse stables, is the only remaining structure at the Horse Stables Area.

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RCRA SOLID WASTE MANAGEMENT UNITS

Solid Waste Management Units (SWMUs) 79, 80, 81, 101, and 125 were established under the historical **Resource Conservation and Recovery Act (RCRA)** permit for Mare Island. Except for SWMU 125, which is a multi-site SWMU, the SWMUs are located in IR05. The SWMUs are described as follows:

- ◆ SWMU 79—Concord Annex Circle Pit (IR05)
- ◆ SWMU 80—Concord Annex Ordnance Disposal Area (IR05)
- ◆ SWMU 81—Concord Annex Storm Sewers (IR05)
- ◆ SWMU 101—Concord Annex Ordnance and Addition Sites (IR05)
- ◆ SWMU 125—South End of Island (IR05, DP7S, and WMA)

The SWMUs were incorporated into the overall Installation Restoration Program to be remediated under the CERCLA process. They have been investigated and where required excavated through a series of removal actions under the CERCLA program. Once the final remedy is implemented, DTSC will issue a RCRA Corrective Action Complete Determination closing SWMUs 79, 80, 81, 101, and the IR05, DP7S, and WMA portions of SWMU 125. In addition, the three sites will be removed from the facility RCRA permit boundaries.

SITE INVESTIGATIONS

Various environmental investigations have been performed for soil and groundwater at the IR05, DP7S, and WMA sites. These studies have included investigating contamination as required under the CERCLA, RCRA, petroleum, and polychlorinated biphenyl cleanup programs. Key investigation and reports for the site are as follows:

- ◆ Initial Assessment Study (1982)
- ◆ Verification Study (1987)
- ◆ Sampling, Cleaning and Inspection of IR05 Storm Drains (1988)
- ◆ **Remedial Investigation (RI)** Phase I, Site Characterization Study (1990-1992)
- ◆ Basewide Quarterly Groundwater Sampling (1992-1994)
- ◆ RI Phase II Investigations
 - ◇ Geophysical Survey (1993-1994)
 - ◇ Geoprobe, Hand-Auger, and Sediment Sampling (1993-1996)
 - ◇ Cone Penetrometer Test Survey (1994)
 - ◇ Tidal Influence Study (1996)

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SITE INVESTIGATIONS (Continued)

- ◆ Ordnance Preliminary Assessment (1995)
- ◆ Mare Island **Unexploded Ordnance (UXO)** Site Investigation (1995-1997)
- ◆ Onshore Ecological Risk Assessment (1997-1999)
- ◆ Draft RI Report, Investigation Area I (1997-1999)
- ◆ Underground Storage Tank Compliance Program (1997 and 2003)
- ◆ Basewide Quarterly Groundwater Sampling (1999-2000)
- ◆ RI Report, Investigation Area H1, IR05, and WMA (2002)
- ◆ Site Inspection of the Horse Stables Area (2003-2004)
- ◆ Data Gaps Sampling (2007-2008)
- ◆ **Munitions Response Action (MRA) Digital Geophysical Mapping (DGM)** Surveys (2006)
- ◆ RI Report, IR05, DP7S, and WMA (2013)
- ◆ Feasibility Study, IR05, DP7S, and WMA (2014)

SITE REMOVAL ACTIONS

A variety of removal actions have been conducted to address environmental concerns at the IR05, DP7S, and WMA sites. These actions include the following:

- ◆ WMA Emergency Response Actions to address MEC (1990-1994)
- ◆ IR05 Surface Sweep to address MEC (1994)
- ◆ IR05 UXO **Time-Critical Removal Action (TCRA)** to address MEC (1995-1997)
- ◆ WMA UXO Intrusive Investigation to address MEC (1997-1998)
- ◆ Dredge Spoils Ponds UXO Intrusive Investigation to address MEC (1998-2001)
- ◆ Dredge Spoils Ponds Radiological Investigation to address radiological contaminants (2000-2001)
- ◆ MRA DGM Anomaly Excavations to address MEC at IR05 and DP7S as well as MEC and radiological items at the WMA (2006-2007)
- ◆ Horse Stables Area TCRA to address chemical contamination (2007-2010)
- ◆ IR05 TCRA to address chemical contamination (2007-2011)
- ◆ MRA "Mag and Flag" Anomaly Excavations to address MEC (2009-2010)

Reports describing the investigation and removal actions at the IR05, DP7S, and WMA sites can be found at the information repositories listed on the last page of this PP/Draft RAP. Some documents may also be available online at the Navy website: <http://bracpmo.navy.mil>.

CURRENT AND FUTURE SITE USE

Buildings A169 and A180 at the WMA are currently being used for the interim storage of recovered munitions material documented as safe and MEC items, respectively. The remainder of the IR05, DP7S, and WMA sites are currently inactive and remain property of the Navy. The sites are planned for transfer to the California State Lands Commission or City of Vallejo, as appropriate, for reuses including recreational and wetland areas.

EXCEPTION TO SOURCES OF DRINKING WATER POLICY

Shallow groundwater beneath the sites does not meet California's minimum water quality criteria for a domestic or municipal freshwater supply due to salinity. On this basis, the Water Board granted an exception to the drinking water policy for shallow groundwater at the IR05, DP7S and WMA sites under State Water Resources Control Board Resolution 88-63.

SUMMARY OF CONTAMINANTS AND HAZARDS OF CONCERN

Soil/sediment, groundwater, and surface water samples collected from the IR05, DP7S, and WMA sites were evaluated for chemical contaminants consistent with the historical uses of the site. The chemicals of potential concern at the sites include the following:

- ◆ Metals (Inorganic Constituents)
- ◆ Dioxins/Furans
- ◆ Explosives
- ◆ Herbicides
- ◆ Organotins
- ◆ Pesticides
- ◆ Polychlorinated Biphenyls
- ◆ Semivolatile Organic Compounds
- ◆ Total Petroleum Hydrocarbons
- ◆ Volatile Organic Compounds

The three sites were also extensively evaluated for MEC and radiological items. Although radiological items were thoroughly investigated at all three sites, they have only been recovered from the two historic outfall locations at the WMA. Radiological screening was performed at over 16,200 locations excavated to recover MEC; however no additional radiological items were encountered at any of the three sites. Therefore no unacceptable risk remains from potential radiological items at the three sites. Despite the extensive MEC investigations, potential risk from hazards associated with MEC items in subsurface soil may still exist at all three sites.

Public Comment F: Letter from Judy Kirkley (December 15, 2015)

RISK ASSESSMENT PROCESS

A baseline human health and ecological risk assessment was conducted to estimate the theoretical levels of risk to humans and ecological receptors from chemical contamination remaining at the IR05, DP7S, and WMA sites. Regulatory requirements were used to define what is considered acceptable and unacceptable risk.

HUMAN HEALTH RISK ASSESSMENT

A human health risk assessment estimates the theoretical risk to humans based on assumptions designed to overestimate risk and result in assessments that are protective of human health.

The human health risk assessment evaluated cancer risks and adverse non-cancer health effects associated with chemicals of potential concern in soil/sediment, groundwater and surface water for both current and future users. The risks associated with current and planned reuses of the sites, recreational users and construction workers, are discussed below.

Recreational User

Risks were comprehensively evaluated for a future recreational user exposure scenario for all exposure media (soil/sediment, groundwater, and surface water). Recreational users may be exposed to soil/sediment from ingestion, skin contact, inhalation of dust in outdoor air, and inhalation of volatile vapors.

Shallow groundwater beneath the site does not meet California's minimum water quality criteria for a domestic or municipal freshwater supply due to salinity; therefore, ingestion of groundwater was not considered a potential exposure route for recreational users. Recreational users may be exposed to shallow groundwater from inhalation of volatile vapors. Recreational users may be exposed to surface water from ingestion and dermal contact.

Construction Worker

The estimated potential risks/hazards for the construction worker scenario were evaluated for all exposure media (soil/sediment, groundwater, and surface water). Construction workers may be exposed to soil from ingestion, skin contact, inhalation of dust in outdoor air, and inhalation of volatile vapors.

A construction worker may be exposed to groundwater from skin contact, and inhalation of volatile vapors during potential trenching/excavation activities. A construction worker may be exposed to surface water from ingestion and dermal contact.

HUMAN HEALTH RISK ASSESSMENT RESULTS

Conclusions of the human health risk assessment indicate there are no unacceptable risks from chemicals of potential concern to current or planned future recreational users and construction workers. Potential ingestion and dermal contact to groundwater was not fully evaluated for any hypothetical user because shallow groundwater does not meet the minimum water quality criteria for a domestic or municipal freshwater supply due to salinity.

Based on the DGM Anomaly Excavations (2006-2007) and "Mag and Flag" Anomaly Excavations (2009-2010) which included excavation of over 16,200 anomalies, the probability of coming into contact with MEC items at the IR05, DP7S, and WMA sites is low. In addition MEC items are not expected to be present on the surface because 100 percent of accessible areas were visually inspected. However, potential risk from hazards associated with MEC items in subsurface soil may still exist at the three sites.

ECOLOGICAL RISK ASSESSMENT

The ecological risk assessment was conducted initially using conservative assumptions including using the maximum chemical concentration reported as well as assuming all of the species home range and diet is affected by the chemical, and the species foraging area is within the affected property. The conservative assumptions were then revised to more reasonable assumptions if chemicals of concern were identified in the initial approach. In the final step, the chemicals of concern were further evaluated utilizing site-specific receptors and exposure scenarios.

ECOLOGICAL RISK ASSESSMENT RESULTS

Conclusions of the ecological risk assessment indicate that chemicals of potential ecological concern do not pose a significant or immediate total and "incremental site-related" risk to ecological receptors at the sites.



IR05

Public Comment F: Letter from Judy Kirkley (December 15, 2015)

FEASIBILITY STUDY SUMMARY

The purpose of the Feasibility Study Report is to ensure the development and evaluation of the appropriate **remedial alternatives** to address risks at a site. Remedial alternatives are cleanup options available to contain, remove, or treat contamination and hazards to protect human health and/or the environment. Because previous actions have removed the principle risks, including radiological and MEC hazards and chemical constituents in soil/sediment, the feasibility study was streamlined to accelerate the cleanup process. Steps associated with the identification and screening of remedial technologies and development of screening alternatives normally included in a feasibility study were not required.

The remedial alternatives developed in the feasibility study were evaluated against seven of the nine CERCLA criteria, which are described in Figure 3. The remaining two criteria, State and Community Acceptance, will be addressed in the Record of Decision/Final Remedial Action Plan.

REMEDIAL ACTION OBJECTIVES

Remedial action objectives are statements containing a cleanup goal for the protection of human or ecological receptors from contaminants in specific media, such as soil, groundwater, or air. The objectives take into consideration the current and reasonably anticipated future land use. The remedial action objective at all three sites is to control direct exposure and protect future human receptors from the low residual risk posed by potentially buried MEC.

REMEDIAL ALTERNATIVE EVALUATION

Remedial alternatives are evaluated to provide decision-makers with adequate information to allow appropriate selection of a remedy for a site. Based on the numerous investigations and extensive removal activities at the IR05, DP7S and WMA sites, only two remedial alternatives were considered; no action and land-use controls.

Alternative 1—No Action

The No Action Alternative provides a baseline for comparing other alternatives. There are no remedial actions, monitoring, or reporting associated with this alternative.

Threshold Criteria

Overall Protection of Human Health and the Environment

How the risks are eliminated, reduced, or controlled through treatment, engineering, or institutional controls.



Compliance with Applicable or Relevant and Appropriate Requirements

Federal and state environmental statutes met or grounds for waiver provided.



Primary Balancing Criteria

Long-term Effectiveness

Maintain reliable protection of human health and the environment over time, and once cleanup goals are met.



Reduction of Toxicity, Mobility, or Volume Through Treatment

Ability of a remedy to reduce the toxicity, mobility, and volume of the hazardous contaminants present at the site through treatment.

Short-term Effectiveness



Protection of human health and the environment during construction and implementation period including times to meet cleanup objectives.

Implementability

Technical and administrative feasibility of a remedy, including the availability of materials and services needed to carry it out.

Cost

Estimated capital, operation, and maintenance costs of each alternative.



Modifying Criteria

State Acceptance



State concurs with, opposes, or has no comment on the preferred alternative.

Community Acceptance

Community concerns addressed and community preferences considered.



Figure 3. Criteria for Comparison of Cleanup Alternatives

Public Comment F: Letter from Judy Kirkley (December 15, 2015)

REMEDIAL ALTERNATIVE EVALUATION (Continued)

Alternative 2—Land-Use Controls

The Land-Use Control Alternative would include engineering and **institutional controls** for risk and hazard management. Engineering controls such as signage to alert future users of the potential presence of buried MEC may be used together with institutional controls to restrict disturbance of soil. Institutional controls will also prohibit sensitive uses including residences, hospitals, schools, and daycare facilities.

Institutional controls would include legal and administrative mechanisms used to implement land-use restrictions to limit the exposure of future landowner(s) and user(s) of the property to potentially buried MEC unless approved by the DTSC in consultation with the Navy. Upon conveyance of the property from Navy possession, the subsequent property owner will be responsible for enforcing the institutional controls. Property controls in the form of deed restrictions and a **land use covenant** will be implemented to legally enforce the institutional controls.

COMPARISON OF ALTERNATIVES

Both alternatives were compared using the nine criteria shown in Figure 3, which are categorized into three groups: threshold criteria, primary balancing criteria, and modifying criteria. Threshold criteria are requirements that each alternative must meet to be eligible for selection as the preferred alternative and include overall protection of human health and the environment and compliance with **Applicable or Relevant and Appropriate Requirements (ARARs)**. Primary balancing criteria are used to weigh effectiveness and cost tradeoffs among alternatives. The primary balancing criteria include long-term effectiveness and permanence; reduction of toxicity, mobility, or volume through treatment; short-term effectiveness; implementability; and cost. The primary balancing criteria represent the main technical criteria upon which the alternative evaluation is based.

Modifying criteria include state acceptance and community acceptance, and may be used to modify aspects of the preferred alternative when preparing the Record of Decision/Final Remedial Action Plan.

The modifying criteria will be evaluated after the public comment period discussed in this PP/Draft RAP.

Overall Protection of Human Health and the Environment

Under Alternative 2, Land-Use Controls will restrict disturbance of soil at the sites without regulatory

approval, and only if environmental and worker safety control measures are implemented by properly trained personnel. Therefore, Alternative 2—Land-Use Controls achieves a higher level of protection than Alternative 1—No Action, by ensuring that the exposure pathways are controlled.

Compliance with ARARs

Alternative 1—No Action is not evaluated for this criterion because ARARs are applicable only when a response action is taken. Alternative 2—Land-Use Controls is compliant with all identified ARARs.

Long-term Effectiveness and Permanence

Under Alternative 2—Land-Use Controls, risks to human health would be addressed through engineering and institutional controls. Implementation of land-use controls provides control over future activities and restricts potential exposures from soil disturbance. Ongoing effectiveness of land-use controls would be verified through annual inspections and the 5-year review process. Alternative 2 would be effective in the long term at mitigating risk, and mechanisms would be in place to ensure its continued effectiveness.

Reduction of Toxicity, Mobility, or Volume through Treatment

Neither of the proposed alternatives would reduce the toxicity, mobility, or volume of potential contamination through treatment, because treatment is not a component of either alternative.

Short-Term Effectiveness

The short-term effectiveness evaluation addresses protection of human health and the environment during remedy implementation. Alternative 1—No Action has no effect on human health or the environment in the short term because no action would be performed. Under Alternative 2—Land-Use Controls, the only action is implementation of engineering and institutional controls to restrict use and it would be effective in the short term.

Implementability

Both alternatives are straightforward to implement. Alternative 2—Land-Use Controls can be readily prepared and implemented because the Navy currently retains ownership of the property. As the property owner, the Navy can implement land-use controls and incorporate property controls in the deed when the land is transferred to a new owner.

Public Comment F: Letter from Judy Kirkley (December 15, 2015)

COMPARISON OF ALTERNATIVES (Continued)

Cost

No active construction or operational activities would occur under Alternative 1—No Action; therefore, there are no associated costs. The capital costs associated with Alternative 2—Land-Use Controls include preparation of a remedial design to describe the institutional controls as well as signage and installation. These costs are assumed to occur in the first year of the operation and maintenance period. The operation and maintenance costs include annual compliance monitoring and 5-year reviews. The cost in present worth for Alternative 2—Land-Use Controls is estimated to be \$144,088 over a 30-year period, assuming an interest rate of 1.9 percent.

SUMMARY OF PREFERRED ALTERNATIVE

Based on an analysis of the alternatives, Alternative 2—Land-Use Controls achieves an overall higher level of protectiveness than Alternative 1—No Action. Under Alternative 2—Land-Use Controls, soil disturbing activities would be prohibited through institutional controls, unless authorized by the agencies in consultation with the Navy. Engineering controls in the form of warning features such as signs may also be employed. Land-Use Controls would serve as an effective means to ensure conditions at the IR05, DP7S, and WMA sites are protective.

REGULATORY SUMMARY

California Health and Safety Code

This PP/Draft RAP has been prepared to meet the requirements of the California Health and Safety Code section 25356.1 for hazardous substance release sites. The California Health and Safety Code requires preparation of a RAP for sites that are not listed on the **National Priorities List (NPL)**, such as the former MINS. Therefore, this document also serves as a Draft RAP to fulfill the public notice and comment requirement of the California Health and Safety Code. The Final RAP will be incorporated in the Record of Decision for the IR05, DP7S, and WMA sites.

California Environmental Quality Act

As required by California state law (the California Environmental Quality Act or CEQA), DTSC has studied the risks associated with the residual chemical concentrations and MEC at the IR05, DP7S, and WMA sites, as well as possible effects of the proposed cleanup on human health and the environment. The findings of the study can be reviewed in a document called a **Notice of Exemption (NOE)**. The NOE is prepared by DTSC and documents that the proposed cleanup will have no negative impact on human health or the environment.

Nonbinding Allocation of Responsibility

Pursuant to California Health and Safety Code section 25356.1(e) for remedial action plans prepared for DTSC-listed sites, DTSC is to prepare a preliminary nonbinding allocation of responsibility among all identifiable **potentially responsible parties (PRP)**. Based on the available information regarding the former Mare Island Naval Shipyard, DTSC has determined that the Navy is the only identified PRP.



Munitions Storage Magazines at the WMA

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Public Comment F: Letter from Judy Kirkley (December 15, 2015)

Glossary of Terms

Applicable or Relevant and Appropriate Requirements (ARARs):

Federal, state, and local regulations and standards determined to be legally applicable or relevant and appropriate to remedial (cleanup) actions at a Comprehensive Environmental Response, Compensation, and Liability Act site.

Base Realignment and Closure (BRAC):

The process designed to realign, close, and dispose of military properties.

BRAC Cleanup Team (BCT):

The team of Navy, California Department of Toxic Substances Control, San Francisco Bay Regional Water Quality Control Board, and U.S. Environmental Protection Agency representatives coordinating the environmental investigations and cleanup at the installation.

California Environmental Protection Agency Department of Toxic Substances Control (DTSC):

A part of the California Environmental Protection Agency and California's lead environmental regulatory agency. Its mission is to protect public health and the environment from toxic substances. DTSC is represented on the BCT for the former MINS.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA):

Also known as "Superfund," this federal law was passed in 1980 and regulates environmental investigation and cleanup of sites identified as possibly posing a risk to human health and/or the environment.

Digital Geophysical Mapping (DGM):

A method of detecting certain physical properties below the ground surface. The data produced provides the location of subsurface anomalies.

Dredge Pond 7S (DP7S):

An area of land encompassing approximately 24 acres located between the San Pablo Bay tidal wetlands and IR05 along the southern end of Mare Island.

Engineering Controls:

Engineering controls may include items such as signage to warn personnel of exposure to potential contamination.

Installation Restoration Site 05 (IR05):

An area of land encompassing approximately 35 acres located along the Dike 12 breakwater at the southern end of Mare Island.

Institutional Controls:

Non-engineering mechanisms established to limit human exposure to contaminated soil, sediment, and/or groundwater.

Land-Use Controls

Engineering and institutional controls restricting activity, use, and access to properties with residual contamination.

Land Use Covenants:

Proprietary controls that specify requirements or limit the use of real property and affect the title of the property.

Mare Island Naval Shipyard (MINS):

A naval shipyard established by the Navy in 1854 and closed in April 1996. The former MINS is located on a peninsula in Solano County, California, about 25 miles northeast of San Francisco.

Munitions and Explosives of Concern (MEC):

Discarded military munitions and munitions constituents present in high enough concentrations to pose an explosive hazard.

Munitions Response Action (MRA):

Response actions, including investigation, removal actions, and remedial actions, to address explosives safety or environmental risk.

Public Comment F: Letter from Judy Kirkley (December 15, 2015)

Glossary of Terms

National Oil and Hazardous Substance Pollution Contingency Plan (NCP):

The federal regulation that guides determination of the sites to be corrected under both the Superfund Program and the program to prevent or control spills into surface waters or elsewhere.

National Priorities List (NPL):

The list of national priority sites among the known releases or threatened releases of hazardous substances, pollutants, or contaminants.

Notice of Exemption (NOE):

A form prepared by DTSC to document the site does not have potential impacts on the environment.

Potentially Responsible Party (PRP)

An individual or company, such as the owner, operator, transporter, or generator of hazardous waste that is potentially responsible for the contamination problems at a site.

Proposed Plan (PP)/Draft Remedial Action Plan (RAP):

The document that reviews the remedial alternatives presented in the Feasibility Study, summarizes the proposed preferred remedial alternative, explains the reasons for recommending the alternative, and notifies the community of the preferred alternative.

Remedial Alternatives:

The cleanup options available to contain, remove, or treat hazardous waste to protect human health and/or the environment.

Remedial Investigation:

An in-depth study designed to gather data needed to determine the nature and extent of contamination and assess the risk to human health and the environment.

Resource Conservation and Recovery Act (RCRA):

A federal law passed in 1976 that established the framework for treatment, storage, transportation, and disposal of solid and hazardous wastes.

San Francisco Bay Regional Water Quality Control Board (Water Board):

The San Francisco Bay Regional Water Quality Control Board is part of the California Environmental Protection Agency. Its mission is to preserve, enhance, and restore California's water resources. The Water Board is represented on the BCT for the former MINS.

Solid Waste Management Unit (SWMU):

Any discernible area where solid waste may have been placed at any time, irrespective of whether the area was intended for the management of solid or hazardous waste.

Time-Critical Removal Action (TCRA):

Removal actions where, based on the site evaluation, a determination is made that a removal is appropriate, and that less than six months exists before on-site removal activity should begin.

Unexploded Ordnance (UXO):

Munitions that have been prepared for action but did not explode when they were employed and still pose a potential risk of detonation.

U.S. Environmental Protection Agency (EPA):

The federal agency that is charged with protecting human health and the environment. The EPA is represented on the BCT for the former MINS.

Western Magazine Area (WMA):

An area of land encompassing approximately 106 acres between a hilly upland area and the San Pablo Bay tidal wetlands at the southern end of Mare Island.

Public Comment F: Letter from Judy Kirkley (December 15, 2015)**COMMUNITY PARTICIPATION**

The Navy is issuing this PP/Draft RAP as part of its public participation responsibilities under CERCLA and the NCP to ensure that the public has the opportunity to comment. This PP/Draft RAP summarizes information detailed in the documents, including the RI and Feasibility Study Reports available in the Administrative Record. The Navy encourages the public to review these documents to gain an understanding of the environmental investigations, removal actions, and risk assessments that have been conducted. Key documents generated for the IR05, DP7S, and WMA sites are listed on pages 4 and 5. These documents are available for public review at the information repositories listed on the last page.

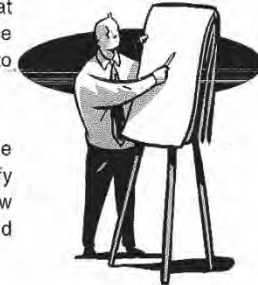
There are two ways for you to provide comments on this PP/Draft RAP:

1. Public Comment Period

During the 30-day public comment period from March 18 to April 17, 2015, you may use the comment form included with this PP/Draft RAP to send written comments to the **Base Realignment and Closure (BRAC)** Environmental Coordinator, Navy BRAC Program Management Office West at 1455 Frazee Road, Suite 900, San Diego, California 92108-4310. You may also submit comments electronically via email to the BRAC Environmental Coordinator (janet.lear@navy.mil) or via fax to (619) 532-0780.

2. Public Meeting

You may provide written or oral comments during the public meeting at 7:00 PM on March 26, 2015, which will be held in the Mare Island Conference Center at 375 G Street, Vallejo, California. A stenographer will be at the meeting to record all public comments.



After the public comment period is over, the Navy will review and consider the comments and in consultation with the regulatory agencies, the Navy may modify the proposed cleanup plan based on feedback from the community or on new information. Therefore, the community is strongly encouraged to review and comment.

A final decision will not be made until all comments are considered. Community acceptance will be evaluated after the public comment period for this PP/Draft RAP. The Navy will address any comments in a responsiveness summary presented in the Record of Decision/Final Remedial Action Plan. A Public Notice will be published in the Vallejo Times-Herald announcing when the Record of Decision/Final Remedial Action Plan is available to the public in the information repositories.

Public Comment F: Letter from Judy Kirkley (December 15, 2015)

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Public Comment F: Letter from Judy Kirkley (December 15, 2015)

Response to Comment F-1

The commenter attached hazardous waste information about the former Mare Island Naval shipyard. Materials attached to the comment letter include:

- A figure showing the Resource Conservation and Recovery Act (RCRA) permit boundary
- The California Department of Toxic Substances Control (DTSC) community update regarding their proposal to issue RCRA Corrective Action Complete Determination for five sites at the former Mare Island Naval Shipyard (dated June 2015).
- The U.S. Navy's Proposed Plan/Draft Remedial Action Plan (dated July 18, 2014) for the Defense Reutilization and Marketing Office at the former Mare Island Naval Shipyard (dated July 18, 2014).
- The U.S. Navy's Proposed Plan/Draft Remedial Action Plan for the Installation Restoration Site 05, Dredge Pond 7S, and Western Magazine Area at the former Mare Island Naval Shipyard (dated March 18, 2015).

DWR and USFWS appreciate the commenter sharing these materials.

As described in Chapter 11, *Hazards and Hazardous Materials*, in the Draft EIR/EIS, the RVARC site was once used by the U.S. Army for various uses including administration, maintenance, and hazardous materials/waste storage and as barracks, warehouses, and a mess hall. The site was characterized and remediated under the California Department of Toxic Substances Control's supervision. Based on the age of the buildings still present on the RVARC, asbestos-containing materials (ACMs) and lead-based paints are likely present in the building materials which can pose a risk to human health and the environment if disturbed. As described in Section 11.4.3 of Chapter 11 of the Draft EIR/EIS, during demolition of any existing buildings on the RVARC site under Alternatives 2 and 3, abatement of ACMs and lead-based materials would be supervised by a Cal/OSHA-certified contractor compliant with federal, state and local regulations to protect construction workers by requiring them to wear personal protective equipment. In addition, Mitigation Measures AQ/GHG-2a (Implement Fugitive Dust Best Management Practices) would reduce dust emissions. Potential impacts related to transport/use of hazardous materials would be reduced by implementing Mitigation Measures HYD/WQ-1 (Implement Construction Best Management Practices for Erosion Control) and HYD/WQ-3 (Implement Construction-related Best Management Practices for Hazardous Materials and Waste Management).

In addition, the Ryde Avenue site has a long history of industrial uses and there are some environmental concerns due to observations of a suspected oil stain and wood burning area. Similar to Alternatives 2 and 3, Mitigation Measures HYD/WQ-1 and HYD/WQ-3 would be implemented to reduce potential impacts related to transport/use of hazardous materials during construction, if this alternative were to be selected.

Public Comment F: Letter from Judy Kirkley (December 15, 2015)

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Public Comment G: Email from John Lambie (November 30, 2015)

From: Michael Stevenson
Sent: Monday, November 30, 2015 5:50 PM
To: Engstrom, John@DWR; Ted Sommer; Parson, Jennifer@DGS; Beggs, Barbara; robert_clarke@fws.gov; Kevin Fisher; Tom Engels; Allison Chan
Subject: FW: Delta Research Center Location Should Be in Stockton

FYI on a comment letter for DRS. Perhaps we will see this individual at Thursday's meeting in Stockton.

Michael Stevenson, M.S.
 Principal
 Horizon Water and Environment, LLC
 180 Grand Avenue, Suite 1405; Oakland, CA 94612
 P.O. Box 2727; Oakland CA, 94602
michael@horizonh2o.com
 510-986-1852
www.horizonh2o.com

From: John Lambie [mailto:jlambie@e-purwater.com]
Sent: Monday, November 30, 2015 11:41 AM
To: comments@deltaresearchstation.com
Subject: Delta Research Center Location Should Be in Stockton

TWIMC,

I understand that you are soliciting input on the choice of a location in Rio Vista as compared to one in Stockton.

I feel that Stockton is the better choice for a variety of reasons.

1. It has superior urban amenities for the variety of support needs for a research center, including
 - better community outreach via events for the public due it being urban over rural,
 - better educational opportunities for youth, and
 - better transportation infrastructure such as overnight delivery services for lab samples as an example.
2. It is home to an excellent university (Univ. of the Pacific) and an excellent community college both of which are fertile local sources of technical labor support.
3. It is more proximate to the labyrinth of waterways that are the Delta. This is not insignificant for establishing data locations and access.
4. The need for water into the fishery habitat would be seasonal and not chronic. Further the need for water to the fish would highlight for all the need for better Delta water conditions. The water needs could also foster innovation in providing that water via riverbank filtration and other methods that would not produce adverse impacts to the waterways as compared to a surface water intake.
5. Good land is readily available.
6. Community support is strong.
7. Most of the researchers live in Stockton and San Joaquin County.

G1

Public Comment G: Email from John Lambie (November 30, 2015)

G2 [The cost benefit analysis performed needs to consider hard capital costs, social goods, and environmental consequences of the site location.

If you would like further information on my thoughts please feel free to reply.

Sincerely,

John M. Lambie, PE, PG
Principal Hydrologist
E-PUR, llc,

Public Comment G: Email from John Lambie (November 30, 2015)

Response to Comment G-1

This comment expressing support for Alternative 4 (Ryde Avenue Site) in Stockton is acknowledged. The commenter believes the Ryde Avenue site is superior to the Rio Vista site for various reasons including: it has better community outreach, educational opportunities for youth, and transportation infrastructure; it is close to the University of the Pacific, it is near Delta waterways; the water needs for the FTC would be seasonal; land is readily available; community support is strong; and many of the researchers live in Stockton and San Joaquin County. DWR and USFWS appreciate the commenter's input.

As described in the Executive Summary of the Draft EIR/EIS, Alternative 2 is DWR's and USFWS's preferred alternative. This alternative is also considered the Proposed Project for the purposes of CEQA. After the EIR/EIS is complete, DWR will prepare findings for each significant environmental effect of the Project in compliance with Public Resources Code Section 21000 et seq. (CEQA Guidelines Section 15091). Pursuant to CEQA Guidelines Section 15093, DWR will also prepare a statement of overriding considerations, which balances the economic, legal, social, technological, and other benefits of the Project against the Project's significant environmental impacts. This document will be used in DWR's decision-making process for the Project. Note that Alternative 2 is referred to as the "Preferred Alternative" for the purposes of NEPA. Upon completion of the EIR/EIS process, USFWS will issue a Record of Decision describing their decision as to which alternative will be adopted. Both the CEQA findings and Record of Decision will take into consideration all alternatives evaluated in the EIR/EIS including Alternative 4.

Response to Comment G-2

The comment requests that the cost benefit analysis consider hard capital costs, social goods, and environmental consequences of the site location. Chapter 18 of the Draft EIR/EIS, *Socioeconomics*, includes estimated construction costs of the Proposed Project for each action alternative. As described on page 18-15 of the Draft EIR/EIS, for the purposes of the impact analysis, a future construction unit cost of \$275 per square foot (RS Means 2015) was used and the estimated total construction cost of the Preferred Alternative would be \$52 million. The estimated construction costs for Alternative 4 (Ryde Avenue Site in Stockton) would be similar to the Preferred Alternative. The estimated costs disclosed in the Draft EIR/EIS are based on the conceptual site plans of each action alternative and best available information; hard capital costs would be determined during the Project's design phase. Potential impacts on social goods such as clean air and clean water are described in Chapter 6, *Air Quality and Greenhouse Gas Emissions*, and Chapter 12, *Hydrology and Water Quality*, respectively. Lastly, the environmental consequences of each action alternative are described throughout the Draft EIR/EIS. Chapters 5 through 20 of the Draft EIR/EIS describe the environmental consequences of each alternative with respect to aesthetics, biological resources, cultural resources, geology and soils, hazards and hazardous materials, land use, noise, transportation, recreation, socioeconomics, population and housing, and cumulative effects.

Public Comment G: Email from John Lambie (November 30, 2015)

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Public Comment H: Letter from Stephen Arakawa, Metropolitan Water District of Southern California (December 14, 2015)



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Office of the General Manager

December 14, 2015

VIA EMAIL AND U.S. MAIL

U.S. Fish and Wildlife Service
Attention: Barbara Beggs
650 Capitol Mall Suite 8-300
Sacramento, CA 95814

Dear Ms. Beggs:

Notice of Availability of a Draft Environmental Impact Report/Environmental Impact Statement:
Delta Research Station—Estuarine Research Station and Fish Technology Center Project
San Francisco Bay/Sacramento-San Joaquin Delta Estuary

The Metropolitan Water District of Southern California (Metropolitan) has reviewed the Delta Research Station Project Draft Environmental Impact Report/Environmental Impact Statement (Draft EIR/EIS) prepared by the two lead agencies, California Department of Water Resources (DWR) and U.S. Fish and Wildlife Service (USFWS), to comply with the California Environmental Quality Act and the National Environmental Policy Act (NEPA), respectively. As proposed, a two-facility complex would be built in a central location in northern California to consolidate ongoing federal and state scientific research throughout the Bay-Delta region. This letter contains Metropolitan's comments on the Draft EIR/EIS as a stakeholder and potentially affected public agency and is a follow up to the previous letter we submitted on January 9, 2015, regarding the Notice of Preparation/Notice of Intent. Given the importance of the Bay-Delta to Metropolitan and other State Water Contractors, Metropolitan is engaged in key studies, debates, and decision-making regarding Delta policy. From that perspective, we request further clarification of the following issues in the Final EIR/EIS:

H1

1. With the proposed consolidation of ongoing Bay-Delta research, all scientific and technical conclusions should be subjected to impartial and objective peer-review by nationally or internationally qualified and recognized scientists and/or technicians. Hence, we propose that the Lead Agencies develop and implement scientific and/or technical mechanisms and strategies to ensure that collegiality will not trump objective scientific inquiry and result in unwitting and unintentional bias or premature consensus/determinations. The Lead Agencies should also consider other administrative measures to foster a collegial environment in which researchers are encouraged to respectfully disagree with other researchers to maximize each researcher's ability to advance the scientific understanding of the Bay-Delta ecosystem.

1015 18th Street NW, Suite 600, Washington, D.C. 20036-5203 • Telephone: (202) 296-3551 • Fax: (202) 296-6741
10 N. Alameda Street, Los Angeles, California 90012 • Mailing Address: Box 54153, Los Angeles, California 90054-0153 • Telephone (213) 217-6000

Public Comment H: Letter from Stephen Arakawa, Metropolitan Water District of Southern California (December 14, 2015)

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

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| H2 | | 2. While the collection of data and collaboration is apparent among USFWS, DWR, and the California Department of Fish and Wildlife (CDFW), the Draft EIR/EIS does not identify a process in which other agencies, universities, and private industries can participate in the data management for access and dissemination. We request that the project description be amended to describe such a process. |
| H3 | | 3. Please explain in the project description how the research functions of the three agencies will be integrated and the resultant analyses be conducted. Given that each Lead Agency has specific missions and mandates under federal and state laws, it is not clear how the consolidation and integration of the research will be developed, planned, and implemented, while balancing the requirements of each agency. |
| H4 | | 4. Data should be disseminated to other agencies to avoid duplicate efforts or to share new findings or understanding as it relates to the science in the Delta. We request that the project description incorporate such an objective. |
| H5 | | 5. Since this project is a joint state and federal effort, it is anticipated that there will be several sources of funding the project implementation. We could not find that information in the Draft EIR/EIS. Please provide such information, in compliance with NEPA regulations, in the project description or introduction. |
| H6 | | 6. Metropolitan is interested in the facilitation of the data management to incorporate the information into the Bay Delta Live website (http://www.baydeltalive.com/). Metropolitan is interested in further understanding the data management infrastructure setup and approach (such as open source), costs (startup/maintenance), implementation of developed data, and the governance of the data systems that are developed and managed. This could have a significant cost when more datasets are added. The purpose of the Bay Delta Live website is to aggregate the wealth of scientific knowledge and information from a variety of sources and then present the information in an easy to use web application. This initial effort to aggregate the data will give all stakeholders equal access to visual insight and understanding into the Delta and neighboring regions for water quality, hydrodynamics, salinity and turbidity conditions, stressors on sensitive native fish populations, infrastructure projects, and development of new scientific inquiry and investigations. Ideally, inclusion of your data should be seamless to further collaboration and best science applications resolving Bay-Delta issues. |

Public Comment H: Letter from Stephen Arakawa, Metropolitan Water District of Southern California (December 14, 2015)

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

U.S. Fish and Wildlife Service
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H7

7. Given that the California WaterFix Project, and not the Bay Delta Conservation Plan, is now the preferred alternative, an opportunity potentially exists for the DWR's Interagency Ecological Program (IEP) to be implemented within the context of the Delta Research Station Project. We request that the final environmental document address this element to determine how IEP inclusion into the Delta Research Station can add value.

We appreciate the continuing opportunity to provide input to your planning process and we look forward to receiving future information concerning this project. If we can be of further assistance, or if you would like to discuss Metropolitan's comments on the Draft EIR/EIS or the proposed project itself, please contact me at sarakawa@mwdh2o.com or for data management considerations, contact Mr. Russ Ryan at rryan@mwdh2o.com.

Very truly yours,



Stephen Arakawa
Manager of Bay-Delta Initiatives

DWS:rrw

Public Comment H: Letter from Stephen Arakawa, Metropolitan Water District of Southern California (December 14, 2015)

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Public Comment H: Letter from Stephen Arakawa, Metropolitan Water District of Southern California (December 14, 2015)

Response to Comment H-1

The commenter's proposal that the lead agencies develop and implement scientific and/or technical mechanisms and strategies to ensure collegiality is acknowledged. The commenter also recommends that the lead agencies consider other administrative measures to foster a collegial environment in which researchers are encouraged to respectfully disagree with other researcher's is noted. Because this comment pertains to the administrative operations of the Interagency Ecological Program (IEP) and not construction or operation of the DRS facilities, no additional response is provided.

Response to Comment H-2

The comment requests that the Draft EIR/EIS identify a process in which other agencies, universities, and private industries can participate in the data management for access and dissemination.

As described in Chapter 2 of the Draft EIR/EIS, the DRS is intended to serve as an aquatic research and monitoring facility in the centralized area of the Bay-Delta and reflects the outcome of collaborative efforts amongst DWR, USFWS, California Department of Fish and Wildlife (CDFW), and other agencies involved in the IEP such as National Marine Fisheries Service (NMFS) and U.S. Bureau of Reclamation (Reclamation). The Estuarine Research Station (ERS) facility would serve as the central location for IEP activities that are currently being conducted in various areas of the Bay-Delta. By consolidating facilities in one centralized location in the Bay-Delta, the DRS would improve the effectiveness and efficiency of scientific efforts related to Bay-Delta rare fish species because staff working on these efforts would be based in one location.

The IEP has developed several documents that address stakeholder involvement with respect to data management and disseminating data generated by the IEP to these stakeholders. The IEP Stakeholder Engagement Plan, for instance, contains goals and objectives focused on engaging a broad range of stakeholders by convening stakeholders with IEP coordinators (IEP 2013). Consistent with this plan, an Interagency Ecological Program Stakeholder Group (IEPSG), comprised of IEP coordinators and stakeholders who use information and data developed by the IEP, meet twice a year to provide updates on current IEP monitoring and research activities. At these meetings, the IEPSG also discusses future monitoring and research, and other issues of interest or concern. It is important to note that the approach focuses on stakeholder engagement, active listening, and responsiveness to try and ensure that a full range of views are solicited. In addition, the IEP Communication and Engagement Plan (2015a) is intended to guide IEP internal and external communications and efforts to involve stakeholders including other local, state or federal agencies who are not members of the IEP, academia, researchers, and other members of the public.

The Proposed Project would not change the process in which the IEP currently engages with other agencies, universities and private industries. Because the Draft EIR/EIS focuses on evaluating the construction and operation impacts of the DRS on the environment, no edits to Chapter 3, *Description of Alternatives*, are necessary.

Public Comment H: Letter from Stephen Arakawa, Metropolitan Water District of Southern California (December 14, 2015)

Response to Comment H-3

The commenter requests that the project description describe how the research functions of DWR, USFWS, and CDFW will be integrated through the consolidation of facilities.

Chapter 3 of the Draft EIR/EIS, *Description of Alternatives*, focuses on describing the primary DRS facilities that would be constructed and operation and maintenance activities that would take place at the facilities. As the Proposed Project is in the conceptual planning phase, details about how the research functions amongst the IEP member agencies would be integrated have not yet been developed. However, the interactions will follow the IEP Governance Framework (IEP 2015b) that has been developed to guide the overall program, as well as specific efforts such as the proposed new field station. The Governance Framework provides an overview of how IEP will function including roles and responsibilities, organization, and work plan development.

It should be noted that the planning process for the DRS has been on-going for some time. The IEP Strategic Plan (2014) describes how scientific staff of IEP member agencies and other partners collaborate in interdisciplinary teams. This plan also describes IEP's commitment to developing and maintaining a shared research facility including field equipment, laboratories, offices, facilities and fleet of research vessels, as well as shared web-based data and information repositories. To provide some background and context about the ERS's inception, the following information has been provided regarding the IEP.

Established in 1970, the IEP is comprised of a team of experts and a broad range of stakeholders. The mission of the IEP is to provide and integrate relevant and timely ecological information for management of the Bay-Delta ecosystem and the water that flows through it. This is accomplished through collaborative and scientifically sound monitoring, research, modeling and synthesis efforts for various aspects of the aquatic ecosystem. Some of the key values shared amongst the IEP member agencies include: transparent and collaborative interactions and partnerships; and shared staff, expertise and infrastructural resources. As scientific staff of IEP member agencies collaborate in interdisciplinary teams, the IEP has been committed to developing a shared space for field equipment, laboratories, offices, facilities, and a fleet of research vessels (IEP 2014). The ERS is intended to satisfy the IEP's commitment for developing shared infrastructure for IEP member agencies.

Response to Comment H-4

The commenter's request that data generated by IEP agencies be disseminated to other agencies in order to avoid duplicate efforts or to share new findings or understanding as it relates to the science in the Delta is noted. As described in the IEP's Strategic Plan (2014), member agencies of the IEP readily share its data, information, equipment, expertise and resources with the Bay-Delta science community. Example programs that rely on some of these IEP generated data include the San Francisco Bay and Delta Regional Monitoring Programs, Delta Stewardship Council – Delta Science Program, Collaborative Science and Adaptive Management Program, Bay-Delta Conservation Plan, California Water Quality Monitoring Council, and others. A major focus for IEP is to make data easily available through

Public Comment H: Letter from Stephen Arakawa, Metropolitan Water District of Southern California (December 14, 2015)

the California Estuary Monitoring Workgroup and the development of the Estuaries Portal. The purpose of this workgroup is to foster collaboration, reduce redundancies of efforts, and to provide a platform for streamlining data access via internet portals.

Many of the issues raised in Comment H-4 are discussed in the Delta Science Program's 2015 white paper, *Enhancing the Vision for Managing California's Environmental Information*, which was developed with significant contributions from the California Monitoring Council's Data Management Workgroup (DMWG). The DMWG has been identified by the Delta Plan Interagency Implementation Committee (DPIIC) to help implement several of their High Impact Science Actions. IEP is working with IT representatives from various agencies within CalEPA and the California Natural Resources Agency to develop a strategic plan for how the DMWG can help implement the white paper's vision. The DMWG's close ties with the Estuary Monitoring Workgroup will help ensure that any actions taken are closely in line with goals outlined in the white paper and objectives of the Bay Delta Live website (Bay Delta Live 2016) a multi-organizational effort to provide access to a wide range of data sets.

The purpose and objectives of the DRS, as outlined in Chapter 2 of the Draft EIR/EIS, focus on establishing consolidated facilities associated with the IEP to reduce redundancies and costs related to operating existing IEP facilities.

Response to Comment H-5

The comment notes that the Draft EIR/EIS lacks funding information and requests that this information be provided in the project description or introduction.

For clarification, CEQA and NEPA do not require that funding information be disclosed in an EIR/EIS. Project funding is beyond the scope of the Draft EIR/EIS and has yet to be finalized. Therefore, no discussion of project funding has been added to the document.

Response to Comment H-6

The comment notes that Metropolitan Water District (MWD) is interested in the facilitation of data management and incorporation of such information into the Bay Delta Live website. The comment further expresses interest in further understanding the data management infrastructure setup and approach, costs for start-up and maintenance, implementation of developed data and the governance of the data systems that are developed and managed. The comment notes that significant costs may be incurred when more datasets are added. In general, this comment does not pertain to the content or analysis in the Draft EIR/EIS. However, the response above to Comment H-4 provides an overview of how IEP is working with efforts such as the Bay Delta Live website.

Response to Comment H-7

The comment requests that the Final EIR/EIS address how inclusion of the IEP into the DRS can add value. As described in Chapter 3 of the Draft EIR/EIS (page 3-7), all three action alternatives would accommodate various IEP agencies and would serve as a hub for ongoing

Public Comment H: Letter from Stephen Arakawa, Metropolitan Water District of Southern California (December 14, 2015)

1 research activities focused on the Bay-Delta region. The ERS would have office space for
2 USFWS, CDFW, and DWR employees working on 20-30 active IEP projects. Each action
3 alternative would also have boat storage, laboratory space, and shop space to accommodate
4 these same IEP projects.

Public Comment I: Email from Richard Morat (November 12, 2015)

From: Barbara Beggs
Sent: Thursday, November 12, 2015 2:19 PM
To: Engstrom, John@DWR; Parson, Jennifer@DGS; ted.sommer@water.ca.gov; Michael Stevenson; daniel.obrien; Robert Clarke; Tom Engels; Allison Chan
Subject: DRS public comment

See below. When the letter arrives in the mail, I'll send a copy of that as well.

From: Martarano, Steve [mailto:steve_martarano@fws.gov]
Sent: Thursday, November 12, 2015 2:11 PM
To: Barbara Beggs
Subject: Fwd: Delta Science Center - feedback

fyi

----- Forwarded message -----

From: Richard Morat <rjmorat@gmail.com>
Date: Thu, Nov 12, 2015 at 1:38 PM
Subject: Delta Science Center - feedback
To: steve_martarano@fws.gov, ted.thomas@water.ca.gov

can Steve fwd this to Begg and Ted to Mark Cowan?

Reply if you will not.

I singed and posted this by mail today. Rick

November 12, 2015

Charlton Bonham, Director

California Department of Fish and Wildlife

1416 9th Street, 12th Floor,

Sacramento, CA 95814

Ren Lohofener, Regional Director

U. S. Fish and Wildlife Service, Region 8

*2800 Cottage Way, W-2606
Sacramento, CA 95825*

Public Comment I: Email from Richard Morat (November 12, 2015)

Maria Rea, Supervisor

Sacramento Area Office

National Marine Fisheries Service

650 Capitol Mall, Suite 5-100

Sacramento, CA 95814-4700

Re: Feedback on the Rio Vista Delta Research Station Proposal

Addressees:

11

The United States Fish and Wildlife Service's and California Department of Water Resources' October 29, 2015 joint News Release asked for feedback as well as comments on the DEIR/EIS. The proposal is for an Estuarine Research Station and a Fish Technology Center to be located on the Sacramento River at Rio Vista. Strange the public News Release would not offer a ballpark cost estimate to give the public some idea of scope. Understandable too that it did not.

12

The project, according to the public notice, is to "consolidate approximately 145 employees from federal and state offices of the Interagency Ecological Program (IEP)... allowing for increased interagency coordination and collaboration." The news release further states that this "might help imperiled fish populations". What a cruel hoax. Co-location is of no benefit unless increased coordination and collaboration produces increased understanding that is shared and used in decision making. I contend that your three agencies have been withholding important information on fishery flow needs from the State Water Resources Control Board that has resulted in horrible decisions for protection of public trust resources. As for the Fish Technology Center, captive propagation of imperiled fish populations should only be a backup to priority efforts to restore essential flows for wild populations of fish. Without a plan and resources to restore habitat and release endangered fish back into the wild for true recovery, propagation of captive populations is just a deathwatch - as it was for Martha, the last passenger pigeon. Without a commitment to share the findings and understandings, something sorely lacking especially in the last decade, this proposal for a research station is nothing more than a spending program.

Have you looked at your resource protection track record recently? In referring to "you" I mean you and the next level or two under you, not the field staff. While sitting on some of the best science in the world - reference A Historical Perspective of the Interagency Ecological Program: Bridging Multi-Agency Studies into Ecological Understanding of the Sacramento-San Joaquin Delta and Estuary for 40 Years, July 2012 - your three agencies have fed lousy advice to state and federal regulators and, more importantly and all too often, your agencies have been silent and withheld the most valuable and useful advice from the one regulator that need needed it the most - the State Water Resources Control Board. What you have misadvised and failed to

Public Comment I: Email from Richard Morat (November 12, 2015)

12
cont.

advise on fishery flow needs has assisted in this disastrous decline in aquatic resources. Decades of regulatory water shortages for the aquatic ecosystems, especially in the estuary, and now this drought has, coupled with your agency's silence and misinformation, allowed some agricultural users economic gain but at a huge and perhaps irreversible cost to public trust resources. Balance in the protection of beneficial uses has been lacking.

You have no need for a location-consolidated IEP station unless you allow the program to excel and then share with the public and key regulatory agencies their findings. I suggest that you withdraw your proposal for this spending program or, better yet, commit to share the understanding gained with key decision-making agencies. Make the July 2012 history of the IEP an interim report and not an epilogue.

Richard Morat

2821 Berkshire Way

Sacramento, CA 95864

cc: Barbara Beggs

Mark Cowin

--
Steve Martarano, Public Affairs Specialist
Bay-Delta Office, U.S. Fish and Wildlife Service
650 Capitol Mall, Eighth Floor
Sacramento, CA 95814

Office -- 916-930-5643
Cell - 916-335-8841

Check out the BDFWO web page at
<http://www.fws.gov/sfbaydelta/>

Public Comment I: Email from Richard Morat (November 12, 2015)

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Public Comment I: Email from Richard Morat (November 12, 2015)**1 Response to Comment I-1**

2 The comment correctly notes the publication date of the Draft EIR/EIS for the Delta Research
3 Station Project. DWR and USFWS's preferred alternative is to construct the ERS and FTC at
4 the Rio Vista Army Reserve Center in Rio Vista, California.

5 The commenter notes that it is odd that the USFWS and DWR's news release did not offer a
6 ballpark cost estimate. Chapter 18, *Socioeconomics*, includes an estimated construction cost
7 for the ERS and FTC. Page 18-15 of the Draft EIR/EIS states that construction costs would be
8 \$38.23 million for the ERS and \$13.75 million (in 2015 dollars) for the FTC, resulting in a total
9 of approximately \$52.0 million.

10 Response to Comment I-2

11 The comment's expression of opposition towards the Proposed Project is noted. As stated in
12 Chapter 2, *Purpose, Need, and Project Objectives*, the purpose of the DRS is to enhance
13 interagency coordination and collaboration by developing a shared research facility. See
14 Response to Comment H-4, above, for discussion about the IEP's Strategic Plan (2014), which
15 describes ways in which IEP readily share its data, information, equipment, expertise and
16 resources with the Bay-Delta science community and the public.

Public Comment I: Email from Richard Morat (November 12, 2015)

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2

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Public Comment J: Email from Terry Mulligan (December 5, 2015)

From: Michael Stevenson
Sent: Wednesday, December 16, 2015 2:31 PM
To: allison@horizonh2o.com
Subject: Fwd: put me on mailing list

Begin forwarded message:

J1

From: Terry Mulligan <terrylizm@yahoo.com>
Date: December 5, 2015 at 11:55:13 AM PST
To: "info@deltaresearchstation.com" <info@deltaresearchstation.com>
Subject: put me on mailing list
Reply-To: Terry Mulligan <terrylizm@yahoo.com>

terrylizm@yahoo.com

Terry & Liz Mulligan
BERKSHIRE HATHAWAY | Dunnigan Properties
Terrylizm@yahoo.com
Cell:(916)768-3796

Public Comment J: Email from Terry Mulligan (December 5, 2015)

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2

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Public Comment J: Email from Terry Mulligan (December 5, 2015)

1 Response to Comment J-1

- 2 As requested, the commenter has been added to the DRS EIR/EIS mailing list.

Public Comment J: Email from Terry Mulligan (December 5, 2015)

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Public Comment K: Letter from Maria C. Rea, National Oceanic and Atmospheric Administration (December 14, 2015)



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

DEC 8 2015

Mr. John Engstrom
DRS Draft EIR/EIS Comments
California Department of Water Resources
1416 Ninth Street, Room 315-3
Sacramento, California 95814

Re: Comments on the Draft Environmental Impact Report / Environmental Impact Statement
Regarding the Proposed Delta Research Station – Estuarine Research Station and Fish
Technology Center

Dear Mr. Engstrom:

Thank you for the opportunity to comment on the Draft Environmental Impact Report / Environmental Impact Statement (EIR/EIS) Regarding the Proposed Delta Research Station – Estuarine Research Station and Fish Technology Center. The Draft EIR/EIS addresses the proposed construction of two facilities: (1) a proposed Estuarine Research Station (ERS); and (2) a proposed Fish Technology Center. The proposed Delta Research Station is intended to serve as a centralized aquatic research and monitoring facility and is a result of a multiyear collaboration between the agencies of the Interagency Ecological Program (IEP).

K1

NOAA's National Marine Fisheries Service (NMFS) has been an IEP participant since the late 1980s and these comments are related to NOAA's National Marine Fisheries Service (NMFS) federally listed endangered Sacramento River winter-run Chinook salmon (*Oncorhynchus tshawytscha*), threatened Central Valley spring-run Chinook salmon (*O. tshawytscha*), threatened California Central Valley steelhead (*O. mykiss*), and the threatened Southern distinct population segment of North American green sturgeon (*Acipenser medirostris*) and their associated designated critical habitats. We also refer you to the January 30, 2015, letter sent to you regarding the proposed Delta Research Station (attached).

Following, are general comments related to the document:

K2

1) The document states there will be room for 165 staff from the U.S. Fish and Wildlife Service, California Department of Water Resources, and California Department of Fish and Wildlife. NMFS would like to discuss workspace in the new facility to improve coordination.

K3

2) The document states that the FTC may raise green sturgeon for genetic refugial backup purposes. Careful consideration should be made before moving forward with broodstock propagation of an ESA listed species to assure that the program is consistent with the



Public Comment K: Letter from Maria C. Rea, National Oceanic and Atmospheric Administration (December 14, 2015)

2

K3
cont.

policy of the Endangered Species Act and does not operate to the disadvantage of the species. The propagation of listed federal species is also subject to the requirements of a Hatchery Genetic Management Plan and associated ESA consultation.

K4

- 3) Construction – impacts: The proposed project involves the construction of 8,000-13,000 square feet of new docks. Compensation for dock construction will involve removal of piling and overwater structures (e.g., derelict docks) in the Delta and potential purchase of conservation banking credits. If project impacts cannot be adequately compensated through removal of existing structures and restoration of disturbed areas, NMFS recommends purchase of credits in a NMFS approved conservation bank in the lower Sacramento River or Delta (e.g., Liberty Island Conservation Bank).

K5

- 4) Fish exclusion measures: The project proposes exclusion and relocation of fish from a large tidally influenced shoreline area. It may not be feasible to remove and exclude fish from the proposed area or continually relocate fish for the proposed period of construction. NMFS recommends investigation into feasibility of proposed fish exclusion, and consideration of alternate methods for minimizing impacts to fish if exclusion is not feasible.

In addition, NMFS provides the following specific comments on the EIR/EIS:

K6

- 1) Table 8-1 and 8-2: In Table 8-1 adult spawning distribution of green sturgeon includes the San Joaquin River and in Table 8-2 habitat characteristics of Southern DPS green sturgeon includes the Klamath and Trinity rivers Southern DPS green sturgeon spawning has only been documented in Sacramento River drainage.

K7

Central Valley spring-run description indicates that spring-run Chinook have been extirpated from the San Joaquin basin. An experimental population of spring-run Chinook salmon exists in the San Joaquin basin and the “not expected” category should be changed for the Ryde Avenue site.

K8

- 2) We recommend consulting with NMFS guidelines on the use of treated wood products in aquatic environments for implementation of BMPs for removal of creosote piles (page 8-25). Located at:

http://www.westcoast.fisheries.noaa.gov/publications/habitat/treated_wood_guidelines_final_2010.pdf

K9

- 3) Page 8-46 describes relocation of research boats to the proposed marina/harbor location in Rio Vista. This section, however, does not address the additional overwater structures and “soak” time associated with additional boats in the Rio Vista area.

Public Comment K: Letter from Maria C. Rea, National Oceanic and Atmospheric Administration (December 14, 2015)

3

Please contact Jeff McLain at (916) 930-5647, or via email at Jeff.McLain@noaa.gov, in the California Central Valley Area Office, if you have any questions regarding this letter.

Sincerely,


for Maria C. Rea
Assistant Regional Administrator

Attachment

cc: Copy to File - ARN151422WCR2014SA00316

Public Comment K: Letter from Maria C. Rea, National Oceanic and Atmospheric Administration (December 14, 2015)



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

JAN 30 2015

Mr. John Engstrom
Supervising Architect
California Department of Water Resources
1416 Ninth Street, Room 315-3
P.O. Box 942836
Sacramento, CA 94236-0001

Dear Mr. Engstrom:

This letter responds to your November 21, 2014, request for comments regarding the scope and content for the *Draft Environmental Impact Report/ Environmental Impact Statement for the Delta Research Station* (Draft EIR/EIS). NOAA's National Marine Fisheries Service (NMFS) received this request on December 11, 2014. At your request, NMFS has reviewed the information provided in your letter for the Delta Research Station (DRS). This response is provided as technical assistance to DWR, is not intended to take the place of consultation as required under section 7 of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 *et seq.*), and does not provide incidental take authorization pursuant to section 7(b)(4) and section 7(o)(2) of the ESA, as NMFS can only enter into ESA section 7 consultations with another Federal agency or its designee.

Project Background

The California Department of Water Resources (DWR) and the United States Fish and Wildlife Service (USFWS) are preparing a joint Draft EIR/EIS for the construction and operation of the DRS. The DRS is proposed to be located in the Sacramento-San Joaquin Delta (Delta), either near Rio Vista in the North Delta or the City of Stockton in the Central Delta. The USFWS will be the Federal Lead Agency for coordinating the environmental analysis under the National Environmental Policy Act (NEPA) while DWR will be the lead State agency responsible for coordinating California Environmental Quality Act (CEQA) environmental analysis.

DWR and USFWS plan to construct a science and research center in the Delta which will bring together State and Federal agency staff working on similar Delta issues. The research station will be divided into two facilities; the Estuarine Research Station (ERS) and the Fish Technology Center (FTC). The intent of constructing the DRS is to enhance interagency coordination and collaboration through common work at a shared research facility.



Public Comment K: Letter from Maria C. Rea, National Oceanic and Atmospheric Administration (December 14, 2015)

2

The specific objectives of each facility of the proposed DRS are as follows:

ERS

- Establish a research station in a central location within the Delta region to facilitate ease of conducting monitoring and research.
- Co-locate the research station with a facility capable of studying fish in captivity (*i.e.*, the FTC).
- Provide facilities to conduct monitoring and research on the Delta's aquatic resources.

FTC

- Develop captive propagation technologies for the Delta's rare fish species.
- Test and refine the captive propagation techniques for these species of interest.
- Locate the facility where suitable water quality and quantity are available and there is the ability to discharge waste water into adjacent surface waters, given its various functions and uses in the FTC.
- Co-locate the FTC with a facility conducting conservation research on Delta rare fish species (*i.e.*, the ERS).

The ERS will provide improved and additional facilities for research activities conducted by scientist from the Interagency Ecological Program (IEP). Over 160 State and Federal employees from the IEP are expected to eventually be located at the ERS facilities. ERS facilities will include offices and work space, wet and dry laboratory facilities, warehouse and boat storage facilities, a marina for mooring research vessels, and a vehicle and boat repair shop. Laboratory facilities will include microscopy labs, fume hoods, computer labs, and water storage for processing field samples and holding biological specimens. The ERS will also have the facilities to repair and store electronic sensing, monitoring, and telecommunications equipment used in field studies in the Delta region. DWR will manage the ERS facilities.

The FTC will be a center for research, conservation, and study of rare Delta fishes and will be situated immediately adjacent to the ERS facilities. The FTC facility is also intended to house and maintain refugia populations of rare fish species in captivity. The FTC facilities will include research and study space, office and administration space, a shop and vehicle storage building, a water treatment facility, and an effluent treatment facility. The proposed DRS will include separate aquaculture and research facilities for the study of individual species as well as laboratory space to support water quality, genetic, and fish health analysis. USFWS will manage the FTC facilities.

General Comments to Request for Scoping

NMFS makes the following general comments regarding the proposed scoping for the DRS as it pertains to the CEQA and NEPA documents:

- 1.) The construction of the marina for the mooring of research vessels should include an analysis of the impacts of this facility on the local habitat. If excavation is needed to construct a protected mooring off of the main channel, then the impacts of dredging, and

Public Comment K: Letter from Maria C. Rea, National Oceanic and Atmospheric Administration (December 14, 2015)

3

dredge material disposal should be assessed. Likewise, the impacts to exposed fish species and the benthic community from placing pilings and docks should be addressed. This should include an analysis of acoustic impacts from pile driving and the creation of habitat within the marina facilities that may serve as a refuge for predators. Operations of the marina facilities should assess the impacts of boat traffic, discharge of hydrocarbons and other contaminants from the operations of internal combustion engines, and the potential for spills associated with the operations of a research fleet, *i.e.*, lubricating fluids, hydraulic fluids, and fuels in the confined area of the marina as well as adjacent waters. If vessel maintenance and fueling operations are to take place in the marina or associated boat yard, the potential for spills or contaminated runoff from such operations should be assessed as well.

- 2.) If raw water is to be diverted from the adjacent waterways of the Delta to supply the aquaculture facilities and wet labs, an analysis of the impacts of this diversion on the local environment should be performed. Impacts to local hydraulics should be modeled for any proposed designs. Modeling should include the effects of tides, river flows, and water year types as well as anticipated water demands in the research facilities on local hydraulics. Assessment of different screening designs, their conformity to NMFS screening criteria, and their effects on fish behavior and vulnerability to predation should also be conducted.
- 3.) If the source of raw water for the aquaculture facility and wet labs includes ground water, an assessment of impacts to the ground water table should be conducted.
- 4.) Any raw water used for the aquaculture facility will likely need to be treated and disinfected prior to use in the facility. Sterilization of the raw water from surface water sources will require at least one of several technologies to achieve a "clean" source of water for the facilities. This may include ultra violet disinfection, ozone disinfection, or other methodologies. Assessment of the disinfection protocol and its potential to create biochemical byproducts that may inadvertently enter the environment should be performed. In addition, an evaluation of the energy requirements to perform the chosen disinfection procedure would be prudent in order to ensure a consistent and continuous application of those protocols, thereby discounting the chance of failure.
- 5.) Discharge of the "waste" water from the aquaculture facilities and wet labs should be assessed. Discharge of "waste" water from the aquaculture or wet labs may contain pathogens such as viruses, bacteria, or fungi from cultured organisms. In addition, biochemical compounds from fish excrements, uneaten fish food, and antibiotics, as well as degraded water quality [low dissolved oxygen (DO), altered pH, or altered water temperatures, *etc.*] in the waste water could impact receiving waters. Within the proposed project design alternatives, consideration should be given to the type of disinfection of the effluent being proposed. Assessments of the impacts of each proposed disinfection treatment method should be conducted. Furthermore, it will be necessary to determine whether adequate methodologies will have been proposed for "cleaning" the discharge in order to remove excessive nutrients, nitrogenous waste compounds, residual antibiotics, and generally improve the physical water quality characteristics (DO, pH, water

Public Comment K: Letter from Maria C. Rea, National Oceanic and Atmospheric Administration (December 14, 2015)

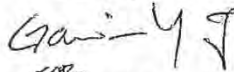
4

temperatures, *etc.*) so that any potential impacts to the receiving waters are minimal or non-existent in accordance with state and regional water quality objectives.

- 6.) An assessment of the impacts of the generation of potentially hazardous materials from laboratory research and their disposal should be conducted. Many standard laboratory assays and methodologies generate hazardous chemicals and compounds, both aqueous and solid. Identifying how these potentially hazardous materials will be disposed of will be necessary, as will any plans to either recover or reclaim these materials for future use or dispose of them in the facility waste stream. For example, many commonly used organic solvents and compounds used in typical analytical assays and procedures can be recovered and reclaimed through distillation and purification processes rather than being disposed of in hazardous materials disposal sites. Likewise, heavy metals can be recovered and reclaimed from the waste stream rather than being disposed of as hazardous waste. An assessment of alternative waste disposal trains should be conducted.
- 7.) Project scoping should identify and address plans for managing the captive “refugia” populations, including the following topics: whether or not excess fish will be released back into the wild or culled, whether cultured fish will be used in experiments that will require release back into the wild for the implementation of the study, and how the potential for “escapee” fish from the facility will be prevented and managed. Finally, a genetics management plan should be prepared and implemented for any captive population in order to maintain genetic diversity and health.

NMFS thanks DWR for the opportunity to offer comments and suggestions regarding the scoping for the DRS. Please contact Jeffrey Stuart of my staff at (916) 930-3607, or via email at J.Stuart@noaa.gov, if you have any questions regarding this letter. You may also contact Douglas Hampton of my staff at (916) 930-3610, or via email at Douglas.Hampton@noaa.gov, should you have any questions regarding the future ESA consultation as it pertains to the proposed DRS.

Sincerely,



FOR
Maria C. Rea

Assistant Regional Administrator

Cc: Copy to File – ARN151422WCR2014SA00316

Public Comment K: Letter from Maria C. Rea, National Oceanic and Atmospheric Administration (December 14, 2015)

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Public Comment K: Letter from Maria C. Rea, National Oceanic and Atmospheric Administration (December 14, 2015)

Response to Comment K-1

DWR and USFWS appreciates NMFS' comments on the Draft EIR/EIS for the DRS. Detailed responses to the commenter's concerns are provided in the following responses.

Response to Comment K-2

The comment correctly notes that office space at the ERS would accommodate 165 staff. Office space at the ERS would accommodate staff from not only USFWS, DWR and CDFW but also include space for NMFS and Reclamation. Two cubicle spaces would be allocated for NMFS staff. In response to this comment, the following sentence on page 3-7 of the Draft EIR/EIS has been revised:

With approximately 165 USFWS, DWR, ~~and CDFW~~, NMFS and Reclamation employees working on 20-30 active IEP projects, the office building would consist of work space and multiple meeting rooms to accommodate concurrent agency meetings, and other IEP and project meetings.

Response to Comment K-3

DWR and USFWS acknowledge that careful consideration and detailed technical analysis will be necessary to plan any future broodstock collection for propagation of Green Sturgeon. Any broodstock collection program developed for the FTC for federal Endangered Species Act (ESA) listed species would be consistent with ESA policies and would be implemented with proper approvals such as a section 10(a)(1)(A) permit. Any future propagation of Green Sturgeon would be done in accordance with a Hatchery Genetic Management Plan.

Response to Comment K-4

DWR and USFWS acknowledge that any impacts to aquatic resources that cannot be compensated for with removal of existing structures. As described in Mitigation Measure FISH-3c, compensation may include purchase of credits from an acceptable conservation bank or through preparation and implementation of a site-specific mitigation plan. The type and quantity of mitigation should be commensurate with the estimated amount of take of a special-status fish species, the total area of disturbance, and the resultant impacts, all of which will be determined through consultation with NMFS and/or USFWS and CDFW..

Response to Comment K-5

The Draft EIR/EIS prescribes Mitigation Measures FISH-3a (Construct and Maintain Fish Exclosure for Instream and Shoreline Work Areas) and FISH-3b (Relocate Fish Outside of Fish Exclosure Work Area) to minimize impacts to fish during construction of shoreline improvements such as the FTC outfall structure. These measures are deemed impractical for marina construction. NMFS recommends investigation into feasibility of proposed fish exclusion, and consideration of alternate methods for minimizing impacts to fish. DWR and

Public Comment K: Letter from Maria C. Rea, National Oceanic and Atmospheric Administration (December 14, 2015)

USFWS acknowledge that maintaining fish exclusions can be challenging. Mitigation Measure FISH-3a states that fish exclosures would be used to isolate work areas to the extent feasible. It is anticipated that it will be feasible to implement this measure for constructing the FTC outfall, but would not be feasible for construction of the marina and shoreline protection. DWR and USFWS will consult with NMFS through the ESA section 7 process to determine alternate or additional methods for minimizing impacts to fish. DWR and USFWS will implement Mitigation Measures FISH-3c (Compensate for Impacts on Special-Status Fish Species and their Habitat) to compensate for impacts on special-status fish and their habitat that cannot otherwise be avoided or minimized. As described in Mitigation Measure FISH-3c, compensation may include purchase of credits from an acceptable conservation bank or through preparation and implementation of a site-specific mitigation plan. The type and quantity of mitigation should be commensurate with the estimated amount of take of a special-status fish species, the total area of disturbance, and the resultant impacts, all of which will be determined through consultation with NMFS and/or USFWS and CDFW. As such, significant impacts would be mitigated to a level of less-than-significant.

Response to Comment K-6

NMFS correctly notes that the San Joaquin, Klamath, and Trinity rivers are not part of documented spawning range for Green Sturgeon. In response to this comment, the text under the column entitled "Distribution" in Draft EIR/EIS Table 8-1 (page 8-5) has been revised for Green Sturgeon.

Pacific Ocean, Bay-Delta, SR, & SJR

In addition, the text under the column entitled "Habitat Characteristics" in Draft EIR/EIS Table 8-2 (page 8-12) has been revised for Green Sturgeon.

These are the most marine species of sturgeon. Abundance increases northward of Point Conception. Spawns in the Sacramento, ~~Klamath, and Trinity~~ Rivers. Spawns at temps between 8-14 degrees C. Preferred spawning substrate is large cobble, but can range from clean sand to bedrock. Occasionally reported in the San Joaquin River upstream from Stockton (Jackson, Z. J., and J. P. Van Eenennaam 2013)

Response to Comment K-7

The experimental population of spring-run Chinook Salmon is addressed in the line below the Central Valley ESU. The experimental population is noted as "possible" to occur at the Ryde Avenue site.

Response to Comment K-8

The Project Partners appreciate NMFS' recommendation for providing a reference to guidelines for removal of creosote piles. These measures will be incorporated, as appropriate, to minimize adverse impacts of pile removal.

Public Comment K: Letter from Maria C. Rea, National Oceanic and Atmospheric Administration (December 14, 2015)

1 Response to Comment K-9

2 NMFS correctly points out that the Draft EIR/EIS did not address the impacts of additional
3 overwater structures at the proposed marina. Upon reviewing this impact, the Project
4 Partners find that the effects of the overwater canopy structures would be similar to those
5 described for the effects of docks (See *Impact FISH-5: Effects of Marina Facilities on Aquatic*
6 *Habitat Functions* which starts on page 8-31 of the Draft EIR/EIS). The Project Partners will
7 implement Mitigation Measure FISH-5 (Provide Compensatory Mitigation to Offset Adverse
8 Effects on Aquatic Habitat Functions) to offset potential adverse effects of new structures
9 such as docks and overwater shade structures. This mitigation may be include removal of
10 existing abandoned docks or wharves in the Delta region and will be determined through
11 coordination with appropriate agencies including NMFS.

12 In addition, NMFS points out that the Draft EIR/EIS did not address the impacts of "soak" time
13 associated with new vessels being docked at this location. The impacts of soak time may
14 include deterioration or leaks from vessels that are berthed but not properly maintained. The
15 vessels berthed in the new marina will include the Delta research fleet of IEP partners and
16 will not include inactive boats. These boats are maintained on a regular basis and the ERS will
17 include facilities for boat maintenance. The soak time of these vessels is not anticipated to
18 result in adverse effects on aquatic resources and would not result in any new impacts that
19 were not considered in the Draft EIR/EIS.

Public Comment K: Letter from Maria C. Rea, National Oceanic and Atmospheric Administration (December 14, 2015)

1

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Public Comment L: Email from Jean Public (November 2, 2015)

From: Jean Public
Sent: Monday, November 02, 2015 12:10 PM
To: Allison Chan
Cc: VICEPRESIDENT@WHITEHOUSE.GOV; AMERICANVOICES@MAIL.HOUSE.GOV
Subject: Re: Notice of Availability of a Draft Environmental Impact Report / Environmental Impact Statement Regarding the Proposed Delta Research Station - Estuarine Research Station and Fish Technology Center

L1

I DONT THINK THIS BUILDING SHOULD BE IN THAT PLACE. I DONT THINK YOUI NEED A NEW BUILDING AT ALL. WE WAN T TO DOWNSIZE GOVT, NOT KEEPT BUILDING MORE GOVT BUILDINGS. I THINK IF YOU NEED SPACE, RENT SOME VACANT BUILDING. THERE ARE PLENTY OF THEM AROUND, OR HAVENT YOU NOTICED. THE REST OF US HAVE. WE CANT FIND JOBS.

On Fri, 10/30/15, Allison Chan <allison@horizonh2o.com> wrote:

Subject: Notice of Availability of a Draft Environmental Impact Report / Environmental Impact Statement Regarding the Proposed Delta Research Station - Estuarine Research Station and Fish Technology Center

To: jeanpublic1@yahoo.com

Date: Friday, October 30, 2015, 4:16 PM

To Interested Parties:

NOTICE IS HEREBY

GIVEN that the

California Department of Water Resources (DWR), as lead agency under the California Environmental Quality Act (CEQA); and the U.S. Fish and Wildlife Services, lead agency under the National Environmental Policy Act (NEPA), are making available a draft environmental impact report / environmental impact statement (Draft EIR/EIS) for public review. DWR and USFWS have prepared this Draft EIR/EIS to provide the public, responsible agencies, and trustee agencies with information about the potential environmental effects of the proposed Delta Research Station (DRS) (Proposed Project).

This Draft EIR/EIS was prepared in compliance with CEQA of 1970 (as amended), the State CEQA Guidelines (California Code of Regulations [CCR] title 14, section (§) 15000 et seq.), and the NEPA (U.S. Code [USC] 432). DWR hereby invites comments on the adequacy and completeness of the environmental analyses in the Draft EIR/EIS.Project

Location: The

DRS would be located in a centralized area of the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta), California. Two alternative locations are evaluated in the Draft EIR/EIS: (1) the Rio Vista Army Reserve Center (RVARC) site in the City of Rio Vista, and

(2) a site located at 845 Ryde Avenue in the City of Stockton (Ryde Avenue site).PROJECT DESCRIPTION AND ENVIRONMENTAL REVIEW: The Proposed Project, as analyzed in this Draft EIR/EIS, consists of evaluation of the proposed construction and operation of two facilities, a proposed Estuarine Research Station (ERS) and Fish Technology Center (FTC). Collectively, these facilities are intended to serve as an aquatic research and monitoring facility that is located in centralized area of the Bay-Delta. The Proposed Project reflects the outcome of a multiyear collaboration between DWR, USFWS, California Department of Fish and Wildlife, and other agencies involved in the Interagency Ecological Program (IEP).The proposed DRS would consolidate ongoing IEP research and monitoring activities throughout the Bay-Delta and provide facilities for study in support of population restoration of endangered Delta fishes. Currently, the IEP has approximately 145 state and federal employees who conduct research throughout the Bay-Delta. The IEP collaboratively monitors, researches, models and synthesizes critical information for adaptive management water project operations, planning and regulatory purposes relative to the aquatic ecosystem in the Bay-Delta. USFWS and DWR plan to construct the DRS in a centrally located area within the Bay-Delta and the facilities are

Public Comment L: Email from Jean Public (November 2, 2015)

expected to enhance interagency coordination and collaboration. The purpose of the DRS is to enhance interagency coordination and collaboration by developing a shared research facility.

Currently, federal and state agency staff working on similar Bay-Delta issues are distributed among different locations that are often remote from the Bay-Delta. Construction and operation of the DRS would reduce travel times and costs and improve research and monitoring activity efficiency. The ERS would consolidate existing IEP programs currently located throughout the Delta, and the FTC would house a new program to develop and apply captive fish propagation technologies in support of population restoration. The Draft EIR/EIS evaluates the potential environmental impacts of three action alternatives as well as the No Project

Alternative: the No Project Alternative (DWR and USFWS would not construct the ERS or FTC); Alternative 2 (the ERS and FTC facilities would be consolidated in the predominantly undeveloped portions of the RVARC site); Alternative 3 (the ERS facilities would involve rehabilitation and reuse of existing facilities); and Alternative 4 (the ERS and FTC facilities would be located at 845 Ryde Avenue site in Stockton). In accordance with CEQA Guidelines §15087, given the size of the Proposed Project area, it is possible that hazardous waste sites or listed toxic sites listed by the Department of Toxic Substances Control (Cal-EPA) may be present in the area. The analysis in the Draft EIR/EIS concluded that the location for the DRS facilities do not overlap with listed sites and did not identify any potentially significant impacts that would require mitigation to reduce effects to a less-than-significant level, or that would be significant and unavoidable.

DOCUMENT

AVAILABILITY:

The Draft EIR/EIS and supporting documents are available for download from the following website: www.deltaresearchstation.com. Printed copies of the Draft EIR/EIS and supporting documents are available to review during regular business hours at DWR's office in Sacramento (listed below). Copies are also available to review at the Rio Vista Library and Stockton-San Joaquin County Library (listed below). CDs are available on request by phoning (510) 986-1850 or emailing comments@deltaresearchstation.com. They will also be available at the public meetings in Rio Vista and Stockton. Printed copies are also available at cost plus postage, upon request using the above contact information.

PUBLIC REVIEW

PERIOD: The

Draft EIR/EIS is available for a 45-day public review and comment period, which begins on October 30, 2015 and ends at

5 p.m. on December 14, 2015. Please send comments on the DEIR at the earliest possible date, but postmarked no later than 5 p.m. on December 14, 2015 in order for your comments to be considered. Comments may be mailed to the following address:

California Department of Water Resources ATTN: John Engstrom, DRS Draft EIR/EIS
Comments 1415 Ninth Street, Room 315-3 P.O. Box
942836 Sacramento,

CA 942836-0001 Written comments may also be submitted by email to: comments@deltaresearchstation.com. Emailed comments are preferred, and should include your name, address, and daytime telephone number so a representative of DWR can contact you if clarifications regarding your comments are required. All comments received, including names and addresses, will become part of the official public record. A Final Environmental Impact Report / Environmental Impact Statement will be prepared which will include responses to comments received during the public review period. PUBLIC MEETINGS: All interested persons are encouraged to attend the public meetings to present written and/or verbal comments on the Draft EIR/EIS. Two public meetings will be held at the following locations and times: § D.H.

White Elementary School, 500 Elm Way, Rio Vista, CA 94571 on December 1, 2015 at 6:00 p.m. § Arnold Rue Community Center, 5758 Lorraine Avenue, Stockton, CA

95210 on December 3, 2015 at 5:30 p.m. Sincerely, John Engstrom Supervising Architect
Locations where DEIR copies can be reviewed: California Department of Water Resources, 1415 Ninth Street, Room 315-3, Sacramento, CA 95814- Rio Vista Library, 44 South Second Street, Rio Vista, CA 94571- Stockton-San Joaquin County Library, 605 N. El Dorado Street, Stockton, CA 95202

Public Comment L: Email from Jean Public (November 2, 2015)**1 Response to Comment L-1**

2 The commenter's opinion that the Proposed Project should not be constructed and their
3 suggestion that vacant buildings be used, is noted. As described in Chapter 1, *Introduction*,
4 Section 1.4.1, the lead agencies established screening criteria when evaluating a broad range
5 of alternatives. Such criteria included adequate groundwater quality, waterfront access to a
6 major Delta waterway, and proximity to amenities such as housing and a major state highway.
7 See Appendix K of the Draft EIR/EIS for additional details regarding the screening process.

Public Comment L: Email from Jean Public (November 2, 2015)

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The seal of the State of California is a circular emblem. It features a central figure, Minerva, seated on a rock and holding a grizzly bear. The background shows a landscape with mountains, a bay, and a ship. The text "THE GREAT SEAL OF THE STATE OF CALIFORNIA" is inscribed around the perimeter, with "EUREKA" at the top and "CALIFORNIA" at the bottom.

STATE OF CALIFORNIA
GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH
STATE CLEARINGHOUSE AND PLANNING UNIT



Sincerely,

February 2017

Public Comment M: Letter from Scott Morgan, Office of Planning and Research, California State Clearinghouse and Planning Unit (December 15, 2015)

Document Details Report State Clearinghouse Data Base				
SCH#	2014122017			
Project Title	Delta Research Station			
Lead Agency	Water Resources, Department of			
Type	EIR Draft EIR			
Description	<p>The Delta Research Station (DRS) will be a science and research center in the Bay-Delta, which would consolidate a number of existing and new activities into two proposed facilities, the Estuarine Research Station and the Fish Technology Center, bringing together State and Federal agency staff working on similar Bay-Delta issues. The purpose of the DRS is to enhance interagency coordination and collaboration by developing a shared research facility. The DRS would advance the interests of researchers, local communities, and others that are dependent on the Bay-Delta. The DRS is needed because current State and Federal agency staff working on similar Bay-Delta issues are spread out in different locations, located in areas remote from the Bay-Delta, or have limited resources, inhibiting efficient research and monitoring efforts and collaboration.</p>			
Lead Agency Contact				
Name	John Engstrom			
Agency	California Department of Water Resources			
Phone	916 651 8745	Fax		
email				
Address	1416 Ninth Street, Rm 315-3			
City	Sacramento	State	CA	Zip 94236
Project Location				
County	Solano, San Joaquin			
City	Rio Vista, Stockton			
Region				
Lat / Long				
Cross Streets	Rio Vista: Beach Dr and South 2nd St; Stockton: West Fremont St and Ryde Ave			
Parcel No.	Various			
Township	Range	Section	Base	
Proximity to:				
Highways	Various			
Airports	Various			
Railways	Various			
Waterways	Rio Vista: Sacramento River; Stockton: San Joaquin River			
Schools	Various			
Land Use	Various			
Project Issues	<p>Air Quality; Archaeologic-Historic; Biological Resources; Drainage/Absorption; Economics/Jobs; Flood Plain/Flooding; Geologic/Seismic; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Growth Inducing; Landuse; Cumulative Effects; Aesthetic/Visual</p>			
Reviewing Agencies	<p>Resources Agency; Department of Conservation; Department of Fish and Wildlife, Region 2; Department of Fish and Wildlife, Region 3; Delta Protection Commission; Office of Historic Preservation; Department of Parks and Recreation; Central Valley Flood Protection Board; California Highway Patrol; Caltrans, District 4; Caltrans, District 10; Air Resources Board; Regional Water Quality Control Bd., Region 5 (Sacramento); Native American Heritage Commission; Delta Stewardship Council</p>			
Date Received	10/30/2015	Start of Review	10/30/2015	End of Review 12/14/2015

Public Comment M: Letter from Scott Morgan, Office of Planning and Research, California State Clearinghouse and Planning Unit (December 15, 2015)

1 Response to Comment M-1

2 The comment, by which the State Clearinghouse provided notification to reviewing agencies
3 through December 14, 2015, is acknowledged.

Public Comment M: Letter from Scott Morgan, Office of Planning and Research, California State Clearinghouse and Planning Unit (December 15, 2015)

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Public Comment N: Letter from Jan Vick, Rio Vista Army Base Steering Committee (December 14, 2015)



CITY OF RIO VISTA
One Main Street, Rio Vista, California 94571
Phone: 707-374-6451 Fax: 707-374-5063

December 14, 2015

California Department of Water Resources
Attn: John Engstrom, DRS Draft EIR/EIS Comments
1415 Ninth Street, Room 315-3
P.O. Box 942836
Sacramento, CA 942836-0001

Re: Delta Research Station Draft EIR/EIS Comments

Dear Mr. Engstrom:

We appreciate all the efforts that the DRS EIR/EIS staff and consultants have put into this very thoroughly prepared document. We look forward to the certification of the Final EIR/EIS next year and implementation to follow shortly after. On behalf of the Rio Vista Army Base Steering Committee (RVABSC), we submit the following comments:

Chapter 3 – Description of Alternatives

- N1 | Page 3-16; 3.2.3 Alternative 2 and 3.3.4 Alternative 3: The address of the former Rio Vista Army Reserve Center (RVARC), 800 Beach Drive, Rio Vista, should be included in both the descriptions for Alternative 2 and Alternative 3.
- N2 | Page 3-16; 3.2.3 Alternative 3: The RVABSC concurs with selection of "Alternative 2: Rio Vista Army Reserve Center Configuration 1" as the "Preferred Alternative," largely because it minimizes the proposed footprint on the site and maximizes public access along the waterfront.
- N3 | Page 3-25; 3.2.6 Project Construction: We suggest that a copy of the "Contributing Resource Descriptions" map (pg. 5-2 of "Appendix I, Historical Evaluation for the Delta Research Station" be included by reference in this section of the Final EIR/EIS for easy reference to the existing buildings cited as part of Section 3.2.6.
- N4 | Page 3-30; Construction Vehicle Trips and Access: Using Front and Second streets is not acceptable. The project sponsor needs to list the preferred alternative route of going via Montezuma Hills Road. (e.g., Azevedo Road to Emigh – Montezuma Hills Road).
- N5 | Page 3-32; Aquaculture: Regarding the estimated wastewater effluent at the FTC, it is not clear how much and where the effluent would go, either into the Sacramento River or Beach Wastewater Treatment plant? Please further explain.

Public Comment N: Letter from Jan Vick, Rio Vista Army Base Steering Committee (December 14, 2015)

Delta Research Station Draft EIR/EIS
Rio Vista Army Steering Committee Comments
December 9, 2015

Chapter 5 – Aesthetics

N6 | Pages 5-21 - 5-24; Impact AES-2 Long Term Adverse Effects...: The RVABSC and staff appreciate the very thorough discussion and referencing of the various provisions of the Army Base Design Guidelines into this section of the Draft EIR/EIS and mitigation measures. We believe those guidelines will serve very well to fully mitigate many of the aesthetic issues discussed in this Chapter.

N7 | Page 5-26 - 5-28; Impact AES-3 Permanent Source of Substantial Light or Glare: We fully support the use of measures such as use of photocells, astronomical time switches, motion detectors, shielding and/or directional lighting, non-reflective building materials (wherever possible) and appropriately placed landscaping to reduce nighttime light, glare and/or sky glow impacts to a level that would achieve a threshold of “less than significant with mitigation.”

Chapter 6 – Air Quality and Greenhouse Gas Emissions

N8 | Pages 6-36 to 6-37; Rio Vista General Plan: We request that the “Rio Vista Climate Action Plan,” approved by the Rio Vista City Council on November 18, 2014 by Resolution 2014-091, be incorporated by reference into this area of the report.

Chapter 9 – Cultural Resources

N9 | Pages 9-16 to 9-23; Cultural Resources: Although the RVABSC concurs that a portion of the Army Base Reserve Center may appear to be eligible as a potential historic district under the “California Register of Historic Places,” the committee would prefer that a district not be formally designated as such because of the substantial deterioration of the remaining buildings, the lack of integrity, and the site constraints created by the grading, proposed land uses, setbacks, parking, access, utilities and other compatibility issues that could prove to be difficult to achieve with the new and immediately adjacent Estuarine Research Station, Fish Technology Center and other cumulative uses in the remaining site area(s).

N10 | However, the RVASC fully supports the various mitigation measures (identified primarily in pages 9-30 to 9-33) to fully document the past activities that occurred on the site, primarily through a City - proposed interpretive center/museum and interpretive pathway proposed to be located in the remaining area, the preservation of the existing water tower, reuse of one or more existing building(s) (if feasible) and the reuse of existing materials (where possible). The RVABSC believes that the overall result would be to mitigate impacts to a “less than significant with mitigation level.”

Chapters 12– Hydrology and Water Quality, Chapter 13 - Land Use and Planning

N11 | Pages 12-10; Water and Sediment Quality and 13-1 Site Description: These sections should briefly describe the location, purpose and proximity of the Sacramento Deep Water Ship Channel (DWSC) to the Army Base Reserve Center Site.

Chapter 15 – Transportation and Traffic

N12 | Page 15-7; 15.2.1 Existing Network, paragraph 10, rail service: Please include a description of the Amtrak California San Jose to Sacramento passenger service with an existing station/stop at Suisun City,

Public Comment N: Letter from Jan Vick, Rio Vista Army Base Steering Committee (December 14, 2015)

Delta Research Station Draft EIR/EIS
Rio Vista Army Steering Committee Comments
December 9, 2015

- N12** ↑
cont. | Main Street, and a planned station/stop at the new Fairfield/Vacaville Station, currently under construction at Peabody/Vanden/Manual Campos Roads. Also this is a major Union Pacific freight line.
- N13** | Page 15-8; Existing Roadway Network: Local Access and Study Area: Did the traffic study consider the counts on Highway 12 between Hillside Terrace to River Road or were those counts not considered?
- | Page 15-10; Bicycle and Pedestrian Network: Please add the following paragraph:
"Safe Routes to School Program"
- N14** | Based on the "Safe Routes to School Program," initially prepared by the Solano Transportation Authority in 2008 and updated in October 2013 with participation by the City of Rio Vista, various needs, proposals and improvements have been identified adjacent to schools and may be recommended as conditions at the time of project entitlements of the project to improve the safety of school children walking and riding their bikes to school. If the DRS project is ultimately built on the Army Base Reserve Center site, the City of Rio Vista and the River Delta Unified School District should identify and specify any necessary improvements, projects or programs that might be needed to maintain travel and pedestrian safety near and adjacent to Riverview Middle School. These might include such things as high visibility crosswalks, additional or improved sidewalks, cautionary lighting and signage near pedestrian crossings, establishment of a paid crossing guard program and safety improvements to Second Street, Montezuma Hills Road and Beach Drive. "
- N15** | Page 15-24; 15.3.2: The study should also reference the SR 12 Realignment/Rio Vista Bridge Preliminary Study (2010), the SR 12 Corridor Study (I-80 to I-5) (2012) and the SR 12 Economic Impact Study (2012), all conducted by the Solano Transportation Authority in consultation with the City of Rio Vista, Caltrans District 4 and other local, regional and state agencies.
- N16** | Pages 15-39 Alternatives 2 and 3 and 15-66 Mitigation Measures TRA12a... and TRA 12b...: Please confirm the incremental traffic counts, locations, direction and time where the major new traffic from the Army Base DRS site is added into the Rio Vista road system. It appears that the main new, pm peak hour incremental impacts would most impact the SR 12/North Front Street/River Road intersection (43 incremental pm trips) and the second main impact would be at the 12/Main Street intersection (how many incremental pm traffic trips would be added there?). Both intersections would experience 5 seconds or more of additional pm peak hour delay as a result of the DRS – Is that correct?
- | As a result of that increased delay, we concur that the sponsor should pay their fair share to provide a northbound left turn lane at SR 12/Main Street. But because of the current configuration of SR 12/North Front Street/River Road (with the state highway carrying through traffic and Front Street and River Road basically serving as on ramps to SR 12), we are not sure how a traffic signal would be designed at that location to reduce delay and/or improve safety on local streets. Please further explain and/or provide a schematic on how such an improvement could reduce the delay and/or improve LOS at that location.
- N17** | Page 15-49; Impact TRA-9 Impacts on...Construction - Related Traffic: Mitigation should include designating the alternate route of Montezuma Hills Road (instead of through central Rio Vista).

Public Comment N: Letter from Jan Vick, Rio Vista Army Base Steering Committee (December 14, 2015)

Delta Research Station Draft EIR/EIS
Rio Vista Army Steering Committee Comments
December 9, 2015

N18

Chapter 15 Transportation and Traffic: The various Intersection tables are difficult to figure out where and how much the increased traffic is added. Could you please provide a simpler map and/or table indicating the amount and direction of additional pm peak hour traffic (the main peak hour period for traffic impacts) that is added to the Rio Vista system, particularly at the SR 12/North Front Street/River Road and SR 12/Main Street intersections?

N19

Chapter 16 – Public Services

Page 16-1 16.1.1 Fire Protection: There seems to be a typo regarding fire protection service when seeking mutual aid from the Montezuma Fire District. This section states that their response time is generally 4-5 minutes longer than the Rio Vista Fire Department, which is an average of 5 minutes 43 seconds to anywhere in the City limit. When responding to a mutual aid incident at the Army Base site, it seems like it should be the same exact response time since they are next door to each other on Main Street and have the exact same distance to travel. Later on page 16-20 in the Draft EIR/EIS it states that the response time for the Montezuma Fire District is a total of 4-5 minutes. Again, because the two fire agencies are immediately next door to each other and if they receive a call for service at the same time, shouldn't they both be able to respond within the same timeframe (i.e. in about 5 minutes).

N20

Page 16-3 Wastewater: Paragraph 2, page 16-4, states "...Del Rio Hills and Riverwalk development projects are currently on hold with no immediate plans for moving forward." Please note that, based on two recent presentations made to the Rio Vista Planning Commission by representatives of the developer of Riverwalk, the project sponsors will potentially finalize their subdivision map and commence construction in 2016. Other residential projects that have been entitled by the City and could move forward in the future include Liberty Island (Gibbs Ranch) and Brann Ranch. However, the previously proposed Del Rio Hills development has not been entitled by the City and therefore has no current official status.

Chapter 17 – Recreation

N21

Page 17-4 Facilities, line 3-5: We suggest that this statement be amended as follows" ...Second, Trilogy, an active resort community, has a golf course ~~as well as a community center and other facilities; however, these and Sir Flair's Restaurant that are open to the general public, but the rest of the community facilities...~~ are open only to Trilogy residents."

Chapter 18 – Socioeconomic

N22

Page 18.3; Housing Vacancy Rates: Rio Vista's housing vacancy is listed at 11.2% (compared to 7% for Solano County). 11.2% (or if calculated out would be approximately 480 vacant units) seems very high to us given the fact that the Trilogy development continues to build approximately 100 new homes a year because of high on-going demand. In addition, a recent discussion with a local real estate agent indicated that there are only a total of about 19 housing units currently for sale in Rio Vista, and rental units are hard to come by.

How is this vacancy rate computed; what elements are taken into consideration; and was it based on a current survey of Rio Vista housing units? We would appreciate you looking further into the accuracy of this rate.

Public Comment N: Letter from Jan Vick, Rio Vista Army Base Steering Committee (December 14, 2015)

Delta Research Station Draft EIR/EIS
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N23

Page 18.7; Economic and Characteristics...: The Employment table 18.6 lists the unemployment in Rio Vista at 14.5%. Is this data based on a recent survey? According to the 2015 Rio Vista Housing Element, "the average annual unemployment rate in the city was 9.0 percent in January of 2010 and a 12.0 % unemployment rate for Solano County for the same period..." It further states..."Historically, the city has had a lower rate of unemployment than surrounding cities and the county overall, which may be due to a higher population of retired seniors in the City who are out of the workforce."

We have also seen other sources (i.e. www.bestplaces.net, www.homefacts.com) and local media reports that consistently cite the current unemployment rate in Rio Vista between 5.3% to 7% (which is what we believe it to actually be). Please look into this matter further and cite the most reliable unemployment percentage available.

N24

Page 18-15, Alternative 2...paragraphs 3 and 4: The estimated total construction cost of the ERS and FTC is expected to be approximately \$52 million over 2.5 years. What is the current target year for the project to commence construction? What is expected to be the proportion of state (i.e. DWR) vs. federal (USFWS) funding to build out each phase of the project? When will the state and federal agencies be able to prepare a funding agreement to demonstrate the full commitment of each of the parties to adequately fund the entire project? In case the federal funds are delayed, would DWR consider a state-only funded first phase of the ERS if needed to keep the project moving forward per the timeline?

N25

Page 19.3; Housing, paragraph 1: This section states that "San Joaquin County had 236,943 housing units and 818,987 vacant housing units. This must be a typo and the amount of vacant housing units should actually be more like 18,987. Please correct this number.

N26

Pages 22-3 to 22-6: "Table 22-1 Regulatory Permits, Approvals, and Consultations to the Proposed Project." On March 31, 2015, Rio Vista staff forwarded along the attached requested amendments to this table requesting these additional approvals and permits be included. Please update this table as requested.

N27

Appendixes

Appendix I: We thought the appendix on Historical Architectural Evaluation was very well done. It provided an excellent chronology and the analysis was helpful for the RVABSC.

If you have any questions please contact either myself at (707) 374-5025 or Dan Christians, Adjunct Staff Member, at (707) 580-0905.

Sincerely,

Jan Vick

Jan Vick
RVABSC Chair

Public Comment N: Letter from Jan Vick, Rio Vista Army Base Steering Committee (December 14, 2015)

Delta Research Station Draft EIR/EIS
Rio Vista Army Steering Committee Comments
December 9, 2015

Cc: Mayor and City Council Members
ABSC Members
Tim Chapa, City Manager
David Melilli, Director of Community Development and Public Works
Isaac George, Planning Manager
Dan Christians, Adjunct Staff Member

Attachment: City of Rio Vista Proposed Addendum – March 31, 2015, Delta Research Station – List of Potential Permits and Regulatory Approvals

Public Comment N: Letter from Jan Vick, Rio Vista Army Base Steering Committee (December 14, 2015)

City of Rio Vista Proposed Addendum – March 31, 2015 Draft
Delta Research Station – List of Potential Permits and Regulatory Approvals

Regulatory Agency	Law/Regulation	Purpose	Relevant Activities	Permit/Authorization Type
City of Rio Vista	Per Chapter 17.27 of the Rio Vista Municipal Code (A-B Army Base District).	Entitlements, design review and conditions of approval for each phase of development	DRS Construction	Rio Vista Planning Commission and/or City Council approval of Use Permit for each phase of development, or PUD Permit or a Specific Plan for entire 28 - acre development
City of Rio Vista	The entire 28-acre Army Base site is owned by City of Rio Vista; It is expected the City would lease portions of the site to GSA and USFWS per the terms and restrictions contained in 2003 Quitclaim Deed.	Ground lease and terms for each phase of development	DRS Construction	Rio Vista City Council approval of a ground lease
City of Rio Vista (in addition to securing a well drilling permit from Solano County)	Per Title 13 of Rio Vista Municipal Code.	City authorization to drill separate water supply well.	Fish Technology Center	Rio Vista City Council approval of a Well Drilling Permit
Solano County/City of Rio Vista	Use of Beach Drive for revised or new access to development of Army Base site.	As part of conditions of entitlements and ground lease(s), City would negotiate transfer of Beach Drive R-O-W/ access easement with Solano Co.	DRS Construction	Acceptance of easement to City of Rio Vista jurisdiction for improvement and access to DRS and other future cumulative uses

N26 cont.

Public Comment N: Letter from Jan Vick, Rio Vista Army Base Steering Committee (December 14, 2015)

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Public Comment N: Letter from Jan Vick, Rio Vista Army Base Steering Committee (December 14, 2015)

Response to Comment N-1

The comment's request to include the address of the former RVARC is noted. In response to this comment, the following sentence on page 3-16 has been revised:

Figure 3-1 shows the conceptual site layout for Alternative 2 at the former Rio Vista Army Reserve Center (RVARC), which is located on the southern edge of Rio Vista at 800 Beach Drive.

The following sentence on page 3-21 of the Draft EIR/EIS has been revised:

Similar to Alternative 2, Alternative 3 would utilize the existing RVARC site (at 800 Beach Drive) and would include the common project components described in Section 3.2.2.

Response to Comment N-2

The commenter's expression of support for Alternative 2 as the "Preferred Alternative" is acknowledged.

Response to Comment N-3

The comment's request to incorporate by reference the "Contributing Resource Descriptions" map from Appendix I (Figure 9) of the Draft EIR/EIS is acknowledged.

In response to this comment, a cross-reference to this graphic has been added. The following sentence on page 3-25 has been added to the second paragraph:

Table 3-4 provides a complete list of facilities that would be removed. Figure 9 of Appendix I (Historical Architectural Evaluation for the Delta Research Station) shows where these facilities are located at the RVARC site.

Response to Comment N-4

The comment's request to not use Front Street and Second Street for construction vehicle access is noted. Access via Azevedo Road, Emigh Road, and Montezuma Hills Road may be feasible, and the preferred access route would ultimately be determined by the construction contractor. As described in more detail in Response to Comment N-17, below, for vehicle trips heading eastbound on SR 12, this route would extend the vehicle trip lengths by up to 11.7 miles. In response to this comment, the following sentence on page 3-30 has been revised:

~~The anticipated primary~~ Primary access routes used for ingress/egress to the Rio Vista site ~~would~~ could be on SR 12, Front Street, Second Street, and Beach Drive. Alternatively, access to the Rio Vista site could be on SR 12, Amerada Road, Emigh Road, Montezuma Hills Road, and Beach Drive.

Public Comment N: Letter from Jan Vick, Rio Vista Army Base Steering Committee (December 14, 2015)

Response to Comment N-5

Process water generated by aquaculture facilities at the FTC would be treated at either the RVARC site or the Ryde Avenue site (depending on which alternative gets selected), and the effluent would then get released to the Sacramento River (under Alternatives 2 and 3) or the Stockton Deepwater Ship Channel (under Alternative 4). In response to this comment, the following sentence has been added to the end of the third paragraph on page 3-32 of the Draft EIR/EIS:

At this time, it is not anticipated that a processing system would be needed to remove aquaculture chemicals like formalin. After the process water is treated, the effluent would be discharged to either the Sacramento River (under Alternatives 2 and 3) or the Stockton Deepwater Ship Channel (under Alternative 4).

Response to Comment N-6

The comment's expression of appreciation of the discussion and reference to various provisions of the Army Base Design Guidelines into the Draft EIR/EIS is acknowledged.

Response to Comment N-7

The comment's expression of support regarding the measures outlined in Mitigation Measures AES-3a (Implement Army Base District Design Standards and Guidelines Related to Site Lighting) and AES-3b (Implement Nighttime Lighting and Daytime Glare Reduction Measures) is acknowledged.

Response to Comment N-8

The commenter's request for including discussion of the Rio Vista Climate Action Plan is acknowledged. In response to this comment, the following text has been added to page 6-37 of the Draft EIR/EIS:

Rio Vista Climate Action Plan

The City of Rio Vista approved a CAP in November 18, 2014. The plan outlines the GHG emissions from the City of Rio Vista and makes recommendations of measures to implement to reduce GHG emissions consistent with the goals of AB 32. The measures applicable to Alternatives 2 and 3 include the following:

- **New Construction Energy Efficiency**, which encourages energy-efficient new construction by promoting energy-efficient mortgages and technical assistance programs for developers.
- **Energy Star Appliances**, which promotes voluntary installation of Energy Star and other high-efficiency appliances.

Public Comment N: Letter from Jan Vick, Rio Vista Army Base Steering Committee (December 14, 2015)

- Building Shade Trees, which promotes adopting a shade tree ordinance for new construction, and development of a shade tree outreach campaign to encourage existing property owners to voluntarily plant shade trees.
- Solar water heaters, which promote voluntary installation of solar water heaters in new construction and building retrofits through outreach campaigning.
- Solar Photovoltaic Systems, which facilitates the voluntary installation of solar PV systems on residential and nonresidential buildings.
- Building Lighting, which encourages voluntary adoption of efficient indoor and outdoor lighting technologies in residential and nonresidential buildings.

Response to Comment N-9

The commenter's concerns about future possible development plans for the RVARC, should it be determined eligible for the California Register of Historical Resources (CRHR) by the State Historic Preservation Officer (SHPO), are appreciated. The RVARC was evaluated by an architectural historian who meets the U.S. Secretary of the Interior's professional standards for historic architecture, and it was recommended as a historic district eligible for the CRHR. It is the responsibility of the SHPO to make the final determination of eligibility for the RVARC. On November 7, 2016, the SHPO sent USFWS a letter stating its concurrence with USFWS's determination that with the exception of pier S-104, construction and operation of the DRS will not adversely affect historic properties within the District. This letter and other correspondence between SHPO and the USFWS's Regional Historic Preservation Officer are presented in **Attachment C**. Consistent with modified Mitigation Measure CUL-2a(ii) (Prepare Historic Structure Reports/Historic American Building Records), presented in Chapter 3 of this document, the pier will be photographed and documented and interpretive signage will be installed.

Response to Comment N-10

The comment's expression of support for the cultural resources mitigation measures, including Mitigation Measures CUL-2a through CUL-2d, is noted. The comment also expresses the opinion that the overall impact determination would be "less than significant with mitigation."

Under Alternative 2, the preferred alternative, a pier (S-104) that is included in the RVARC would be demolished. Implementation of Mitigation Measure CUL-2a(i) (Protect Historic Structures) and Mitigation Measure CUL-2a(ii) (Prepare Historic Structure Report/Historic American Building Records/Historic American Engineering Records), which have been revised to reflect modifications to Alternative 2 (see Chapter 3 of this document), the impact was determined to be less than significant with mitigation. These mitigation measures simply protect the buildings of the potential Historic District with physical barriers to prevent construction machinery from inadvertently damaging the structures. Potential adverse

Public Comment N: Letter from Jan Vick, Rio Vista Army Base Steering Committee (December 14, 2015)

impacts to the RVARC would be significant only under Alternative 3, which would involve demolition of numerous buildings that contribute to the character of the potential historic district. As described on page 9-32 of the Draft EIR/EIS, implementation of Mitigation Measure CUL-2b (Prepare Historic Structure Reports) would require detailed recordation of buildings or structures scheduled to be razed. For Alternative 3, this measure in addition Mitigation Measures CUL-2a(i), CUL-2c (Follow the Secretary of the Interior's Standards for Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings), and CUL-2d (Prepare Interpretive Materials), was found to reduce impacts to the potential Historic District. However, because demolition irrevocably alters the contributing elements of the potential Historic District, impacts resulting from Alternative 3 to the potential Historic District would be significant and unavoidable under CEQA.

Response to Comment N-11

The comment requests that Chapter 12, *Hydrology and Water Quality*, and Chapter 13, *Land Use and Planning*, briefly describe the location, purpose and proximity of the Sacramento Deep Water Ship Channel (DWSC) to the RVARC site. The location of the Sacramento Deep Water Ship Channel and its proximity to the RVARC site are described on page 12-4 of the Draft EIR/EIS, under the heading "Hydrology". In addition, the purpose of the both the Sacramento and Stockton DWSCs is described on page 12-2 of the Draft EIR/EIS but it doesn't state that these are adjacent to the alternative sites.

The Sacramento DWSC coincides with the Sacramento River and is located just east of the RVARC site. The Stockton DWSC coincides with the San Joaquin River and is located immediately south of the Ryde Avenue site. The channels allow for goods to be transported inland from California's coastal ports and other domestic and international ports to the Ports of Sacramento and Stockton, respectively.

Chapter 13 describes land uses on the RVARC site and in the vicinity of the site. To clarify that the Sacramento DWSC is adjacent to the RVARC site, the following sentence on page 13-1 of the Draft EIR/EIS has been revised:

The 28.16-acre site is situated on the west bank of the Sacramento River (also Sacramento DWSC), which extends for approximately 1,600 feet as the southeastern site boundary.

Response to Comment N-12

The comment requests that Chapter 15, *Transportation and Traffic*, include a description of the Amtrak service (from San Jose to Sacramento). Railroad services are described on page 15-7 of the Draft EIR/EIS but does not describe specific stations in the region. In response to this comment, the following text has been added to page 15-7 of the Draft EIR/EIS:

In addition to the roadway network, there are rail and waterways of regional significance. Water routes used for shipping freight include the Bay-Delta,

Public Comment N: Letter from Jan Vick, Rio Vista Army Base Steering Committee (December 14, 2015)

Sacramento DWSC, and the Stockton DWSC. The Amtrak passenger rail passes through Stockton, providing access to Sacramento, San Francisco, and other locations throughout California and the U.S. Amtrak has an existing station in Suisun City (at Main Street) and plans to build a station in Fairfield/Vacaville (at Peabody/Vanden/Manual Campos Roads). Railroads used for shipping freight in this region include the Union Pacific Railroad and the Burlington Northern and Santa Fe Railway.

Response to Comment N-13

The traffic analysis described in Chapter 15, *Transportation and Traffic*, of the Draft EIR/EIS considered counts on SR 12 in Rio Vista where project-generated traffic could potentially impact State Route (SR) 12. Figure 15-8 of the Draft EIR/EIS shows the expected trip distribution for Alternatives 2 and 3 at the RVARC site. Traffic to and from SR 12 eastbound is expected to access the RVARC site via River Road. Traffic to and from SR 12 westbound is expected to access the RVARC via Main Street. The traffic analysis did not evaluate the segment of SR 12 between Main Street and River Road to/from the project site as this segment of SR 12 is not expected to be used under Alternatives 2 and 3.

Response to Comment N-14

The commenter's request to include text regarding the Solano Transportation Authority's (STA's) "Safe Routes to School Program" on page 15-10 of the Draft EIR/EIS is acknowledged. Note that the discussion in Section 15.2.2 (including page 15-10) is intended to describe the existing roadway network, transit system, bicycle and pedestrian system, and truck routes in the vicinity of the Rio Vista Army Reserve Site. This section is not intended to describe potential future traffic safety improvements in the vicinity. In the event that the DRS gets constructed at the RVARC site, the Proposed Project would not preclude any future improvements such as crosswalks, additional or improved sidewalk, and cautionary lighting/signage near pedestrian crossings. Because these potential future improvements do not address existing traffic or transportation conditions in the vicinity of the RVARC site, the suggested text additions have not been added to the Draft EIR/EIS.

Response to Comment N-15

DWR and USFWS appreciate the commenter's request to include discussion of the SR 12 Realignment/Rio Vista Bridge Preliminary Study (STA 2010), the SR 12 Corridor Study (I-80 to I-5) and the SR 12 Economic Impact Study (2012) in the DRS EIR/EIS. Because the SR 12 Economic Impact Study pertains to economic effects that may occur as a result of future improvements to SR 12 and does not inform the analysis of impacts to traffic/transportation, this study need not be described in Section 15.3.2 of the EIR/EIS. However, in response to this comment, discussion of the SR 12 Realignment/Rio Vista Bridge Preliminary Study and the SR 12 Corridor Study has been added to the document. The following sentence has been added on page 15-24 of the Draft EIR/EIS:

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15.3.2 Local Laws, Regulations, and Policies

The Solano Transportation Authority (STA) is the Congestion Management Agency of Solano County. It is responsible for countywide transportation planning; financing of priority projects; and programming of federal, state, and regional transportation funds. The following discussion summarizes STA's objectives and strategies relevant to Alternatives 2 and 3. In addition, STA studies and reports that pertain to SR 12 are summarized below.

In response to this comment, the following text has been added after the second bullet item on page 15-24 of the Draft EIR/EIS after the discussion:

- **SR 12 Realignment/Rio Vista Bridge Preliminary Study.** The SR 12 Realignment/Rio Vista Bridge Preliminary Study was initiated by STA at the request of the City of Rio Vista. This report documents the first step in identifying feasible corridor alternatives for an improved SR12 through Rio Vista and across the Sacramento River. In addition, the study reassesses alternatives that were previously considered as part of a 1994 Project Study Report with respect to potential impacts on existing and planned development. This 1994 study also evaluated environmental, river navigation, and engineering constraints, and investigated revised routes to minimize these impacts.
- **SR 12 Comprehensive Evaluation and Corridor Management Plan (2012).** The SR 12 Comprehensive Evaluation and Corridor Management Plan (Caltrans et al. 2012) report summarizes an evaluation conducted for SR 12 as it passes through the four counties of Napa, Solano, Sacramento and San Joaquin. The report outlines a short-term and long-term plan for the corridor and addresses questions such as whether SR 12 should be widened to four lanes, whether movable bridges at Rio Vista and Mokelumne be replaced, and the timing of when major improvements could be implemented. As SR 12 traverses multiple jurisdictions, the study was supported by various agencies including Caltrans (Districts 4, 3, and 10), MTC, STA, and SICO.

Response to Comment N-16

The incremental change in average delays at the Alternatives 2 and 3 study intersections constitutes the difference between the Average Delay of Existing plus Project conditions and the Average Delay of the Existing conditions, presented in Table 15-11. Based on traffic count data collected by Fehr & Peers, the AM peak hour at study intersections occurs between 7:15-8:15 AM and 7:45-8:45 AM. The PM peak hour at study intersections occurs between 4:00-5:00 PM and 4:30-5:30 PM. Individual intersection peak hour volumes were used for level of service analysis. Under Alternatives 2 and 3, 53 trips would be added to the SR 12/Main Street intersection in the PM peak hour.

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As shown in Table 15-11 of the Draft EIR/EIS, under the Existing plus Project Conditions for Alternatives 2 and 3, the maximum delay added to the SR 12/North Front Street/River Road intersection would be 5.6 seconds to the northbound right-turn lane during the PM peak hour. As described on page 15-39 of the Draft EIR/EIS, the addition of traffic generated by Alternatives 2 or 3 would cause the LOS to degrade from C to D at this intersection; however LOS D is still considered acceptable according to the thresholds of significance. With respect to the delays that would occur at the SR 12/Main Street intersection, as shown in Table 15-11, under Alternatives 2 and 3, the maximum delay added would be 1.6 seconds during the PM peak hour.

DWR and USFWS appreciate the commenter's question about how a traffic signal at the SR 12/North Front Street/River Road intersection (per Mitigation Measure TRA-12b) would be designed and improve traffic conditions at this particular intersection. It should be clarified that this is a cumulative mitigation measure proposed in the Draft EIR/EIS. As described on page 15-66 of the Draft EIR/EIS, a traffic signal at this intersection could improve movement for the northbound right-turn lane, which is the primary movement affected by either Alternatives 2 or 3. Detailed design of this traffic improvement has not been conducted, and would be the responsibility of the agencies implementing the traffic improvements (not USFWS or DWR). Design and construction of a traffic signal at this intersection would be led by agencies such as Caltrans, STA, and the City of Rio Vista, and would require careful consideration of the draw bridge operations. Because DWR and USFWS cannot ensure that their contributions to such an improvement would ultimately result in the improvement being planned or constructed, the Draft EIR/EIS concluded that Mitigation Measure TRA-12b cannot be guaranteed to reduce traffic conditions and the impact would remain significant and unavoidable.

Response to Comment N-17

The commenter's request to designate Montezuma Hills Road as the construction haul route via mitigation is acknowledged. Because construction-related traffic along the route analyzed in the Draft EIR/EIS was not found to create a significant impact, no mitigation is necessary.

That said, construction-related vehicles and haul-truck trips traveling westbound toward SR 12 west could conceivably use Montezuma Hills Road, Emigh Road, and Currie Road to the SR 12/Currie Road intersection instead of using a route through downtown Rio Vista. The Montezuma Hill Road route would add approximately one mile to the haul route between the RVARC site and the SR 12/Currie Road intersection (6.3 miles via downtown Rio Vista in comparison to 7.3 miles via Montezuma Hills Road).

Routing eastbound construction traffic toward SR 12 east along Montezuma Hills Road, Emigh Road, and Currie Road instead of through downtown Rio Vista would add approximately 11.7 miles to the route (1.2 miles via downtown Rio Vista in comparison to 12.9 miles via Montezuma Hills Road) between the RVARC site and the SR 12/North Front Street/River Road intersection.

The additional travel distance associated with these routes would be substantial.

Public Comment N: Letter from Jan Vick, Rio Vista Army Base Steering Committee (December 14, 2015)

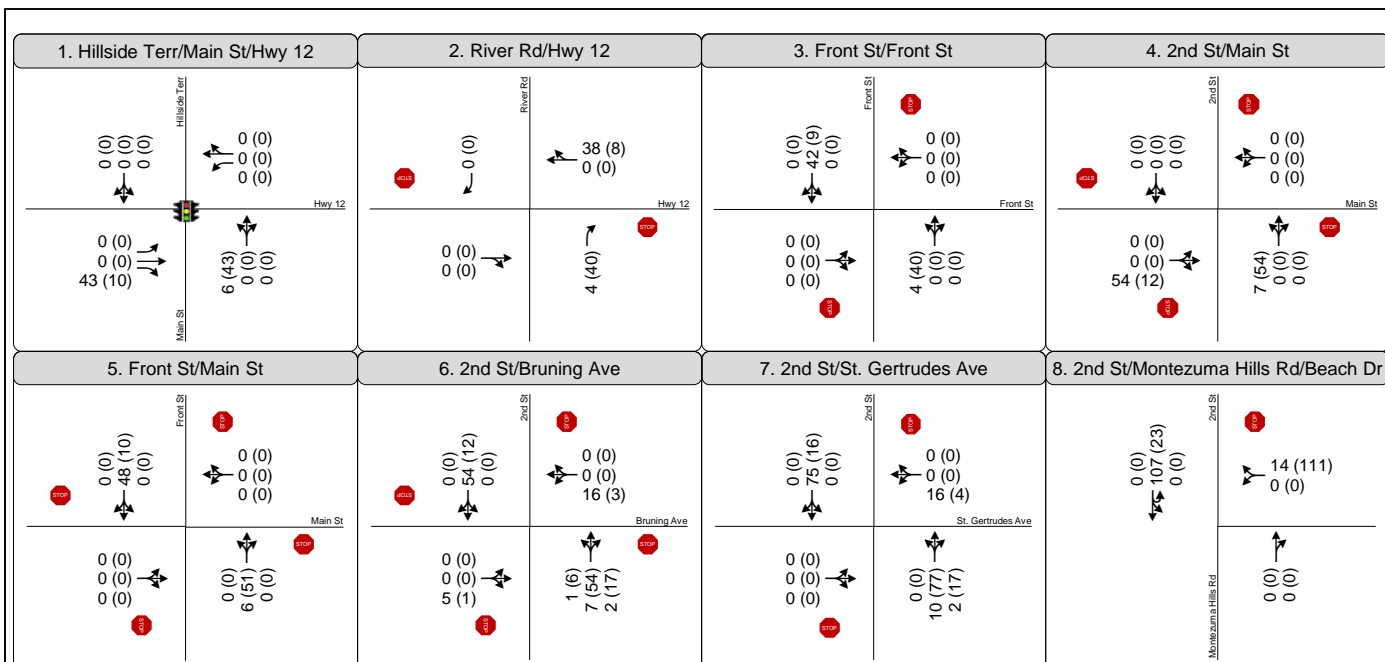
1 It should also be noted that Montezuma Hills Road, Emigh Road, and Currie Road are all
2 narrow rural roadways with paved widths between approximately 20 feet and 24 feet.
3 Routing construction traffic along these roadways, especially truck traffic, may present safety
4 concerns for other traffic on these roads. Additionally, it is unknown whether these roadways
5 were designed to accommodate heavy trucks.

6 For this reason and because routing eastbound construction-related traffic toward SR 12 east
7 via Montezuma Hills Road would increase vehicle trip lengths by up to 11.7 miles, no changes
8 to Mitigation Measure TRA-9 have been made.

9 Response to Comment N-18

10 The comment requests that a simpler map showing the amount and direction of additional
11 PM peak hour traffic to be added to Rio Vista, particularly at the SR 12/North Front
12 Street/River Road and SR 12/Main Street intersections.

13 For clarification, in Chapter 15, *Transportation and Traffic*, Figures 15-10 through 15-13
14 show peak hour traffic volumes for the following conditions evaluated: Existing-Plus-Project,
15 Existing-Plus-Approved-Project, and Cumulative-Plus-Project. In response to this comment,
16 **Figure 2-1**, shown on the following page, shows AM and PM peak hour traffic volumes that
17 would be generated by Alternatives 2 and 3 at the Rio Vista study intersections. In Figure 2-
18 1, the arrows represent turn lanes and the numbers represent AM and PM peak hour traffic
19 volumes (PM values are in parentheses). Note that this graphic does not present new
20 information that was not described in the Draft EIR/EIS. As with the other figures and
21 analysis presented in Draft EIR/EIS Chapter 15, the distribution of Alternatives 2 and 3 trips
22 was estimated using a variety of sources and analytical techniques, such as the Napa-Solano
23 Travel Demand Model, the Stockton Travel Demand Model, and the Tri-County (San Joaquin
24 County, Stanislaus County, and Merced County) Travel Demand Model, review of existing
25 traffic count data, and the relative east of travel on various routes. For additional discussion
26 about the assumptions used in the traffic analysis, refer to the discussion under “Trip
27 Distribution/Assignment” on page 15-30 of the Draft EIR/EIS. The traffic analysis was also
28 conducted based on the conceptual design and site layouts provided in Chapter 3, *Description*
29 *of Alternatives*.



Source: Fehr & Peers, 2016

Public Comment N: Letter from Jan Vick, Rio Vista Army Base Steering Committee (December 14, 2015)

Response to Comment N-19

The comment points out a potential typographical error on page 16-1 of the Draft EIR/EIS. The commenter's line of reasoning makes intuitive sense; however, the Captain at the Rio Vista Fire Department (RVFD) confirmed that the information in the Draft EIS/EIR is correct. Two factors would contribute to delays in response time by the Montezuma Fire Protection District to incidents within the City's boundaries: (1) the Montezuma Fire Protection District is an all-volunteer fire district and has no staffing in the evenings; therefore, responding to incidents in Rio Vista may require calling volunteers from their homes, and (2) calls for service within the City's boundaries would first be routed to the City's dispatch, and RVFD would then only call for aid if needed (Bahrenfuss, pers. comm., 2016). While response times to specific incidents may vary, these factors would contribute to a roughly 4-5 minute delay (beyond RVFD's average response time) in response from the Montezuma Fire Protection District.

The statement on page 16-20 of the Draft EIS/EIR is incorrect. The Draft EIS/EIR has been revised as follows:

As described in "Environmental Setting" above, the City of Rio Vista Fire Department has an adequate response time of 5 minutes, 43 seconds and has mutual and automatic aid agreements with neighboring departments, including the Montezuma Fire Protection District, which can respond to calls from Rio Vista in 4-510-11 minutes, or roughly 4-5 minutes longer than the City of Rio Vista Fire Department's average response time.

Response to Comment N-20

The status of the various development projects in the Rio Vista area provided by the commenter is acknowledged. In response to this comment, the last sentence of the second paragraph on page 16-4 of the Draft EIR/EIS has been revised:

Construction of the Del Rio Hills and Riverwalk development projects may commence in 2016 are currently on hold, with no immediate plans for moving forward (Melilli, pers. comm., 2015a). Other residential projects that have been entitled by the City of Rio Vista, including Liberty and Brann Ranch, may move forward in the future. The Del Rio Hills development project has not been entitled by the City of Rio Vista and therefore has no current official status (Rio Vista Army Base Steering Committee 2015).

The Army Base Steering Committee's comment letter provided on the Draft EIR/EIS has been added to the Chapter 24 of the EIR/EIS on page 24-35 as follows:

Rio Vista Army Base Steering Committee. 2015. Delta Research Station Draft EIR/EIS Comments. December 14.

Public Comment N: Letter from Jan Vick, Rio Vista Army Base Steering Committee (December 14, 2015)

Response to Comment N-21

The suggested text revisions to page 17-4 of the Draft EIR/EIS are acknowledged. In response to this comment, the following sentence has been revised:

Second, Trilogy, an active resort community, has a golf course, ~~as well as a community center and other facilities; however, these~~ and Sir Flair's Restaurant, which are open to the general public. The rest of the community facilities are open only to Trilogy residents (City of Rio Vista 2007).

Response to Comment N-22

The comment requests for additional information about how Rio Vista's housing vacancy rate was computed. As cited at the bottom of Table 18-3 of the Draft EIR/EIS, the housing and vacancy rates shown represents data obtained from California Department of Finance (DOF) Table 2: E-5 City/County Population and Housing Estimates 1/1/2014. DOF estimates are the State of California's official source for demographic data and are considered the most reliable published data source. DOF estimates are derived from national census data. Its vacancy rate estimates likely include unoccupied (non-primary home) residences.

Although these homes may not currently be offered for rental or sale under current market conditions, these properties nonetheless represent existing under-used housing resources that may be potentially available to meet expected project-related housing demand increases. Consequently, lower numbers of homes offered for sale and increasing new housing development are not necessarily inconsistent with DOF's housing occupancy and vacancy rates. It should also be noted that the City of Rio Vista Housing Element reported a comparable 11.2 percent vacancy rate for 2010 (Table 6-15, page 6-18) in its recently updated 2015-2023 Housing Element.

Response to Comment N-23

The comment questions whether the data presented in Table 18-6 of the Draft EIR/EIS is based on a recent survey and cites the unemployment rate from the 2015 Rio Vista Housing Element. As cited at the bottom of Table 18-6 (page 18-7), the 2014 unemployment data was obtained from California Employment Development Department (EDD) Labor Market Information Division Monthly Labor Force Data for Cities and Designated Places. EDD is the primary and official source for California labor force and employment data. EDD also has direct information on unemployment claim filings. The real estate websites noted by the commenter (www.bestplaces.net and www.homefacts.com) do not identify their data sources for the quoted unemployment rates. However, there are a couple of potential explanations for the apparent differences in reported unemployment rates.

- EDD's labor force estimates include all eligible potential workers aged between 18 and 65. Consequently, retirees less than 65 years old will nonetheless be counted as unemployed individuals irrespective of whether they are voluntarily unemployed and/or are not actively seeking future employment.

Public Comment N: Letter from Jan Vick, Rio Vista Army Base Steering Committee (December 14, 2015)

- Self-employed, independent contract or informal workers may be recognized differently between state and other data sources.
- Unemployment rates typically represent the percentage of non-working residents within the area's labor force. Individuals working two jobs would be recognized as one employed individual. Consequently, a relatively high proportion of the area's available jobs may be filled (by both local and non-local workers) and nonetheless also be a higher proportion of local residents without jobs.

Response to Comment N-24

DWR and USFWS appreciate the commenter's request for additional information about the Proposed Project's targeted construction start date and how the project would be funded. As described in Chapter 3, *Description of Alternatives*, the construction start date is currently unknown but the overall construction duration may occur up to approximately 30 months (see page 3-30 of the Draft EIR/EIS). In response to the commenter's questions about funding, project funding is beyond the scope of the EIR/EIS and has yet to be finalized. The estimated construction cost and expected construction period assumptions presented in Chapter 18 of the Draft EIR/EIS, *Socioeconomics*, are used solely for the purposes of developing and presenting representational estimates of the nature and magnitude of the indirect and induced economic impacts that may be expected from the Proposed Project's future construction and operation.

Response to Comment N-25

The commenter correctly notes a typo on page 19-3 of Chapter 19, *Population and Housing*. In response to this comment, the first sentence under the heading "Housing" on page 19-3 has been revised:

In 2014, San Joaquin County had 236,943 housing units and 818,987 vacant housing units – a vacancy rate of 8.0 percent.

Response to Comment N-26

The suggested additions to Table 22-1 (Regulatory Permits, Approvals, and Consultations Relevant to the Proposed Project) of the Draft EIR/EIS are acknowledged. USFWS and DWR look forward to coordinating with the City further regarding these items to discuss the manner in which they may apply to the Proposed Project.

Response to Comment N-27

The comment expressing praise for Appendix I (Historical Architectural Evaluation for the Delta Research Station) is acknowledged.

**Public Comment O: Letter from Ashlen McGinnis, San Joaquin County
Department of Public Works (December 14, 2015)**



KRIS BALAJI
DIRECTOR



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MICHAEL SELLING

DEPUTY DIRECTOR

FRITZ BUCHMAN

DEPUTY DIRECTOR

JIM STONE

DEPUTY DIRECTOR

ROGER JAMES

BUSINESS ADMINISTRATOR

December 14, 2015

California Department of Water Resources
ATTN: John Engstrom, DRS Draft EIR/EIS Comments
1416 Ninth Street, Room 315-3
Sacramento, CA 95814

SUBJECT: NOTICE OF AVAILABILITY OF A DRAFT ENVIRONMENTAL IMPACT
REPORT/ENVIRONMENTAL IMPACT STATEMENT REGARDING THE
PROPOSED DELTA RESEARCH STATION – ESTUARINE RESEARCH
STATION AND FISH TECHNOLOGY CENTER

Dear Mr. Engstrom,

O1

The San Joaquin County Department of Public Works has reviewed the Notice of Availability for the above referenced project and has no comments at this time. However, the County does request to be included on the circulation list for any additional project documents.

Thank you for the opportunity to review and comment. Should you have questions please contact me at atmcginnis@sjgov.org or (209) 468-3085.

Sincerely,

ASHLEN MCGINNIS
Environmental Coordinator

AM:as

c: Firoz Vohra, Senior Engineer

**Public Comment O: Letter from Ashlen McGinnis, San Joaquin County
Department of Public Works (December 14, 2015)**

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**Public Comment O: Letter from Ashlen McGinnis, San Joaquin County
Department of Public Works (December 14, 2015)**

1 Response to Comment O-1

2 The San Joaquin County Department of Public Works has been added to the project mailing
3 list.

**Public Comment O: Letter from Ashlen McGinnis, San Joaquin County
Department of Public Works (December 14, 2015)**

1

2

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Public Comment P: Letter from Solano County (December 16, 2015)**MEMORANDUM**

TO: State of California-Dept. of Water
Resources
1416 Ninth Street, PO Box 942836
Sacramento, CA 94236-0001

DATE: 11/30/15

FROM: Solano County

SUBJECT: Return of Posted Document (s)

P1 | Enclosed please find the original copy/copies of the (1) Notice of Availability that has/have been filed and posted in the Board of Supervisors/County Administrator's Office for at least 30 days.

Public Comment P: Letter from Solano County (December 16, 2015)

STATE OF CALIFORNIA – CALIFORNIA NATURAL RESOURCES AGENCY

DEPARTMENT OF WATER RESOURCES1416 NINTH STREET, P.O. BOX 942836
SACRAMENTO, CA 94236-0001
(916) 653-5791**FILED**

EDMUND G. BROWN JR., Governor

OCT 30 2015



October 30, 2015

Birgitta E. Corsello, Clerk of
the Board of Supervisors of
the County of Solano, State
of California**Re: Notice of Availability of a Draft Environmental Impact Report / Environmental
Impact Statement Regarding the Proposed Delta Research Station –
Estuarine Research Station and Fish Technology Center**

To Interested Parties:

NOTICE IS HEREBY GIVEN that the California Department of Water Resources (DWR), as lead agency under the California Environmental Quality Act (CEQA); and the U.S. Fish and Wildlife Services (USFWS), lead agency under the National Environmental Policy Act (NEPA), are making available a draft environmental impact report / environmental impact statement (Draft EIR/EIS) for public review. DWR and USFWS have prepared this Draft EIR/EIS to provide the public, responsible agencies, and trustee agencies with information about the potential environmental effects of the proposed Delta Research Station (DRS) (Proposed Project). This Draft EIR/EIS was prepared in compliance with CEQA of 1970 (as amended), the State CEQA Guidelines (California Code of Regulations [CCR] title 14, section (§) 15000 et seq.), and the NEPA (U.S. Code [USC] 432). DWR hereby invites comments on the adequacy and completeness of the environmental analyses in the Draft EIR/EIS.

PROJECT LOCATION: The DRS would be located in a centralized area of the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta), California. Two alternative locations are evaluated in the Draft EIR/EIS: (1) the Rio Vista Army Reserve Center (RVARC) site in the City of Rio Vista, and (2) a site located at 845 Ryde Avenue in the City of Stockton (Ryde Avenue site).

PROJECT DESCRIPTION AND ENVIRONMENTAL REVIEW: The Proposed Project, as analyzed in this Draft EIR/EIS, consists of evaluation of the proposed construction and operation of two facilities, a proposed Estuarine Research Station (ERS) and Fish Technology Center (FTC). Collectively, these facilities are intended to serve as an aquatic research and monitoring facility that is located in centralized area of the Bay-Delta. The Proposed Project reflects the outcome of a multiyear collaboration between DWR, USFWS, California Department of Fish and Wildlife, and other agencies involved in the Interagency Ecological Program (IEP).

The proposed DRS would consolidate ongoing IEP research and monitoring activities throughout the Bay-Delta and provide facilities for study and production of endangered Delta fishes. Currently, the IEP has approximately 145 state and federal employees who conduct research throughout the Bay-Delta. The IEP collaboratively monitors, researches, models and synthesizes critical information for adaptive management water project operations, planning and regulatory purposes relative to the aquatic ecosystem in the Bay-Delta. USFWS and DWR plan to construct the DRS in a centrally located area within the Bay-Delta and the facilities are expected to enhance interagency coordination and collaboration.

Document Posted From
10-30-15 to 11-30-15
Sandy Hoffer
Deputy Clerk of the Board

Public Comment P: Letter from Solano County (December 16, 2015)

Interested Parties
October 30, 2015
Page 2

The purpose of the DRS is to enhance interagency coordination and collaboration by developing a shared research facility. Currently, federal and state agency staff working on similar Bay-Delta issues are distributed among different locations that are often remote from the Bay-Delta. Construction and operation of the DRS would reduce travel times and costs and improve research and monitoring activity efficiency. The ERS would consolidate existing IEP programs currently located throughout the Delta, and the FTC would house a new program to develop and apply captive fish propagation technologies in support of population restoration.

The Draft EIR/EIS evaluates the potential environmental impacts of three action alternatives as well as the No Project Alternative: the No Project Alternative (DWR and USFWS would not construct the ERS or FTC); Alternative 2 (the ERS and FTC facilities would be consolidated in the predominantly undeveloped portions of the RVARC site); Alternative 3 (the ERS facilities would involve rehabilitation and reuse of existing facilities); and Alternative 4 (the ERS and FTC facilities would be located at 845 Ryde Avenue site in Stockton).

In accordance with CEQA Guidelines §15087, given the size of the Proposed Project area, it is possible that hazardous waste sites or listed toxic sites listed by the Department of Toxic Substances Control (Cal-EPA) may be present in the area. The analysis in the Draft EIR/EIS concluded that the location for the DRS facilities do not overlap with listed sites and did not identify any potentially significant impacts that would require mitigation to reduce effects to a less-than-significant level, or that would be significant and unavoidable.

DOCUMENT AVAILABILITY: The Draft EIR/EIS and supporting documents are available for download from the following website: www.deltaresearchstation.com. Printed copies of the Draft EIR/EIS and supporting documents are available to review during regular business hours at DWR's office in Sacramento (listed below). Copies are also available to review at the Rio Vista Library and Stockton-San Joaquin County Library (listed below). CDs are available on request by phoning (510) 986-1850 or emailing comments@deltaresearchstation.com. They will also be available at the public meetings in Rio Vista and Stockton. Printed copies are also available at cost plus postage, upon request using the above contact information.

Locations where DEIR copies can be reviewed:

- California Department of Water Resources, 1415 Ninth Street, Room 315-3, Sacramento, CA 95814
- Rio Vista Library, 44 South Second Street, Rio Vista, CA 94571
- Stockton-San Joaquin County Library, 605 N. El Dorado Street, Stockton, CA 95202

Public Comment P: Letter from Solano County (December 16, 2015)

Interested Parties
October 30, 2015
Page 3

PUBLIC REVIEW PERIOD: The Draft EIR/EIS is available for a 45-day public review and comment period, which begins on October 30, 2015 and ends at 5 p.m. on December 14, 2015. **Please send comments on the DEIR at the earliest possible date, but postmarked no later than 5 p.m. on December 14, 2015 in order for your comments to be considered.**

Comments may be mailed to the following address:

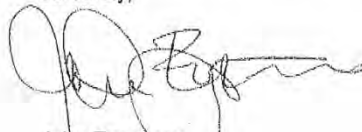
California Department of Water Resources
ATTN: John Engstrom, DRS Draft EIR/EIS Comments
1416 Ninth Street, Room 315-3
Sacramento, CA 95814

Comments may also be submitted by email to: comments@deltaresearchstation.com. Emailed comments are preferred, and should include your name, address, and daytime telephone number so a representative of DWR can contact you if clarifications regarding your comments are required. All comments received, including names and addresses, will become part of the official public record. A Final Environmental Impact Report / Environmental Impact Statement will be prepared which will include responses to comments received during the public review period.

PUBLIC MEETINGS: All interested persons are encouraged to attend the public meetings to present written and/or verbal comments on the Draft EIR/EIS. Two public meetings will be held at the following locations and times:

- D.H. White Elementary School, 500 Elm Way, Rio Vista, CA 94571 on December 1, 2015 at 6:00 p.m.
- Arnold Rue Community Center, 5758 Lorraine Avenue, Stockton, CA 95210 on December 3, 2015 at 5:30 p.m.

Sincerely,



John Engstrom
Supervising Architect

Public Comment P: Letter from Solano County (December 16, 2015)

Office:
180 Grand Ave, Suite 1405
Oakland, CA 94612
(510) 986-1851
www.horizonh2o.com

Transmittal

Date:	October 29, 2015	
To:	Solano County Clerk's Office 675 Texas Street, Suite 1900 Fairfield, CA 94533	
From:	Michael Stevenson Horizon Water and Environment, LLC 180 Grand Avenue, Suite 1405 Oakland, CA 94612	
Subject:	Draft EIR/EIS for the Delta Research Station Project – Estuarine Research Station and Fish Technology Center	
Method of Transmission:	<input type="checkbox"/> Mail <input checked="" type="checkbox"/> Overnight <input type="checkbox"/> Courier	
Purpose of Transmission:	<input type="checkbox"/> Per your request <input type="checkbox"/> For your review <input type="checkbox"/> For your information or use <input checked="" type="checkbox"/> Other: for your filing and distribution	
Items Being Transmitted:	Quantity	Description
	1	Notice of Availability (NOA) for the Draft EIR

Enclosed is the NOA for the Draft Environmental Impact Report/Environmental Impact Statement (Draft EIR/EIS) for the Delta Research Station Project – Estuarine Research Station and Fish Technology Center. Please post the document for public review upon receipt for 45 days.

Horizon Water and Environment is a California limited liability company.

Public Comment P: Letter from Solano County (December 16, 2015)

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Public Comment P: Letter from Solano County (December 16, 2015)**1 Response to Comment P-1**

2 The Solano County attached the original copy of the Notice of Availability that was filed and
3 posted in the Board of Supervisors/County Administrator's Office for 30 days. Receipt of the
4 Notice of Availability is acknowledged.

Public Comment P: Letter from Solano County (December 16, 2015)

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Public Comment Q: Letter from Sandy Person, Solano Economic Development Corporation (December 14, 2015)



Sandy Person
President

sandy@solanoedc.org

Patrick McGuire
Vice President

patrick@solanoedc.org

J. Paul Harrington
Project Manager

Solano Energy Watch
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Moving Solano Forward Ph2

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Website:
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December 14, 2015

California Department of Water Resources
Attn: John Engstrom, DRS Draft EIR/EIS Comments
1415 Ninth Street, Room 315-3
P.O. Box 942836
Sacramento, CA 942836-0001

Re: Delta Research Station Draft EIR/EIS Comments

Dear Mr. Engstrom:

I have been attending the Rio Vista Army Base Steering Committee meetings and have been following the recent progress made on this very important project!

On behalf of the Solano Economic Development Corporation (Solano EDC), we appreciate all the efforts that your staff and consultants have put into this very thoroughly prepared document. We look forward to the certification of the Final EIR/EIS next year and implementation to follow shortly thereafter.

Founded in 1983, the Solano EDC is a collaboration of private and public stakeholders that provide a leadership role for economic development efforts in Solano County and its seven cities. In today's environment, it is essential Solano County preserve its economic development base and also strives to enhance all prospects for expansion of existing business and industry. Solano EDC is committed to supporting partnerships and developing new opportunities that will increase economic activity and job generation.

In particular, we believe that this project will have the following very significant economic benefits to the business community and local jurisdictions, including the City of Rio Vista and Solano County, as further described in the following particular sections of the document:

Location and Preferred Alternative

Because of the location of the Rio Vista Army Reserve Center (RVABRC) in this key area of the Sacramento Delta, we believe it would fully meet the specific requirements of the research and water quality needs of the Department of Water Resources and the U.S. Fish and Wildlife Service (Chapter 3: Description of Alternatives). We support the "Alternative 2: Rio Vista Army Reserve Center," Configuration 1, (Preferred Alternative)," as the best alternative for reducing the building footprint and maximizing public access along the Sacramento River waterfront as supported by the Rio Vista Army Base Steering Committee.

Army Base Design Guidelines

We believe that the City of Rio Vista has been very proactive for the planning of the Army Base site for many years, as most recently evidenced in the development and adoption of the "Army Base Design Guidelines" in 2012 (pg. 5-14 of Draft EIR/EIS). We believe that the City should be congratulated for developing these guidelines at a very early stage, and we think they will prove be very beneficial in helping to ensure that a very high quality of design and land use compatibility will result for this site and the surrounding uses.

Q1

Q2

Q3

Public Comment Q: Letter from Sandy Person, Solano Economic Development Corporation (December 14, 2015)

Construction Spending and Jobs

Based on the estimated \$52 million of construction spending (pg. 18-15 and 18-16 of the Draft EIR/EIS), we look forward to the direct employment of 139 workers and \$10.0 million in new income for our region over the expected 2 ½ year construction period. Also, the expected \$7.3 million of direct and indirect construction earnings income expected will have very good and immediate benefits, particularly to the Rio Vista economy. In addition, we understand that the construction spending would support another 114 jobs and generate another \$13.2 million in regional economic impact output activity from other supporting businesses.

Q4

Long Term Jobs

Based on the estimated 165 of long term jobs to be established at the Estuarine Research Station and 15 jobs at the Fish Technology Center (pg. 18-18 to 18-20 of the Draft EIR/EIS), the project is expected to add about \$14.3 million (in 2015 dollars) of annual income earning to the area around the RVARC. Since about 85% of the project employees would be very high paying professional/scientific employees, conservatively estimated to have annual wage rates of \$86,100 for professional staff, such jobs would have very beneficial and cumulative benefits the City of Rio Vista and the surrounding economy. The new employees would be expected to increase total employment in Rio Vista by nearly 10% and greatly benefit the local economy through their local retail spending and by purchasing or renting local homes. And the revenue from the estimated retail spending by DRS employees would be approximately \$30,100 annually.

Q5

Cumulative Land Use Benefits: Interpretive Center, Retail and Multi-Use Interpretive Pathway

We also believe that the cumulative benefits of this project would greatly benefit the community and local economy. These additional benefits would include the Rio Vista Army Base Steering Committee's desire to further proceed with their planning, funding and implementation of an interpretive center, related retail uses, a multi-uses interpretive pathway and other passive delta recreational activities on the remaining site area of the Rio Vista Army Reserve Center site. We also thought that Appendix I on Historical Architectural Evaluation was very well done and the history of the site could be very well documented in the interpretive center as proposed by the RVABSC.

Q6

Please feel free to contact me if you have any questions.

Sincerely,



Sandy Person
President

Cc: Rio Vista Mayor and City Council Members
RVABSC Members
Dan Christians, RVABSC Adjunct Staff Member

Public Comment Q: Letter from Sandy Person, Solano Economic Development Corporation (December 14, 2015)

1 Response to Comment Q-1

2 The comment's expression of appreciation regarding the efforts in preparing the EIR/EIS and
3 expression of support for the Proposed Project is acknowledged.

4 Response to Comment Q-2

5 The comment's expression of support for Alternative 2 is noted.

6 Response to Comment Q-3

7 As noted in the comment, the Draft EIR/EIS acknowledges the Army Base Design Guidelines
8 in Chapter 5, *Aesthetics*. Per Mitigation Measure AES-2a, DWR and USFWS will incorporate
9 the design standards in the ERS and FTC facility design plans and, to the extent feasible, will
10 design the ERS and FTC buildings consistent with the Rio Vista Army Base Design Guidelines.

11 Response to Comment Q-4

12 The comment correctly summarizes the estimated construction spending and job generation
13 estimates described in Chapter 18, *Socioeconomics*. The comment's general expression of
14 support for the DRS due to the new income generated for the region and number of jobs
15 created is acknowledged.

16 Response to Comment Q-5

17 The comment correctly summarizes the long-term effects of Alternatives 2 and 3 on the City
18 of Rio Vista and surrounding area's economy and employment, as described on pages 18-18
19 through 18-21 of the Draft EIR/EIS.

20 Response to Comment Q-6

21 The comment expresses the opinion that Alternative 2 would benefit the community and
22 support the Rio Vista Army Base Steering Committee's desire to further proceed with
23 planning an interpretive center and other retail and recreational uses on the remaining
24 portion of the RVARC site. The commenter also notes that Appendix I was well done. These
25 comments are acknowledged.

**Public Comment Q: Letter from Sandy Person, Solano Economic
Development Corporation (December 14, 2015)**

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Public Comment R: Letter from Kathleen Martyn Goforth, U.S. Environmental Protection Agency (December 14, 2015)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

December 14, 2015

USFWS
Attn: Barbara Beggs
650 Capitol Mall, Suite 8-300
Sacramento, California 95814

Subject: Draft Environmental Impact Statement for the Delta Research Station – Estuarine Research Station and Fish Technology Center Project, Sacramento, California (CEQ# 20150301)

Dear Ms. Beggs:

R1

The U.S. Environmental Protection Agency (EPA) has reviewed the above-referenced document pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act.

EPA understands that the research facility that is proposed for construction would be shared by state and federal resource agencies and would consist of two components: an estuarine research station that would serve to consolidate ongoing research and monitoring activities currently conducted at different facilities throughout the Bay-Delta, and a fish technology center that would be used to propagate technologies in support of population restoration of rare fish species native to the Bay-Delta. EPA is pleased that both components are proposed to be built to the standards of the U.S. Green Building Council's Leadership in Energy & Environmental Design (LEED) program at silver level or higher accreditation.

R2

Based on our review, we have rated the Proposed Project as *Lack of Objections (LO)* (See attached "Summary of EPA Rating Definitions"). While we do not object to the Proposed Project, we wish to bring to your attention a correction needed to the General Conformity analysis that was provided in the Draft EIS. The remainder of this letter provides recommendations regarding this and other matters relevant to the mitigation and disclosure of impacts in the Final EIS. We are available to further discuss our enclosed detailed comments.

R3

General Conformity

In its evaluation of Alternatives 3 and 4, the Draft EIS incorrectly assesses the applicability of EPA's General Conformity Rule, which established a two-step process for general conformity. The first is an applicability analysis and the second is a general conformity determination. If a federal action's emissions do not exceed the general conformity de minimis thresholds (e.g. 10

Public Comment R: Letter from Kathleen Martyn Goforth, U.S. Environmental Protection Agency (December 14, 2015)

- R3** ↑ tons per year of NO_x as stated in Table 6-7 of the Draft EIS), the action does not need a general conformity determination.
- R4** ↑ The general conformity applicability analysis is specified at 40 CFR 93.153(b). It requires federal agencies to estimate the total of direct and indirect emissions for a federal action (see definitions at 40 CFR 93.152). In performing an applicability analysis, federal agencies may not deduct emission credits or offsets. If emissions from an alternative exceed the de minimis threshold, the Draft EIS should commit to the preparation of a general conformity determination, in compliance with Subpart B of 40 CFR Part 93. In a general conformity determination (the second step in the process), EPA does allow the use of offsets as one of several methods of demonstrating a federal action conforms to a State Implementation Plan (see 40 CFR 93.158(a)(2)). In the Draft EIS, offsets from the voluntary emission agreement proposed in Mitigation Measure AQ/GHG-2d were applied to the general conformity applicability analysis for Alternatives 3 and 4. EPA recommends that the conformity analysis for those alternatives be corrected, removing the offsets, and that the corrected analysis be included in the Final EIS.
- R5** ↑ While the projected emissions for the proposed project (Alternative 2) do not exceed the de minimis threshold, they do closely approach it (9.6 tons compared to 10 tons as noted in Table 6-7). The Draft EIS discusses tracking of emissions, noting that an annual emissions report will be prepared for the San Joaquin Valley Air Pollution Control District (see Mitigation Measure AQ/GHG-2b). If Alternative 2 is selected and any subsequent (e.g. during construction) changes to the alternative result in increased emissions, USFWS will be required to complete a general conformity determination before emissions exceed any de minimis threshold (see Question 34 of General Conformity Guidance for Airports, Questions and Answers, September 25, 2002, FAA and EPA http://www3.epa.gov/ttn/oarpg/conform/airport_qa.pdf). For this reason, we recommend that USFWS consider heightened tracking of NO_x emissions for Alternative 2, particularly as the end of the calendar year approaches, to ensure compliance with EPA's General Conformity Rule.
- R6** ↑ **Water Quality**
The Draft EIS indicates that "small quantities" of surface water would be needed for processes involving temperature adjustment or for acclimation of fish prior to release into the river; however, no quantitative estimate of the amount of surface water to be diverted for use in the Fish Technology Center is provided. According to the Draft EIS, because the quantity and timing of surface water diversion from the Sacramento River is not known at this time, this aspect has not been evaluated (p. 3-32). Although the quantity of water needed may be small, such information is relevant to the determination of the proposed project's impacts to waters. EPA recommends that USFWS provide, in the Final EIS, a reasonable quantitative estimate of the amounts of surface water anticipated to be used in these processes, possibly based on current hatchery operations of similar size, or other appropriate methods.
- R7** ↓ **Flood Protection (Executive Order 13690)**
On January 30, 2015 President Obama issued Executive Order 13690 – Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input, which amends Executive Order 11988 – Floodplain Management. Section 2(i)

Public Comment R: Letter from Kathleen Martyn Goforth, U.S. Environmental Protection Agency (December 14, 2015)

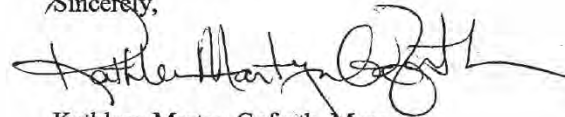
R7 ↑ of E.O. 13690 establishes a new definition of the term “floodplain”. EPA recommends that the Final EIS explain how each alternative would be consistent with the directives in Executive Order 13690, and discuss any changes to the project necessary to meet those directives. For more information, go to: <https://www.fema.gov/federal-flood-risk-management-standard-ffrms>.

R8 ↑ **Climate Change**
We believe the Council on Environmental Quality’s December 2014 *revised draft guidance for Federal agencies’ consideration of GHG emissions and climate change impacts in NEPA* (www.whitehouse.gov/sites/default/files/docs/nepa_revised_draft_ghg_guidance_searchable.pdf) outlines a reasonable approach to analyzing climate change issues, and we recommend that the USFWS use that draft guidance to help outline the framework for its analysis of these issues. Accordingly, if applicable, we recommend the Final EIS include an estimate of the GHG emissions associated with the project, qualitatively describe relevant climate change impacts, and analyze reasonable alternatives and/or practicable mitigation measures to reduce project-related GHG emissions. In addition, we recommend that the NEPA analysis address the appropriateness of considering changes to the design of the proposal to incorporate resilience to foreseeable climate change. The Final EIS should make clear whether commitments have been made to ensure implementation of design or other measures to adapt to climate change impacts.

R9 ↑ More specifically, we suggest that the “Affected Environment” section of the Final EIS include a summary discussion of climate change and ongoing and reasonably foreseeable climate change impacts relevant to the project, based on U.S. Global Change Research Program (www.globalchange.gov/) assessments, to assist with identification of potential project impacts that may be exacerbated by climate change and to inform consideration of measures to adapt to climate change impacts. Among other things, this will assist in identifying resilience-related changes to the proposal that should be considered.

R10 ↑ EPA appreciates the opportunity to review this Draft EIS. When the Final EIS is released for public review, please send one hard copy and one electronic copy to the address above (specify Mail Code ENF-4-2) at the same time it is officially filed with our Washington, D.C. Office. If you have any questions, please contact me at 415-972-3521, or contact Phillip Lopez, the lead reviewer for this project, at 415-972-3210 or lopez.phillip@epa.gov.

Sincerely,



Kathleen Martyn Goforth, Manager
Environmental Review Section

Enclosure: Summary of EPA Rating Definitions
EPA’s Detailed Comments

Public Comment R: Letter from Kathleen Martyn Goforth, U.S. Environmental Protection Agency (December 14, 2015)

SUMMARY OF EPA RATING DEFINITIONS*

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

ENVIRONMENTAL IMPACT OF THE ACTION

"LO" (Lack of Objections)

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

"EC" (Environmental Concerns)

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

"EO" (Environmental Objections)

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

"EU" (Environmentally Unsatisfactory)

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

ADEQUACY OF THE IMPACT STATEMENT

"Category 1" (Adequate)

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

"Category 2" (Insufficient Information)

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

"Category 3" (Inadequate)

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

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

Public Comment R: Letter from Kathleen Martyn Goforth, U.S. Environmental Protection Agency (December 14, 2015)

Response to Comment R-1

DWR and USFWS appreciate the U.S. Environmental Protection Agency's (USEPA's) review of the DRS Draft EIR/EIS. The comment correctly summarizes the primary components of the DRS.

Response to Comment R-2

The USEPA's rating of the Proposed Project as *Lack of Objections* (LO) is noted. According to the USEPA's rating system, this rating means that the USEPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The USEPA requests that a few corrections be made to the Draft EIR/EIS's General Conformity discussion, and provides some recommendations for mitigation and disclosure of impacts. These corrections and recommendations are addressed in Response to Comments R-3 through R-9, below.

Response to Comment R-3

The comment states that the Draft EIR/EIS's evaluation of Alternatives 3 and 4 incorrectly assesses the applicability of the USEPA's General Conformity Rule. The comment notes that the first step is an applicability analysis and the second is a general conformity determination. As described on pages 6-53 and 6-54, construction of Alternatives 3 and 4 have the potential to generate emissions above the general conformity de minimis thresholds, respectively. Because the construction phasing of the Proposed Project has not yet been defined, the analysis conservatively assumes that construction of all land-based and marina facilities would overlap. Since General Conformity applicability does not need to be determined now but before the start of project construction, during the detailed design phase, DWR and USFWS may refine the construction equipment and phasing (through implementation of Mitigation Measures AQ/GHG-2b and AQ/GHG-2c) such that the Proposed Project's revised emissions estimates are below the General Conformity de minimis threshold. If the revised estimate indicates that emissions would exceed the general conformity de minimis threshold, then General Conformity is applicable. As described in Mitigation Measure AQ/GHG-2d of the Draft EIR/EIS (page 6-54), if general conformity is applicable, nitrogen oxides (NO_x) emissions would need to be offset to zero.

In response to this comment, the following text under "Alternative 3: Rio Vista Army Reserve Center, Configuration 2" (page 6-53 of the Draft EIR/EIS) is revised to provide additional clarification regarding General Conformity applicability.

Thus, to ensure Proposed Project emissions are below the thresholds of significance or offset to net zero if General Conformity is applicable, DWR and USFWS would implement some combination of **Mitigation Measures AQ/GHG-2b (Implement Construction Emission Reductions)**, **and AG/GHG-2c (Implement Construction Phasing)**, ~~and AQ/GHG-2d (Enter into a Voluntary Emission Reduction Agreement if Emissions Remain Above De Minimis Conformity Thresholds for Project Portions Subject to General Conformity or above Local Air District Mass~~

Public Comment R: Letter from Kathleen Martyn Goforth, U.S. Environmental Protection Agency (December 14, 2015)

Emission Significance Thresholds) in a manner that would result in emissions below the conformity *de minimis* thresholds for NO_x. **If Mitigation Measures AQ/GHG-2b and AQ/GHG-2c do not reduce emissions below applicable thresholds of significance and/or below the conformity *de minimis* thresholds, General Conformity applies and Mitigation Measure AQ/GHG-2d (Complete General Conformity Determination and, if necessary, Enter into a Voluntary Emission Reduction Agreement if Emissions Remain Above De Minimis Conformity Thresholds for Project Portions Subject to General Conformity or above Local Air District Mass Emission Significance Thresholds)** would be implemented. Mitigation Measure AQ/GHG-2d would ensure that NO_x emissions are offset to net zero and ensure that emissions are below any other thresholds of significance for any criteria pollutant established by the applicable air district.

Response to Comment R-4

The comment clarifies that when performing the general conformity applicability analysis (as specified at 40 CFR 93.153(b)), federal agencies may not deduct emission credits or offsets. The comment indicates that if emissions from an alternative exceed the *de minimis* threshold, the Draft EIR/EIS should commit to the preparation of a general conformity determination.

The Draft EIR/EIS was not intended to serve as the general conformity applicability determination since the Proposed Project is currently in the early design phase. As such, it is more appropriate to conduct this analysis at a point when the construction schedule and equipment list has been refined, and generally closer to the overall construction start date. As discussed in Response to Comment R-3, implementation of Mitigation Measures AQ/GHG-2b and AQ/GHG-2c are meant to support the general conformity applicability analysis. In response to this comment, Mitigation Measure AQ/GHG-2d has been revised to indicate that the lead agencies shall conduct a final applicability analysis and, if necessary, prepare a general conformity determination. The Proposed Project intends to use offsets if necessary to meet general conformity requirements.

In response to this comment, Mitigation Measure AQ/GHG-2d (page 6-54 of the Draft EIR/EIS) has been revised as follows:

Mitigation Measure AQ/GHG-2d: Complete General Conformity Determination and, if necessary, e**Enter into a Voluntary Emission Reduction Agreement if Emissions Remain Above De Minimis Conformity Thresholds for Project Portions Subject to General Conformity or above Local Air District Mass Emission Significance Thresholds (Alternatives 3 and 4).**

DWR and USFWS or the contractor(s) developing the site shall complete a general conformity determination and, if necessary, enter into a voluntary emission reduction agreement (VERA) with the local air district if implementation of a combination of Mitigation Measures AQ/GHG-2b and AQ/GHG-2c would not reduce emissions below applicable thresholds of significance and /or below the General Conformity De Minimis Thresholds.

Public Comment R: Letter from Kathleen Martyn Goforth, U.S. Environmental Protection Agency (December 14, 2015)

Response to Comment R-5

The comment notes that because the projected construction emissions for Alternative 2 are close to the 10 NO_x threshold (10 tons), as shown in Table 6-7 of the Draft EIR/EIS, the comment requests that tracking of emissions be heightened. USFWS understands that a general conformity determination would need to be completed in the event that emissions associated with Alternative 2 in fact exceed any *de minimis* threshold.

In response to this comment, the following text on page 6-49 of the Draft EIR/EIS has been modified to require tracking of Alternative 2.

In addition, **Mitigation Measure AQ/GHG-2a (Implement Fugitive Dust Best Management Practices and Emission Tracking)** would be implemented to minimize fugitive dust emissions and track emissions to ensure they remain below the thresholds through final project design and construction. With this mitigation measures, the impact would be **less than significant with mitigation**.

In addition, the following text of **Mitigation Measure AQ/GHG-2a** on pages 6-49 and 6-50 has been revised:

Mitigation Measure AQ/GHG 2a: Implement Fugitive Dust Best Management Practices and Emission Tracking (Alternatives 2, 3, and 4)

DWR's and USFWS's contractor(s) shall implement BMPs to reduce fugitive dust emissions to ensure compliance with applicable fugitive dust regulations required by the local air district or city. The following measures shall be implemented by the construction contractor(s):

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
4. All vehicle speeds on unpaved roads shall be limited to 15 mph.
5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
6. A publicly visible sign shall be posted with the telephone number and name of the person to contact at the Lead Agency regarding dust complaints. This

Public Comment R: Letter from Kathleen Martyn Goforth, U.S. Environmental Protection Agency (December 14, 2015)

person shall respond and take corrective action within 48 hours. The air district's phone number shall also be identified to ensure compliance with applicable regulations.

7. DWR's and USFWS's contractor(s) shall present equivalent emission calculations as required by SJVAPCD Indirect Source Review (ISR) Rule or by using other methodologies recommended by the local air district to track emissions to ensure they remain below applicable thresholds. If emissions are estimated to approach the thresholds, the Project may implement Mitigation Measures AQ/GHG-2b, -2c, or -2d.

Response to Comment R-6

The commenter's request for including a reasonable quantitative estimate of the amounts of surface water anticipated for use by the FTC is acknowledged.

As described on page 3-32 of the Draft EIR/EIS, based on preliminary estimates of the FTC's operation and demand, the overall water demand for the FTC operation is estimated at 3,000 gallons per minute. Once the specific fish species to be reared at the FTC have been determined, the quantity of the facility's water needs can be better determined. For example, green sturgeon are larger fish and require more water than other fish species like Delta Smelt. In addition, the Draft EIR/EIS notes that the site layouts are conceptual (see page 3-16 of the Draft EIR/EIS). As such, currently available information does not permit detailed analysis of potential impacts due to construction and operation of the surface water intake. To the extent feasible, the Draft EIR/EIS evaluates construction-related effects of the surface water intake. Once additional information regarding the surface water intake (e.g., the quantity and timing) is available, additional environmental review can be initiated.

Response to Comment R-7

The comment requesting that the EIR/EIS explain how each alternative would be consistent with the directives in Executive Order 13690 is acknowledged. The comment also notes that Section 2(i) of E.O. 13690 establishes a new definition of the term "floodplain".

According to FEMA's *Guidelines for Implementing Executive Order 11988, Floodplain Management, and Executive 13690, Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input* (2015), the floodplain should be established by using one of the following approaches when designing or constructing facilities (1) utilize the best-available, actionable data and methods that integrate current and future changes in flooding based on science; (2) use the base flood elevation (or 1-percent-annual-chance flood determined using best available data) and an additional height to calculate the freeboard value; or (3) use the 0.2-percent-annual-chance flood elevation (or 500-year flood elevation). The design standards are consistent with the standards outlined in Mitigation Measure HYD/WQ-14 (Perform Hydraulic Analysis and Conform to Standards in Applicable County and State Requirements).

Public Comment R: Letter from Kathleen Martyn Goforth, U.S. Environmental Protection Agency (December 14, 2015)

In response to this comment, the following text has been added to the end of Section 12.2.1 in Chapter 12, *Hydrology and Water Quality* on page 12-21:

Executive Order 13690

On January 30, 2015, President Obama issued Executive Order 13690 – Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input, which amends Executive Order 11988 – Floodplain Management. The Federal Flood Risk Management Standard builds upon work completed by the Hurricane Sandy Rebuilding Task Force, which announced in April 2013 that all Sandy-related rebuilding projects funded by the Sandy Supplemental (Public Law 113-2) must meet a consistent flood risk reduction standard. When implementing the Federal Flood Risk Management Standard, federal agencies are given the option to select one of three approaches for establishing the flood elevation and hazard area used in siting, design, and construction:

- Utilize best-available, actionable data and methods that integrate current and future changes in flooding based on science,
- Use the base flood elevation (or 1-percent-annual-chance flood determined using best available data) and an additional height to calculate the freeboard value, or
- 500-year, or 0.2%-annual-chance, flood elevation.

The new flood risk standard requires all future federal investments in and affecting floodplains to meet the level of resilience established by the standard. This standard applies to new structures and facilities that are federally funded such as the ERS and FTC.

In addition, Mitigation Measure HYD/WQ-14 (pages 12-61 and 12-62 of the Draft EIR/EIS) has been revised to include the approaches outlined in the Federal Flood Risk Management Standard:

Mitigation Measure HYD/WQ-14: Perform Hydraulic Analysis and Conform to Standards in Applicable County, ~~and State,~~ and Federal Requirements (Alternatives 2, 3 and 4)

Before finalizing the design of the ERS and FTC facilities, including but not limited to, the ERS marina and boat launch and the FTC aquaculture facility intake and outfall, DWR, USFWS, or their contractors shall conduct an analysis of pre- and post-Proposed Project hydraulic conditions, including erosive and flood conditions, in the Proposed Project area. The analysis shall include an assessment of the potential change in velocity, floodplain storage, and Base Flood Elevation (BFE) for the pre- and post-Proposed Project conditions. The analysis would also determine the Proposed Project's potential to affect any levees and alter existing or create new sea level-rise

Public Comment R: Letter from Kathleen Martyn Goforth, U.S. Environmental Protection Agency (December 14, 2015)

inundation areas. If the analysis determines that the Proposed Project would significantly decrease floodplain storage, affect the stability of any levees, create or alter sea level-rise inundation areas, or result in a significant increase in BFE or velocity or cause erosion, measures would be designed and implemented to reduce these potential effects to an acceptable level. This could include:

- implementing bank stabilization measures at erosional locations;
- providing increased floodplain storage;
- designing in-water facilities to accommodate flooding and sea level rise;
- designing upland facilities to avoid increases in BFE, such as by securely anchoring and floodproofing structures to at least 2 feet above the 100-year flood elevation or 2 feet above the design floodplain;
- locating and orienting structures to be outside of any sea level-rise inundation areas (based on the National Academy of Sciences' projection range of 16–65 inches);
- ensuring that existing facilities not previously in a sea level-rise hazard area would not be subjected to sea level-rise hazards as a result of the Proposed Project;
- locating and orienting structures to have a minimal impact on floodflows;
- designing facilities by using the 500-year flood elevation;
- using best available, actionable hydrologic and hydraulic data and methods that integrate current and future changes in flooding based on climate science or other factors or changes affecting flood risk to determine the vertical flood elevation and corresponding horizontal floodplain; and
- minimizing the number of structures in the floodplain.

As a performance standard, the design and construction shall conform to the standards contained in the most current version of the county codes and comply with the CVFPB permit requirements for the Proposed Project; such standards are considered by DWR and USFWS to be sufficient to reduce this impact to a level that is less than significant.

Response to Comment R-8

The comment states that the Council on Environmental Quality's (CEQ's) December 2014 *revised draft guidance for Federal agencies' consideration of GHG emissions and climate change impacts in NEPA* should be used to help outline the framework for its analysis. The comment

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1 further recommends that the EIR/EIS include an estimate of greenhouse gas (GHG) emissions
2 associated with the Proposed Project, qualitatively describe relevant climate change impacts,
3 and evaluate reasonable alternatives and/or practicable mitigation measures to reduce GHG
4 emissions, is noted. The comment also notes that the EIR/EIS should clarify whether
5 commitments have been made to ensure implementation of design or other measures to
6 adapt to climate change impacts.

7 The CEQ's guidance referenced in the comment is described in Chapter 6, *Air Quality and*
8 *Greenhouse Gas Emissions* (page 6-24). The guidance encourages agencies to include a
9 quantitative assessment of GHG emissions for projects expected to have direct GHG emissions
10 of 25,000 metric tons of carbon dioxide equivalents (CO₂e) or more on an annual basis. The
11 potential for the Proposed Project to generate substantial GHG emissions due to construction
12 and operation are disclosed in the Draft EIR/EIS (see Impacts AQ/GHG-5 and AQ/GHG-11).
13 This analysis was completed consistent with the CEQA guidance on climate change and GHG
14 emissions. The EIR/EIS concluded that construction and operation emissions generated by
15 the FTC would be less than 25,000 MT CO₂e and therefore would not result in a substantial
16 contribution to cumulative GHG effects. DWR and USFWS believe that the quantitative
17 assessment is sufficient for the purposes of the EIR/EIS.

18 In response to the comment's request for a qualitative discussion of climate change effects,
19 Section 6.1.6 of the Draft EIR/EIS provides an overview of climate change and GHG emissions
20 that contribute to global climate change. This section describes in more detail greenhouse
21 gases and their global warming potential as addressed in the Intergovernmental Panel on
22 Climate Change (IPCC) scientific assessment reports, California-specific climate change
23 impacts, and information on adaptation strategies. In addition, Section 6.2.1 of the Draft
24 EIR/EIS describes the USFWS climate change strategic plan, titled *Rising to the Urgent*
25 *Challenge: Strategic Plan for Responding to Accelerating Climate Change*. This USFWS
26 strategic plan outlines the agency's adaptation planning strategies. Importantly, the
27 Proposed Project is needed to specifically address the issue of strategic conservation of rare
28 fish species that may be vulnerable to climate change or other vulnerabilities.

29 With respect to the commenter's last point requesting clarification as to whether measures
30 have been implemented to adapt to climate change impacts, Section 6.2.2 of the Draft EIR/EIS
31 describes California's Climate Adaptation Strategy and DWR's climate change policies
32 including the *Climate Action Plan – Phase I: Greenhouse Gas Emissions Reduction Plan*. The
33 Draft EIR/EIS further evaluates sea level rise effects in Chapter 12, Hydrology and Water
34 Quality, Impact HYD/WQ-17. As concluded in Impact HYD/WQ-17, under all three action
35 alternatives, the ERS facilities (marina and boat launch) would be constructed in a potential
36 sea-level rise inundation area. However, these types of facilities would have a negligible effect
37 on altering the geographic extent of sea level-rise inundation areas. Other DRS facilities
38 would be outside of the projected sea level rise inundation areas. As such, the EIR/EIS
39 concluded that impacts related to sea level rise would be less than significant and no
40 measures pertaining to climate change adaptation were needed.

Public Comment R: Letter from Kathleen Martyn Goforth, U.S. Environmental Protection Agency (December 14, 2015)

1 Response to Comment R-9


2 This comment suggests that the “Affected Environment” section of the Air Quality and
3 Greenhouse Gas Emissions chapter include a discussion of climate change and ongoing and
4 reasonable foreseeable climate change effects related to the project, based on U.S. Global
5 Change Research Program.

6 In response to this comment, see Response to Comment R-8, above. DWR and USFWS
7 appreciate the comment’s recommendation to use U.S. Global Change Research Program for
8 evaluating potential project impacts that may be exacerbated by climate change. However,
9 this approach was not added to the EIR/EIS. To address climate change effects, the Draft
10 EIR/EIS used other resources that are more regionally specific to California and to water
11 resource agencies. DWR and USFWS believe that Section 6.1, Environmental Setting, of the
12 Draft EIR/EIS’s Air Quality and Greenhouse Gas Emissions chapter adequately discusses
13 ongoing and reasonably foreseeable climate change impacts relevant to the project as
14 outlined in these more specific resources.

15 Response to Comment R-10

16 The commenter has been added to the project mailing list and, as requested, one hard copy
17 and one electronic copy will be sent.

Public Comment S: Letter from Matthew R. Jones, Yolo-Solano Air Quality Management District (December 9, 2015)



Salido Ct., Suite 103 • Davis, California 95618 (530) 757-3650 • (800) 287-3650 • Fax (530) 757-3671

December 9, 2015

Attention: John Engstrom
California Department of Water Resources
P.O. Box 942836
Sacramento, CA 94236-0001

Subject: Delta Research Station EIR

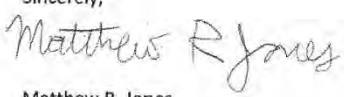
Dear Mr. Engstrom,

S1 The Yolo-Solano Air Quality Management District (District) has received the Environmental Impact Report (EIR) and Request for Comments for the project listed above. The District appreciates the opportunity to review this project. The District is submitting the following comments.

For Impact AQ/GHG-2, the EIR finds that impacts would be significant for alternatives 3 and 4 unless mitigated. The EIR proposes several mitigation measures to reduce the emissions associated with this impact, including the use of low-emission construction equipment and phasing of the construction. The EIR also proposes that Mitigation Measure AQ/GHG 2-d be implemented to reduce any residual nitrogen oxide (NOx) emissions from construction activities to levels below the District's thresholds of significance and/or needed to demonstrate federal conformity. Mitigation Measure AQ/GHG 2-d proposes to enter into a voluntary agreement with the appropriate local air district to offset construction emissions from the proposed project. The District does not require that emissions from a project in excess of District thresholds be offset by a project applicant. However, the District has entered into voluntary agreements, such as what is proposed in Mitigation Measure AQ/GHG 2-d, with applicants in the past. If project alternatives 3 or 4 are eventually chosen by the applicant, the District strongly suggests that the project applicant contact the District to discuss how this mitigation measure would be implemented prior to the start of any construction.

S2 The District consistently asks that before emissions from a project are offset through a voluntary program, the emissions are reduced to the maximum extent feasible at the project site. At the present time, the District is in agreement that implementation of Mitigation Measure AQ/GHG 2-b and Mitigation Measure AQ/GHG 2-c constitute all feasible on-site mitigation for the reduction of NOx emissions during the construction period.

If you require additional information about the District's comments in this letter, please contact me at (530) 757-3668.

Sincerely,

Matthew R. Jones
Planning Manager

Public Comment S: Letter from Matthew R. Jones, Yolo-Solano Air Quality Management District (December 9, 2015)

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Public Comment S: Letter from Matthew R. Jones, Yolo-Solano Air Quality Management District (December 9, 2015)

1 Response to Comment S-1

2 The comment accurately summarizes Mitigation Measure AQ/GHG-2d. In the event that
3 Alternatives 3 or 4 are selected, DWR, USFWS and/or their contractor(s) will contact the
4 Yolo-Solano Air Quality Management District prior to the start of construction to discuss how
5 Mitigation Measure AQ/GHG-2d would be implemented.

6 Response to Comment S-2

7 The Yolo-Solano Air Quality Management District has indicated that Mitigation Measures
8 AQ/GHG-2b and AQ/GHG-2c constitute all feasible on-site mitigation for the reduction of NOx
9 emissions during construction. This comment is noted.

Public Comment S: Letter from Matthew R. Jones, Yolo-Solano Air Quality Management District (December 9, 2015)

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Chapter 3

REVISIONS TO THE DRAFT EIR/EIS

Responses to comments in Chapter 2 of this Final EIR/EIS have resulted in revisions to the Draft EIR/EIS. In addition, modifications to Alternative 2, as described in Chapter 1 of this document, have resulted in revisions to the Draft EIR/EIS. Typographical errors from the Draft EIR/EIS are also corrected in this chapter. Those revisions are presented below. Text to be deleted is shown in ~~strike through~~, and text that has been inserted is shown underlined. Revisions are presented in the order of appearance in the Draft EIR/EIS.

EXECUTIVE SUMMARY

To reflect modifications to Alternative 2, the following text has been revised (page ES-4 of the Draft EIR/EIS).

- Boat storage, including a marina with mooring for up to 230 power boats, dry covered boat storage, open dry boat storage, open field experimental yard and boat launch;

To reflect modifications to Alternative 2, the following text has been revised (page ES-5 of the Draft EIR/EIS).

Under this alternative, development of ERS and FTC facilities would be consolidated in the predominantly undeveloped portions of the site, ~~and the~~ partially excavated and established in the Sacramento River at the southeastern end of the site.

To reflect modifications to Alternative 2, the following text has been revised in Section ES.2.5 (page ES-5 of the Draft EIR/EIS).

Unlike Alternative 2, the marina would require more land to be excavated for its construction.

To reflect modifications to Alternative 2, the following text has been revised in Section ES.2.6 (page ES-6 of the Draft EIR/EIS).

In comparison to Alternative 3, Alternative 2 would ~~also avoid~~ the most direct impacts on the potential Historic District at the RVARC site and would result in fewer areas of conflict with the Army Base District Design Guidelines because more space would be available for additional future development on the RVARC site.

To reflect revisions made to mitigation measures, the text under the heading "Mitigation Measure" in Table ES-1 has been revised for Impact AQ/GHG-2 (page ES-11).

- Mitigation Measure AQ/GHG-2a: Implement Fugitive Dust Best Management Practices and Emission Tracking (Alternatives 2, 3, and 4)

- 1 ▪ Mitigation Measure AQ/GHG-2b: Implement Construction Emission Reductions
2 (Alternatives 2, 3 and 4)
- 3 ▪ Mitigation Measure AQ/GHG-2c: Implement Construction Phasing (Alternatives
4 2, 3 and 4)
- 5 ▪ Mitigation Measure AQ/GHG-2d: Complete General Conformity Determination
6 and, if necessary, eEnter into a Voluntary Emission Reduction Agreement if
7 Emissions Remain above de minimis Conformity Thresholds for Project Portions
8 Subject to General Conformity or above Local Air District Mass Emissions
9 Significance Thresholds (Alternatives 2, 3 and 4)

10 *To reflect revisions made to mitigation measures, the text under the heading “Mitigation*
11 *Measure” in Table ES-1 has been revised for Impact AQ/GHG-3 (page ES-11).*

- 12 ▪ Mitigation Measure AQ/GHG-2a: Implement Fugitive Dust Best Management
13 Practices and Emission Tracking (Alternatives 2, 3, and 4)

14 *To reflect revisions made to mitigation measures, the text under the heading “Mitigation*
15 *Measure” in Table ES-1 has been revised for Impact CUL-2 (page ES-16).*

- 16 ▪ Mitigation Measure CUL-2a(i): Protect Historic Structures during Project
17 Construction (Alternatives 2 and 3)
- 18 ▪ Mitigation Measure CUL-2a(ii): Prepare Historic Structure Report/Historic
19 American Building Records/Historic American Engineering Records
20 (Alternatives 2 – ERS)

21 *To reflect revisions made to mitigation measures, the text under the heading “Mitigation*
22 *Measure” in Table ES-1 has been revised for Impact HAZ-4 (page ES-17).*

- 23 ▪ Mitigation Measure AQ/GHG-2a: Implement Fugitive Dust Best Management
24 Practices and Emission Tracking (Alternatives 2, 3, and 4)

25 *To reflect revisions made to mitigation measures, the text under the heading “Mitigation*
26 *Measure” in Table ES-1 has been revised for Impact HYD/WQ-1 (page ES-17).*

- 27 ▪ Mitigation Measure AQ/GHG-2a: Implement Fugitive Dust Best Management
28 Practices and Emission Tracking (Alternatives 2, 3, and 4)

29 *To reflect revisions made to mitigation measures, the text under the heading “Mitigation*
30 *Measure” in Table ES-1 has been revised for Impacts HYD/WQ-14, HYD/WQ-15, and*
31 *HYD/WQ-17 (page ES-19).*

- 32 ▪ Mitigation Measure HYD/WQ-14: Perform Hydraulic Analysis and Conform to
33 Standards in Applicable County, ~~and~~ State, and Federal Requirements
34 (Alternatives 2, 3, and 4)

CHAPTER 3. DESCRIPTION OF ALTERNATIVES

In response to Comment K-2, the following text has been revised (page 3-7 of the Draft EIR/EIS).

With approximately 165 USFWS, DWR, ~~and CDFW, NMFS and Reclamation~~ employees working on 20-30 active IEP projects, the office building would consist of work space and multiple meeting rooms to accommodate concurrent agency meetings, and other IEP and project meetings.

To reflect modifications to the description of alternatives, namely Alternative 2, the following text has been revised in Section 3.2.2 (pages 3-7 through 3-8 of the Draft EIR/EIS).

The office space would be in the range from ~~50,000 to 60,000~~ 35,000 to 52,000 square feet and would include the following types of facilities:

Employee Work Space. The office building would have office and work space (i.e., cubicles) for approximately 165 employees.

Conference Room. The office building (or in the case of Alternative 3, one of the office buildings) would have a large conference room that could accommodate up to 100 people for large meetings and conferences. This room would have audio/video projection and teleconferencing equipment, public address systems, and wireless internet.

Small Meeting Rooms and Quiet Rooms. ~~Five~~Four small staff meeting rooms (300–450 square feet each) and ~~five~~three quiet rooms (~~150~~120 square feet each) would be dispersed throughout the building(s). The meeting rooms would be used to conduct day-to-day business and would include teleconferencing capabilities and wireless internet; one small meeting room would also have videoconferencing capabilities.

To reflect modifications to the description of alternatives, namely Alternative 2, the following text has been revised in Table 3-2 (page 3-9 through 3-10 of the Draft EIR/EIS).

1 **Table 3-2.** Characteristics Associated with Alternatives 2, 3, and 4

Project Component	Description	Square Footage (sq. ft.) or Acreage and Other Characteristics		
		Alternative 2	Alternative 3	Alternative 4
ERS Facilities				
Marina	230 boat slips	Partially excavated in channel marina: approximately 2- acres 1 acre	Excavated marina: 2.1 acres	Excavated marina: 2.2 acres
Office/Administrative Building/Laboratory	Work space, conference rooms, mailroom, and reception area Contains optical equipment, fume hoods, computer stations, and water tanks	52,000 Approximately 65,000 (one 2-story building) 14,500 (one 2-story building) <u>consisting of approximately</u> <u>35,000 of office space and</u> <u>30,000 of laboratory space.</u>	41,000 (one 2-story building) <u>for</u> <u>office space</u> ; 11,000 (reuse of existing warehouse; <u>office building to be</u> shared with lab); 12,000 (reuse of existing warehouse; one 2-story building <u>for laboratory</u>); 2,500 (reuse of existing warehouse; upper floor of 2-story shared office/lab building).	52,000 (one 2-story building) <u>for</u> <u>office/administrative</u> <u>building</u> ; 14,500 (one 1-story building) <u>for laboratory.</u>
Dry-dock Boat Storage	Storage space for 29 boats	<u>10,000-18,000 (one 1-story</u> <u>covered building)</u> 18,000 (one 1-story covered building)	<u>18,000 (one 1-story covered</u> <u>building)</u>	<u>18,000 (one 1-story</u> <u>covered building)</u>
Shop/ Storage Building(s)/Warehouse	Storage space for boat equipment, metal and woodwork shops, and net fabrication Storage space for field equipment, laboratory field samples, chemicals, batteries, and flammable items	22,500 Approximately 27,000 <u>to 33,000 total (one 1-story</u> <u>building)</u> 32,000 (one 1-story building)	9,500, 3,000, 2,500, and 7,500 (four 1-story buildings) <u>for boat</u> <u>equipment, metal and woodwork</u> <u>shops</u> ; 16,000 on both upper and lower floors (32,000 total) (one 2-story building) <u>for storage.</u>	22,500 (one 1-story building) <u>for boat</u> <u>equipment, metal and</u> <u>woodwork shops</u> ; 32,000 (one 1-story building) <u>for storage.</u>

Project Component	Description	Square Footage (sq. ft.) or Acreage and Other Characteristics		
		Alternative 2	Alternative 3	Alternative 4
Open Dry-dock Boat Storage and Equipment	Open area for boat and equipment drying	30,000		
Open Field Experimental Yard	Open space accommodate a variety of field sampling equipment such as a tagging trailer, cylinder traps, rotary screw traps, ancillary vessel rigging, and a variety of tubs, troughs, tanks and containers used for sampling and fish transport devices.	35,000 30,000	<u>30,000</u>	<u>30,000</u>
<u>Marina Restroom</u>	<u>Restroom facility near the marina</u>	<u>250</u>	<u>N/A</u>	<u>N/A</u>
FTC Facilities				
Fish Study Buildings (three separate buildings)	Aquaculture and research components for three different fish species. The overall facility will include office space (conference rooms, mailroom, reception area) and a shop for storage of aquaculture equipment, fish tissue archives, metal and woodwork shops, and light mechanical maintenance area.	16,000 each (48,000 total), including 2,500 for office space and 6,000 for shop		
Evaporation Ponds/ Sedimentation Basin	Two 5,000 sq. ft. evaporation cells	10,800		

Project Component	Description	Square Footage (sq. ft.) or Acreage and Other Characteristics		
		Alternative 2	Alternative 3	Alternative 4
Water Treatment Facility	Sand filters for solids removal and either ultraviolet- or ozone-based disinfection technologies for pathogen control.	2,000		
Other				
Parking	Parking for secured state/federal vehicles, other vehicles, and visitors' vehicles	Employee parking spaces: 195 <u>203</u> Visitor parking spaces: 48 <u>70</u> Secured parking spaces: 56 <u>17</u>	Employee parking spaces: 182 Visitor parking: 54 Secured parking spaces: 58	Employee parking spaces: 208 Visitor parking spaces: 55 Secured parking spaces: 45
Total Acreage		On-land: 14 acres On-water: approximately 21.2 <u>21.2</u> acres Total: 16 acres	On-land: 18 acres On-water: 2.1 acres Total: 20.1 acres	On-land: 15 acres On-water: 2.2 acres Total: 17.2 acres

To reflect modifications to the description of alternatives, namely Alternative 2, the following text has been revised in Section 3.2.2 (page 3-11 of the Draft EIR/EIS).

Wet Slips. Under all action alternatives, a marina would be established to provide mooring for up to ~~2023~~ power boats ranging from 21 to 60 feet in length. A pump-out station would be provided for the vessels. The marina would include a sampling pier or a platform for loading testing gear such as fish traps and water quality and weather monitoring equipment.

Dry Covered Boat Storage. The dry covered boat storage facility (approximately ~~4810-18,000~~ square feet in size) would accommodate up to 30 vessels ranging from 14 to 25 feet in length. The covered storage facility would protect the vessels, prolonging the life of the vessels and related equipment.

Open Dry-Dock Boat Storage. An approximately 30,000-square-foot dry-land, open area would be used for state and federal vehicles, and boat and equipment storage. The area is expected to accommodate up to 20 vessels on trailers.

To reflect modifications to the description of alternatives, namely Alternative 2, the following text has been revised in Section 3.2.2 (page 3-12 of the Draft EIR/EIS).

The ERS laboratory would be approximately 14,500 to 30,000 square feet and consist of three main work areas, described below.

To reflect modifications to the description of alternatives, namely Alternative 2, the following text has been revised in Section 3.2.2 (page 3-12 of the Draft EIR/EIS).

Shop/Warehouse/Storage

Each action alternative would include a shop space that is approximately ~~25,000~~ 33,000 to 54,500 square feet large. This space would consist of areas for boat maintenance/repair and parts storage, a metal fabrication shop, a woodwork shop, ~~and a net fabrication/maintenance area, and~~ storage buildings for field equipment, laboratory field samples, chemicals, batteries, and flammable materials.

To reflect modifications to the description of alternatives, namely Alternative 2, the following text has been revised in Section 3.2.2 (page 3-13 of the Draft EIR/EIS).

~~Storage Buildings~~ Warehouse

~~Each action alternative would include an approximately 32,000 square foot area consisting of storage buildings for field equipment, laboratory field samples, chemicals, batteries, and flammable materials.~~

In response to Comment N-1, the following text has been revised (page 3-16 of the Draft EIR/EIS).

Figure 3-1 shows the conceptual site layout for Alternative 2 at the former Rio Vista Army Reserve Center (RVARC), which is located on the southern edge of Rio Vista at 800 Beach Drive.

To reflect modifications to Alternative 2, the following text has been revised in Section 3.2.3 (page 3-16 of the Draft EIR/EIS).

As shown in Figure 3-1, the marina would ~~be involve excavation along the shoreline and would be~~ established in the Sacramento River at the ~~southwestern~~ southeastern end of the site; A fixed pier and gangway would be constructed alongside the boat launch, providing pedestrian access to the marina. As shown in Figure 3-1, the boat launch would be split and includes a vehicle turnaround area and connects with the open yard storage area. A small restroom facility would also be installed near the boat launch. To prevent floating debris from getting lodged under the marina docks, a debris deflector would be installed at the northern end of the marina. ~~the~~ The configuration of the marina shown in the figure is preliminary and may be adjusted further into the design process. Most of the existing buildings on the RVARC's lower terrace would remain.

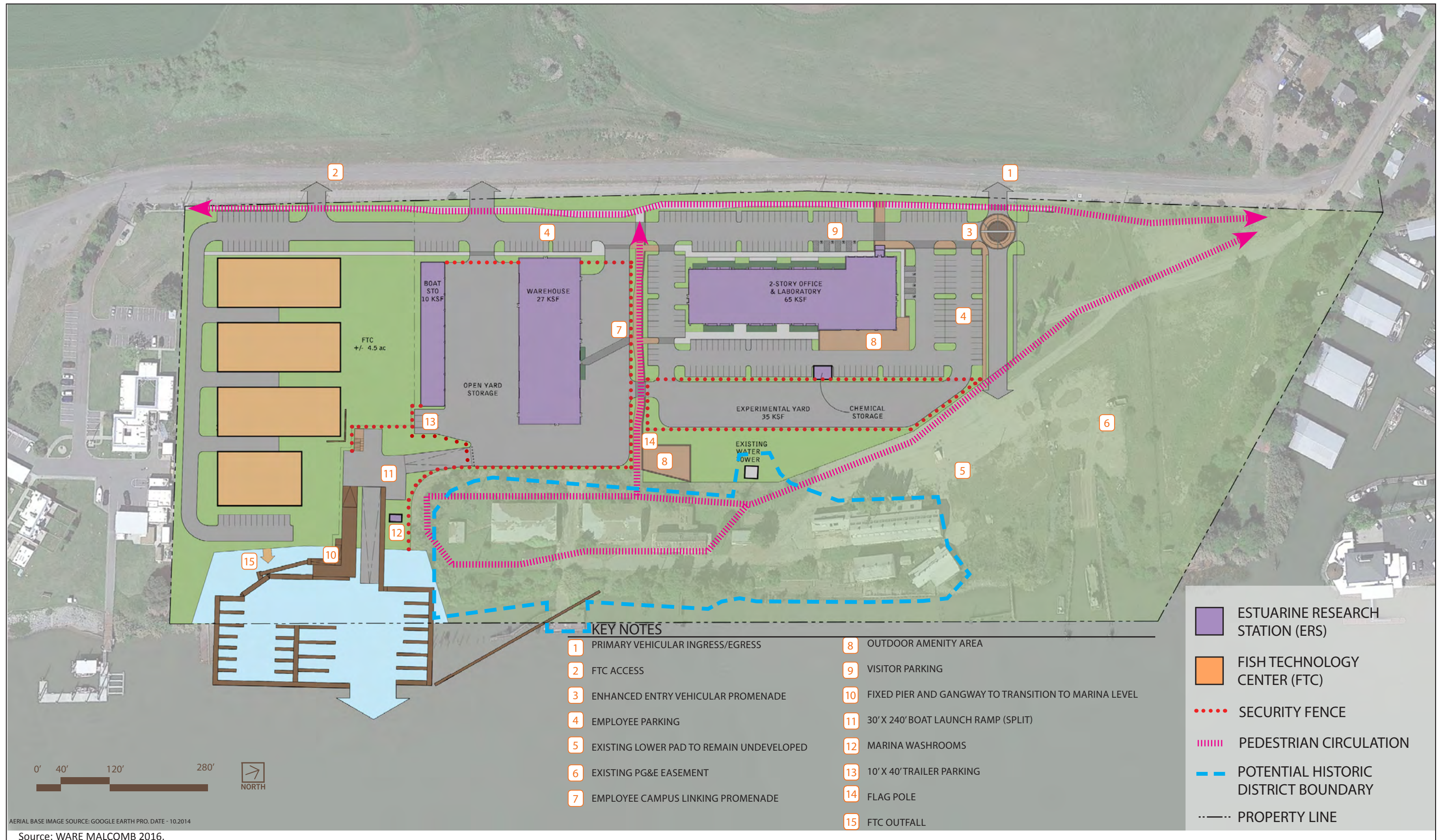
To reflect modifications to Alternative 2, Figure 3-1 has been updated (page 3-19 of the Draft EIR/EIS) and is presented on the following page.

In response to Comment N-1, the following text has been revised (page 3-21 of the Draft EIR/EIS).

Similar to Alternative 2, Alternative 3 would utilize the existing RVARC site (at 800 Beach Drive) and would include the common project components described in Section 3.2.2.

In response to Comment N-3, the following text has been revised (page 3-25 of the Draft EIR/EIS).

Table 3-4 provides a complete list of facilities that would be removed. Figure 9 of Appendix I (Historical Architectural Evaluation for the Delta Research Station) shows where these facilities are located at the RVARC site.



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To reflect modifications to Alternative 2, the following text has been revised in Table 3-4, under the heading "Disposition under Alternative 2," in the row for Facility/Building S-104 (page 3-26 of the Draft EIR/EIS).

~~Remain as is~~ Demolish

To reflect modifications to Alternative 2, the following text has been revised in Table 3-5 (page 3-27 of the Draft EIR/EIS).

Table 3-5. On-land Construction Characteristics

Work Activity	Alternative 2	Alternative 3	Alternative 4
Clearing and ground disturbance area	14 acres	18 acres	15 acres
Total excavation volume	61,866 <u>35,000</u> cy	58,110 cy	22,198 cy
Total fill volume	61,866 <u>35,000</u> cy	58,110 cy	22,073 cy
Total grading area	43,021 <u>168,000</u> square yards (~ 8.9 <u>14.0</u> acres)	45,225 square yards (~9.3 acres)	48,525 square yards (~10.0 acres)

Notes: cy = cubic yards

To reflect modifications to Alternative 2, the following text has been revised in Section 3.2.6 (pages 3-27 through 3-28 of the Draft EIR/EIS).

Marina development would require demolition and removal of existing piles/moorings, and a wooden pier, installation of 15–20 concrete piles, securing 8,000–13,000 square feet of floating docks, and installation of rock slope protection along the shoreline. Under Alternative 2, ~~no~~ approximately 37,000 cy of excavation/dredging work would be required for the marina. Some of the excavated soil and sediment could be reused on-site; wetter sediment could also be reused at a nearby upland area. Any excavated or dredged material not immediately removed from the work area would be covered or contained such that the storage piles do not result in any substantial odors. Because of the uncertainty of reuse options, for the purposes of this analysis, it is conservatively assumed that excavated soil and sediment would be off-hauled to a nearby landfill.

On the landward side of the marina, pile installation work would be conducted on land and the remaining Pilepile installation work would be conducted on-water on a barge. The dock system would likely be fabricated off-site and delivered to the site by truck. A crane would then be used to offload the dock sections from the trucks and place them on a material barge to be towed to the specific location for each section. The sections would be assembled and installed in the appropriate place. As shown in Table 3-6, shoreline protection would also be installed on the landward side of the marina to absorb the energy of the waves. This effort would entail removing

~~2,000~~3,200 cy of sediment across a ~~134,000~~-square-foot area and installing 2,000 cy of rock along the shoreline.

Under Alternatives 3 and 4, marina construction would involve land-based excavation, pile installation, and dock construction. Alternative 3 would require 71,000 cy of excavation and Alternative 4 would require up to 86,000 cy of excavation, both across an approximately 2-acre area. ~~Similar to Alternative 2, Some of the excavated soil and sediment could be reused on-site; wetter sediment could also be reused at a nearby upland area. Any excavated or dredged material not immediately removed from the work area would be covered or contained such that the storage piles do not result in any substantial odors. Because of the uncertainty of reuse options, for the purposes of this analysis, it~~ is conservatively assumed that excavated soil and sediment would be off-hauled to a nearby landfill.

~~Under Alternatives 3 and 4, P~~pile-driving activities would be based on land. Depending on how the dock would be delivered to the site, the dock would be installed either from land or on barge.

To reflect modifications to Alternative 2, the following text has been revised in Table 3-6 (pages 3-28 of the Draft EIR/EIS).

Table Error! No text of specified style in document.-6. Marina Construction and Operation Characteristics

	Alternative 2	Alternative 3	Alternative 4
Demolition			
Existing Piles/Moorings to Be Removed	1246	2	n/a
Existing Pier Removal (square feet)	2,200 4,350	7,800	n/a
Removal of Existing Piles Under Pier (square feet)	253		
Construction Equipment	Tug, crane barge, vibratory hammer, flat deck barge, and work skiff	Same as Alternative 2	n/a
Marina Construction			
Excavation Area (acres)	0 1.4	2.1	2.2
Excavation Volume (cy)	0 37,000	71,000	86,000
Dock Area (square feet)	12,700 8,000–13,000*	8,000	8,000
Number of Piles	15–20 30–35	15–20	15–20
Rock Slope Protection (cy)	--	2,100	1,600

	Alternative 2	Alternative 3	Alternative 4
Construction equipment	For pile driving: crane barge, impact pile hammer, flat deck barge, tug, and work skiff For dock installation: crane, work skiff, generator, air compressor	For excavation: scrapers and dozers For pile driving: crane and impact pile hammer For dock installation: same as Alternative 2	Same as Alternative 3
Shoreline Protection			
Excavation Volume (cy)	2,000 3,200	--	--
Excavation Area (square feet)	13,000 14,000	--	--
Rock Volume (cy)	2,000	--	--
Rock Area (square feet)	13 14,000	--	--
Construction Equipment	Excavator, dozer, and work skiff	--	--
Maintenance Dredging			
Approximate Maintenance Dredge Volume (cy) ^{a,b}	7,000–11,000 ^a	10,000	11,000

Notes: cy = cubic yards

(a) ~~The range of dredged volumes and dock area account for a range of design options that are under consideration.~~

(a,b) Maintenance dredging for all action alternatives would occur every 10–15 years as needed.

In response to Comment N-4, the following text has been revised (page 3-30 of the Draft EIR/EIS).

~~The anticipated primary access routes used for ingress/egress to the Rio Vista site would be on SR 12, Front Street, Second Street, and Beach Drive. Alternatively,~~
access to the Rio Vista site could be on SR 12, Amerada Road, Emigh Road, Montezuma Hills Road, and Beach Drive.

To reflect modifications to Alternative 2, the following text has been revised in Table 3-7 (page 3-31 of the Draft EIR/EIS).

Table 3-7. Daily Construction Vehicles Associated with Construction Activities

Alternative	Construction Type	Maximum Daily Trips (one-way)			
		Construction Worker Trips	Vendor Trips	Hauling Trips	Total
Alternative 2	Land-based construction	130 <u>134</u>	55 <u>56</u>	128 ^a <u>74</u> ^a	341 <u>300</u>
	Marina	10	0	18 ^b <u>26</u> ^b	
Alternative 3	Land-based construction	126 <u>148</u>	53 <u>62</u>	121 ^a	396
	Marina	10	0	86 ^c	
Alternative 4	Land-based construction	131 <u>150</u>	55 <u>63</u>	46 ^a	327
	Marina	10	0	85 ^d <u>81</u> ^d	

Notes: The number of trips shown includes inbound and outbound vehicle trips.

^a Hauling truck trips for all land-based construction work are expected to be spread out across 6 months.

^b Under Alternative 2, marina construction is estimated to occur over ~~105~~205 days.

^c Under Alternative 3, marina construction is estimated to occur over 115 days.

^d Under Alternative 4, marina construction is estimated to occur over 135 days.

In response to Comment A-2, the following text has been revised (page 3-31 of the Draft EIR/EIS).

Marina maintenance volumes for each alternative are presented in Table 3-~~65~~, above.

In response to Comment N-5, the following text has been revised (page 3-32 of the Draft EIR/EIS).

At this time, it is not anticipated that a processing system would be needed to remove aquaculture chemicals like formalin. After the process water is treated, the effluent would be discharged to either the Sacramento River (under Alternatives 2 and 3) or the Stockton Deepwater Ship Channel (under Alternative 4).

CHAPTER 5. AESTHETICS

To reflect modifications to Alternative 2, the following text has been revised under Impact AES-2 (page 5-21 of the Draft EIR/EIS).

The boat ramp and ~~in-channel~~partially excavated marina would be located at the southern end of the site.

To reflect modifications to Alternative 2, the following text has been revised under Impact AES-2 (page 5-24 of the Draft EIR/EIS).

First, as depicted in Figure 3-2 in Chapter 3, the overall footprint of the alternative would be greater because moving the marina inland further would cause it to occupy more of the currently undeveloped portion of the site and involve demolition of additional structures compared to Alternative 2.

CHAPTER 6. AIR QUALITY AND GREENHOUSE GAS EMISSIONS

To correct a minor citation error, the following text has been revised (page 6-7 of the Draft EIR/EIS).

According to the California Almanac of Emissions and Air Quality (CARB 2013a), many researchers consider diesel PM (DPM) to be a primary contributor to health risk from TACs because particles in the exhaust carry many harmful organics and metals, rather than being a single substance, as are other TACs.

To correct a minor error, the following text has been revised (page 6-11 of the Draft EIR/EIS).

With regard to water supply, ~~California primarily relies on snowmelt~~ provides an important source of water for its drinking water and much of the water used in irrigation during the summer. Global warming could alter, and ~~may~~is already be

altering, the seasonal pattern of snow accumulation and snowmelt and thereby reducing~~ing~~ the overall snow pack, affecting water supplies.

To correct a minor citation error, the following text has been revised (page 6-30 of the Draft EIR/EIS).

The regulation established annual performance standards for fuel producers and importers, applicable to all fuels used for transportation in California (CARB 2011a).

To correct a minor citation error, the following text has been revised (page 6-30 of the Draft EIR/EIS).

AB 1493 required CARB to develop and implement regulations to reduce automobile and light-truck GHG emissions (CARB 20103b).

In response to Comment N-8, the following text has been revised (page 6-37 of the Draft EIR/EIS).

Rio Vista Climate Action Plan

The City of Rio Vista approved a CAP in November 18, 2014. The plan outlines the GHG emissions from the City of Rio Vista and makes recommendations of measures to implement to reduce GHG emissions consistent with the goals of AB 32. The measures applicable to Alternatives 2 and 3 include the following:

- **New Construction Energy Efficiency**, which encourages energy-efficient new construction by promoting energy-efficient mortgages and technical assistance programs for developers.
- **Energy Star Appliances**, which promotes voluntary installation of Energy Star and other high-efficiency appliances.
- **Building Shade Trees**, which promotes adopting a shade tree ordinance for new construction, and development of a shade tree outreach campaign to encourage existing property owners to voluntarily plant shade trees.
- **Solar water heaters**, which promote voluntary installation of solar water heaters in new construction and building retrofits through outreach campaigning.
- **Solar Photovoltaic Systems**, which facilitates the voluntary installation of solar PV systems on residential and nonresidential buildings.
- **Building Lighting**, which encourages voluntary adoption of efficient indoor and outdoor lighting technologies in residential and nonresidential buildings.

In response to Comment R-5 and to reflect modifications to Alternative 2, the following text has been revised (page 6-49 of the Draft EIR/EIS).

~~In addition,~~ **Mitigation Measure AQ/GHG-2a (Implement Fugitive Dust Best Management Practices and Emission Tracking)** would be

implemented to minimize fugitive dust emissions and track emissions to ensure they remain below the thresholds through final project design and construction. Should emission tracking under Mitigation Measure AQ/GHG-2a indicate that emissions would exceed a threshold, DWR and USFWS would implement some combination of **Mitigation Measures AQ/GHG-2b (Implement Construction Emission Reductions)** and **AQ/GHG-2c (Implement Construction Phasing)** in a manner that would result in emissions below the conformity *de minimis* thresholds for NO_x. If Mitigation Measures AQ/GHG-2b and AQ/GHG-2c do not reduce emissions below applicable thresholds of significance and/or below the conformity *de minimis* thresholds, General Conformity applies and **Mitigation Measure AQ/GHG-2d (Complete General Conformity Determination and, if necessary, Enter into a Voluntary Emission Reduction Agreement if Emissions Remain Above De Minimis Conformity Thresholds for Project Portions Subject to General Conformity or above Local Air District Mass Emission Significance Thresholds)** would be implemented. Mitigation Measure AQ/GHG-2d would ensure that NO_x emissions are offset to net zero and ensure that emissions are below any other thresholds of significance for any criteria pollutant established by the applicable air district. These mitigation measures would ensure this through a combination of emission reduction measures and construction phase scheduling. These mitigation measures include a combination of strategies including the use of newer construction equipment and material hauling vehicles, use of alternative fuels, and use of after-market emission control devices. With implementation of Mitigation Measures AQ/GHG-2a, and as needed, a combination of AQ/GHG-2b through AQ/GHG-2d, emissions from project construction would be reduced to a level that is **less than significant with mitigation**. With this mitigation measures, the impact would be **less than significant with mitigation**.

In response to Comment R-5, the following text has been revised (pages 6-49 and 6-50 of the Draft EIR/EIS).

Mitigation Measure AQ/GHG 2a: Implement Fugitive Dust Best Management Practices and Emission Tracking (Alternatives 2, 3, and 4)

DWR's and USFWS's contractor(s) shall implement BMPs to reduce fugitive dust emissions to ensure compliance with applicable fugitive dust regulations required by the local air district or city. The following measures shall be implemented by the construction contractor(s):

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.

4. All vehicle speeds on unpaved roads shall be limited to 15 mph.
5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
6. A publicly visible sign shall be posted with the telephone number and name of the person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The air district's phone number shall also be identified to ensure compliance with applicable regulations.
7. DWR's and USFWS's contractor(s) shall present equivalent emission calculations as required by SJVAPCD Indirect Source Review (ISR) Rule or by using other methodologies recommended by the local air district to track emissions to ensure they remain below applicable thresholds. If emissions are estimated to approach the thresholds, the Project may implement Mitigation Measures AQ/GHG-2b, -2c, or -2d.

To reflect modifications to Alternative 2, the following mitigation measures have been moved to apply to Alternative 2 under Impact AQ/GHG-2 (page 6-50 of the Draft EIR/EIS). In addition to being moved, Mitigation Measure AQ/GHG-2d has been modified in response to Comment R-4 (revisions shown in double-underline and ~~strikethrough~~).

Mitigation Measure AQ/GHG-2b: Implement Construction Emission Reductions (Alternatives 2, 3 and 4)

DWR and USFWS or the contractor(s) developing the site shall develop a plan demonstrating that off-road equipment (greater than 50 horsepower) and material hauling vehicles used during Proposed Project construction (i.e., owned, leased, and subcontracted vehicles) achieve emission reductions to the maximum extent feasible. Equipment and material hauling vehicles shall achieve at least a Project-wide fleet average of 20 percent NO_x reduction and 45 percent DPM reduction compared to the most recent CARB fleet average up to a Tier IV-equivalent engine. Acceptable options for reducing emissions include the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such become available. The Proposed Project shall demonstrate that Project-wide fleet average reductions are achieved by presenting equivalent emission calculations as required for SJVAPCD Indirect Source Review (ISR) Rule or by using other methodologies recommended by the local air district. Annual and final project reports shall be prepared and shall be verified by local air district staff.

Mitigation Measure AQ/GHG-2c: Implement Construction Phasing (Alternatives 2, 3 and 4)

DWR and USFWS or the contractor(s) developing the site shall develop a plan that requires phasing of construction activities in a manner that reduces the daily and annual emissions generated from the Proposed Project, for instance by building the ERS and FTC at separate times. Annual equipment usage hours and calculation of emissions shall be compiled in a report and submitted to the local air district, consistent with requirements stated in Mitigation Measure AQ/GHG-2b.

Mitigation Measure AQ/GHG-2d: Complete General Conformity Determination and, if necessary, eEnter into a Voluntary Emission Reduction Agreement if Emissions Remain Above De Minimis Conformity Thresholds for Project Portions Subject to General Conformity or above Local Air District Mass Emission Significance Thresholds (Alternatives 2, 3 and 4).

DWR and USFWS or the contractor(s) developing the site shall complete a general conformity determination and, if necessary, enter into a voluntary emission reduction agreement (VERA) with the local air district if implementation of a combination of Mitigation Measures AQ/GHG-2b and AQ/GHG-2c would not reduce emissions below applicable thresholds of significance and /or below the General Conformity De Minimis Thresholds. The VERA would mitigate project-specific emissions by requiring that DWR and USFWS (or the site developer) provide funds to the local air district to offset emissions to net zero for portions of the Proposed Project subject to General Conformity and below the local air district mass emission threshold of significance for the Proposed Project as a whole. The local air district would administer implementation of the VERA by collecting funds, identifying emission reductions projects, funding those projects, and verifying that emission reductions have been successfully achieved. The funds will be disbursed by the air district in the form of grants. Types of emission reduction projects that could be funded may include electrification of stationary internal combustion engines, replacing old heavy-duty trucks, and/or replacing old farm tractors. The final amount of mitigation required shall be based on actual emissions generated by the Proposed Project as determined by actual equipment used and hours of operation.

To reflect modifications to Alternative 2, the following text has been revised in Tables 6-7 and 6-8 (page 6-51 and 6-52 of the Draft EIR/EIS).

1 **Table 6-7.** Construction Emissions for Alternatives 2, 3, and 4

Alternative	Construction Type	Worker Trips	Vendor Trips	Hauling Trips	Year	Emissions								
		Maximum Daily Trips		Total Trips		ROG	NO _x	CO	SO ₂	Fugitive PM ₁₀	Exhaust PM ₁₀	Fugitive PM _{2.5}	Exhaust PM _{2.5}	CO ₂ e
						tons								
2	Land-based	134130	5655	8,78715,466	20172016	0.6370786	5.3846794	5.2786514	0.00970012	0.0402046	0.26600308	0.1480163	0.2490288	8521,092
					20182017	2.74226	0.47250526	0.47670482	8.2E-047.9E-04	0.01750016	0.02660031	4.7E-034.4E-03	0.0250029	7069
	Marina	10	0	5,2951,885		0.32890191	3.77692243	2.5001292	5.5E-032.9E-03	0.2390037	0.1410087	0.1150014	0.1300081	503267
	Total					3.7083577	9.6339562	8.2558288	0.0110016	0.2970513	0.4340426	0.2680181	0.4040397	1,4251,427
3	Land-based	148126	6253	14,59414,528	20172016	0.71077	6.126653	6.1836335	0.012	0.48044	0.2770306	0.1670159	0.2850286	1,0691,054
					20182017	3.112512	0.4780524	0.4910477	8.5E-047.8E-04	0.0190016	0.0460031	5.2E-034.3E-03	0.0250029	7268
	Marina	10	0	9,1719,915		0.44045	5.0955195	3.72382	7.2E-037.5E-03	0.5030509	0.1820184	0.2220223	0.17	667692
	Total					4.260373	11.701237	10.3941063	0.020	1.002096	0.505052	0.394039	0.480	1,8081,814

Alternative	Construction Type	Worker Trips	Vendor Trips	Hauling Trips	Year	Emissions								
		Maximum Daily Trips		Total Trips		ROG	NO _x	CO	SO ₂	Fugitive PM ₁₀	Exhaust PM ₁₀	Fugitive PM _{2.5}	Exhaust PM _{2.5}	CO _{2e}
						tons								MT
4	Land-based	150131 150131	6355 6355	5,534	20172016	0.6830664	5.6035509	5.3625132	8.9E-038.5E-03	0.3900358	0.29	0.1450138	0.2720271	789757
					20182017	1.5891588	0.5370529	0.5040483	8.3E-047.9E-04	0.0190017	0.031	5.1E-034.5E-03	2.9E-02	7269
	Marina	10	0	10,95011,450		0.4470453	5.1615232	3.9263994	7.6E-037.7E-03	0.5850517	0.1830184	0.2600253	0.17	699716
	Total					2.7192705	11.3011.27	9.7929609	0.01700171	0.9940892	0.5040505	0.4100395	0.471047	1,5601,541
CEQA Threshold (tons per year unless otherwise noted)														
SJVAPCD						10	10	100	27	15		15		
YSAQMD						10	10	< AAQS		80 lb/day				

Note:

1. Any pollutant with the potential to exceed the applicable CEQA threshold is shown in the total row with ***bold, italic type and underlining***.

1 **Table 6-8.** Construction Emissions of CO₂e for the ERS and FTC under Alternatives 2, 3, and 4

Alternative	Construction Type	Worker Trips	Vendor Trips	Hauling Trips	Year	Emissions of CO ₂ e (MT)
		Maximum Daily Trips		Total Trips		
2	Land-based – ERS	<u>134</u> 130	<u>56</u> 55	<u>8,787</u> 15,466	<u>2017</u> 2016	<u>654</u> 819
					<u>2018</u> 2017	<u>54</u> 52
	Land-based – FTC	<u>134</u> 130	<u>56</u> 55	<u>8,787</u> 15,466	<u>2017</u> 2016	<u>198</u> 273
					<u>2018</u> 2017	<u>16</u> 17
	Marina	10	0	<u>5,295</u> 1,885		<u>503</u> 267
Total						1,427
3	Land-based – ERS	<u>148</u> 126	<u>62</u> 53	<u>14,594</u> 14,528	<u>2017</u> 2016	<u>819</u> 790
					<u>2018</u> 2017	<u>55</u> 51
	Land-based – FTC	<u>148</u> 126	<u>62</u> 53	<u>14,594</u> 14,528	<u>2017</u> 2016	<u>250</u> 264
					<u>2018</u> 2017	<u>17</u>
	Marina	10	0	<u>9,171</u> 9,915		<u>667</u> 692
Total						1,814
4	Land-based – ERS	<u>150</u> 131	<u>63</u> 55	5,534	<u>2017</u> 2016	<u>604</u> 568
					<u>2018</u> 2017	<u>55</u> 52
	Land-based – FTC	<u>150</u> 131	<u>63</u> 55	5,534	<u>2017</u> 2016	<u>185</u> 189
					<u>2018</u> 2017	<u>17</u>
	Marina	10	0	<u>10,950</u> 11,450		<u>699</u> 716
Total						<u>1,560</u> 1,541

Note:

1. Numbers may not total due to rounding.
2. The emissions associated with land-based construction were calculated for the DRS as a whole, and then prorated based on square feet of the ERS and FTC to determine the relative emissions for each facility.

In response to Comment R-3, the following text has been revised (page 6-53 of the Draft EIR/EIS).

Thus, to ensure Proposed Project emissions are below the thresholds of significance or offset to net zero if General Conformity is applicable, DWR and USFWS would implement some combination of **Mitigation Measures AQ/GHG-2b (Implement Construction Emission Reductions)**, ~~and **AQ/GHG-2c (Implement Construction Phasing)**, and **AQ/GHG-2d (Enter into a Voluntary Emission Reduction Agreement if Emissions Remain Above De Minimis Conformity Thresholds for Project Portions Subject to General Conformity or above Local Air District Mass Emission Significance Thresholds)**~~ in a manner that would result in emissions below the conformity *de minimis* thresholds for NO_x. ~~If Mitigation Measures AQ/GHG-2b and AQ/GHG-2c do not reduce emissions below applicable thresholds of significance and/or below the conformity *de minimis* thresholds, General Conformity applies and **Mitigation Measure AQ/GHG-2d (Complete General Conformity Determination and, if necessary, Enter into a Voluntary Emission Reduction Agreement if Emissions Remain Above De Minimis Conformity Thresholds for Project Portions Subject to General Conformity or above Local Air District Mass Emission Significance Thresholds)**~~ would be implemented. Mitigation Measure AQ/GHG-2d would ensure that NO_x emissions are offset to net zero and ensure that emissions are below any other thresholds of significance for any criteria pollutant established by the applicable air district.

To reflect modifications to Alternative 2, the following text has been moved (deleted from its previous location) (pages 6-53 through 6-54 of the Draft EIR/EIS), as described above for Mitigation Measures AQ/GHG-2b, 2c, and 2d.

~~Mitigation Measure AQ/GHG-2b: Implement Construction Emission Reductions (Alternatives 3 and 4)~~

~~DWR and USFWS or the contractor(s) developing the site shall develop a plan demonstrating that off-road equipment (greater than 50 horsepower) and material-hauling vehicles used during Proposed Project construction (i.e., owned, leased, and subcontracted vehicles) achieve emission reductions to the maximum extent feasible. Equipment and material-hauling vehicles shall achieve at least a Project-wide fleet average of 20 percent NO_x reduction and 45 percent DPM reduction compared to the most recent CARB fleet average up to a Tier IV equivalent engine. Acceptable options for reducing emissions include the use of late-model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such become available. The Proposed Project shall demonstrate that Project-wide fleet average reductions are achieved by presenting equivalent emission calculations as required for SJVAPCD Indirect Source Review (ISR) Rule or by using other methodologies recommended by the local air district. Annual and final project reports shall be prepared and shall be verified by local air district staff.~~

~~Mitigation Measure AQ/GHG-2c: Implement Construction Phasing (Alternatives 3 and 4)~~

DWR and USFWS or the contractor(s) developing the site shall develop a plan that requires phasing of construction activities in a manner that reduces the daily and annual emissions generated from the Proposed Project, for instance by building the ERS and FTC at separate times. Annual equipment usage hours and calculation of emissions shall be compiled in a report and submitted to the local air district, consistent with requirements stated in Mitigation Measure AQ/GHG-2b.

Mitigation Measure AQ/GHG-2d: Complete General Conformity Determination and, if necessary, Enter into a Voluntary Emission Reduction Agreement if Emissions Remain Above De Minimis Conformity Thresholds for Project Portions Subject to General Conformity or above Local Air District Mass Emission Significance Thresholds (Alternatives 3 and 4).

DWR and USFWS or the contractor(s) developing the site shall complete a general conformity determination and, if necessary, enter into a voluntary emission reduction agreement (VERA) with the local air district if implementation of a combination of Mitigation Measures AQ/GHG-2b and AQ/GHG-2c would not reduce emissions below applicable thresholds of significance and /or below the General Conformity De Minimis Thresholds. The VERA would mitigate project-specific emissions by requiring that DWR and USFWS (or the site developer) provide funds to the local air district to offset emissions to net zero for portions of the Proposed Project subject to General Conformity and below the local air district mass emission threshold of significance for the Proposed Project as a whole. The local air district would administer implementation of the VERA by collecting funds, identifying emission reductions projects, funding those projects, and verifying that emission reductions have been successfully achieved. The funds will be disbursed by the air district in the form of grants. Types of emission reduction projects that could be funded may include electrification of stationary internal combustion engines, replacing old heavy-duty trucks, and/or replacing old farm tractors. The final amount of mitigation required shall be based on actual emissions generated by the Proposed Project as determined by actual equipment used and hours of operation.

To reflect modifications to Alternative 2, the following text has been revised under Impact AQ/GHG-5 (page 6-57 of the Draft EIR/EIS).

As shown in Tables 6-7 and 6-8, combined GHG emissions associated with construction of Alternative 2 would be 1,427,425 MT CO_{2e}, of which 1,210 MT CO_{2e} would be attributable to the ERS, and 215 MT CO_{2e} attributable to the FTC.

To reflect modifications to Alternative 2, the following text has been revised in Tables 6-9 and 6-10 (pages 6-64 through 6-69 of the Draft EIR/EIS).

1 **Table 6-9.** Operational Emissions from Alternative 1, 2, 3 and 4

Alternative	Source Type	Emissions								
		ROG	NO _x	CO	SO ₂	Fugitive PM ₁₀	Exhaust PM ₁₀	Fugitive PM _{2.5}	Exhaust PM _{2.5}	CO ₂ e
		tons/year								
Alternative 1 (future)	Area	1.33	0.00	0.00			0.00		0.00	0
	Energy	0.02	0.14	0.12	8.60E-04		0.01		0.01	527
	Energy – pumps									0
	Mobile – vehicles	0.55	1.51	5.83	8.89E-03	0.59	0.02	0.16	0.02	749
	Mobile – boats	9.27	46.56	44.74	5.44E-02		1.79		1.79	1,812
	Off-road	0.03	0.28	0.17	2.00E-04		0.02		0.02	19
	Waste									48
	Water									220
	Total	<u>11.19</u>	<u>48.49</u>	<u>50.86</u>	6.43E-02	0.59	1.85	0.16	1.85	3,376
Alternative 1 (existing)	Area	1.33	0.00	0.00			0.00		0.00	0
	Energy	0.02	0.14	0.12	8.60E-04		0.01		0.01	527
	Energy – pumps									0
	Mobile – vehicles	0.48	1.32	5.12	7.82E-03	0.52	0.02	0.14	0.02	659
	Mobile – boats	9.27	46.56	44.74	5.44E-02		1.79		1.79	1,812
	Off-road	0.03	0.28	0.17	2.00E-04		0.02		0.02	19
	Waste									48
	Water									220
	Total	<u>11.12</u>	<u>48.31</u>	<u>50.16</u>	6.33E-02	0.52	1.85	0.14	1.85	3,285
Alternative 2	Area	1.56 1.61	0.00	0.00			0.00		0.00	0
	Energy	0.02	0.21 0.20	0.18 0.17	1.18E-03 1.18E-03		0.02		0.02	703 797
	Energy – pumps									716 0

Alternative	Source Type	Emissions								
		ROG	NO _x	CO	SO ₂	Fugitive PM ₁₀	Exhaust PM ₁₀	Fugitive PM _{2.5}	Exhaust PM _{2.5}	CO _{2e}
		tons/year								MT/year
	Mobile – vehicles	0.49	1.32	5.19	9.92E-03	0.64	0.02	0.02	0.02	770
	Mobile – boats	9.27	46.56	44.74	5.44E-02		1.79		1.79	1,812
	Off-road	0.03	0.24	0.16	2.00E-04		0.02		0.02	19
	Waste									<u>5463</u>
	Water									<u>218226</u>
	Total	<u>11.4237</u>	48.32	<u>50.2628</u>	<u>6.57E-02</u>	0.64	1.85	0.02	1.84	<u>4,2923,686</u>
	Net Change in Comparison to Alternative 1 (future)	<u>0.1722</u>	<u>-0.1716</u>	<u>-0.6058</u>	<u>0.00135E-03</u>	0.05	<u>0.0001</u>	<u>-0.1401</u>	0.00	<u>316311</u>
	Net Change in Comparison to Alternative 1 (existing)	<u>0.249</u>	<u>0.031</u>	<u>0.1113</u>	0.00	0.12	<u>0.010</u>	<u>-0.120.03</u>	0.00	<u>1,007401</u>
Alternative 3	Area	<u>1.5178</u>	0.00	<u>0.010</u>	0.00E+00		0.00		0.00	0
	Energy	<u>0.023</u>	<u>0.190.26</u>	<u>0.1622</u>	<u>1.12E-03</u>		<u>0.021</u>		<u>0.021</u>	<u>672887</u>
	Energy – pumps									716
	Mobile – vehicles	0.49	1.32	5.19	9.92E-03	0.64	0.02	0.17	0.02	770
	Mobile – boats	9.27	46.56	44.74	5.44E-02		1.79		1.79	1,812
	Off-road	0.03	0.24	0.16	2.00E-04		0.02		0.02	19
	Waste									<u>7950</u>
	Water									<u>213247</u>
	Total	<u>11.5932</u>	<u>48.3138</u>	<u>50.2632</u>	<u>6.56E-02</u>	0.64	1.85	0.17	<u>1.854</u>	<u>4,252531</u>
	Net Change in Comparison to Alternative 1	<u>0.1339</u>	<u>-0.1811</u>	<u>-0.6154</u>	<u>1.29E-030.00</u>	0.05	-0.01	0.01	<u>0.0001</u>	<u>8761,156</u>

Alternative	Source Type	Emissions								
		ROG	NO _x	CO	SO ₂	Fugitive PM ₁₀	Exhaust PM ₁₀	Fugitive PM _{2.5}	Exhaust PM _{2.5}	CO _{2e}
		tons/year								MT/year
	Net Change in Comparison to Alternative 1 (existing)	<u>0.2046</u>	<u>0.080</u>	<u>0.4017</u>	0.00	0.12	<u>0.0001</u>	0.03	<u>0.0001</u>	<u>9671,246</u>
Alternative 4	Area	<u>1.6647</u>	0.00	<u>0.010</u>	0.00E+00		0.00		0.00	0
	Energy	0.02	<u>0.2016</u>	<u>0.1317</u>	<u>9.4E-04</u> <u>0.1190E-03</u>		<u>0.021</u>		<u>0.021</u>	<u>689857</u>
	Energy – pumps									716
	Mobile – vehicles	0.58	1.98	6.63	1.16E-02	0.65	0.03	0.18	0.02	926
	Mobile – boats	9.27	46.56	44.74	5.44E-02		1.79		1.79	1,812
	Off-road	0.03	0.24	0.16	2.00E-04		0.02		0.02	19
	Waste									54
	Water									218
	Total	<u>11.5637</u>	<u>48.9398</u>	<u>51.6771</u>	<u>6.71E-02</u>	0.65	<u>1.865</u>	0.18	1.85	<u>4,603,435</u>
	Net Change in Comparison to Alternative 1	<u>0.3618</u>	<u>0.494</u>	<u>0.851</u>	0.00	0.06	0.02	0.02	0.01	1,228
	Net Change in Comparison to Alternative 1 (existing)	0.43	0.68	1.56	0.00	<u>0.134</u>	<u>0.020</u>	0.04	<u>0.010</u>	<u>1,149,318</u>

- 1 **Notes:**
- 2 The underlined and italicized data for the No Action Alternative 1 indicate that had these been a new project and not part of baseline conditions they would exceed a CEQA
- 3 threshold of significance.
- 4 The definition of source categories can be found in the CalEEMod User's Guide (CAPCOA 2013).

1 **Table 6-10.** Operational Emissions from the ERS and FTC under Alternatives 2, 3, and 4

Alternative	Source Type	CO2e Emissions (MT/year)	
		ERS	FTC
Alternative 2	Area	0	0
	Energy	<u>611527</u>	<u>186176</u>
	Energy – pumps	<u>0537</u>	<u>0179</u>
	Mobile – vehicles	<u>591577</u>	<u>179193</u>
	Mobile – boats	<u>1,3901,812</u>	<u>4220</u>
	Off-road	<u>1415</u>	<u>45</u>
	Waste	<u>4840</u>	<u>1514</u>
	Water	<u>173163</u>	<u>5355</u>
	Total	<u>2,8273,671</u>	<u>859622</u>
	Net Change in Comparison to Alternative 1 Attributable to ERS versus FTC (future)	<u>239631</u>	<u>73285</u>
	Net Change in Comparison to Alternative 1 Attributable to ERS versus FTC (existing)	<u>308713</u>	<u>94294</u>
Alternative 3	Area	0	0
	Energy	<u>680504</u>	<u>207168</u>
	Energy – pumps	<u>549537</u>	<u>167179</u>
	Mobile – vehicles	<u>591577</u>	<u>179193</u>
	Mobile – boats	<u>1,3901,812</u>	<u>4220</u>
	Off-road	<u>1415</u>	<u>45</u>
	Waste	<u>6137</u>	<u>1913</u>
	Water	<u>190160</u>	<u>5853</u>
	Total	<u>3,4753,642</u>	<u>1,056611</u>
	Net Change in Comparison to Alternative 1 Attributable to ERS versus FTC (future)	<u>886597</u>	<u>269279</u>
	Net Change in Comparison to Alternative 1 Attributable to ERS versus FTC (existing)	<u>955679</u>	<u>290288</u>
Alternative 4	Area	0	0
	Energy	<u>657517</u>	<u>200172</u>
	Energy – pumps	<u>549537</u>	<u>167179</u>
	Mobile – vehicles	<u>710694</u>	<u>216232</u>

Alternative	Source Type	CO ₂ e Emissions (MT/year)	
		ERS	FTC
	Mobile – boats	<u>1,390</u> 1,812	<u>422</u> 0
	Off-road	<u>14</u> 15	<u>4</u> 5
	Waste	<u>42</u> 40	<u>13</u> 14
	Water	<u>167</u> 163	<u>51</u> 55
	Total	<u>3,530</u> 3,778	<u>1,072</u> 657
	Net Change in Comparison to Alternative 1 Attributable to ERS versus FTC (future)	<u>942</u> 726	<u>286</u> 333
	Net Change in Comparison to Alternative 1 Attributable to ERS versus FTC (existing)	<u>1,011</u> 807	<u>307</u> 342

Note: Emissions associated with the FTC and ERS were prorated based on square footage of the facilities.

The following text in Mitigation Measure AQ/GHG-11 has been revised to remove BMPs that are not relevant to the Proposed Project (page 6-75 of the Draft EIR/EIS).

Mitigation Measure AQ/GHG-11: Implement DWR Greenhouse Gas Emission Reduction Plan portion of the Climate Action Plan BMPs and Mitigation Measures for Operation (Alternatives 2, 3, and 4 - ERS).

During ERS operation, DWR and USFWS shall implement all applicable BMPs and mitigation measures for operation that are listed in DWR's GGERP portion of the CAP. If a BMP or mitigation measure is deemed infeasible or not applicable, a justification shall be provided and approved by the DWR CEQA Climate Change Committee that failing to implement that BMP or mitigation measure would not be detrimental to the Proposed Project's consistency with the Greenhouse Gas Reduction Plan. The BMPs and mitigation measures that should be included in the plan include the following:

1. Implement energy efficiency improvements of pumps through design, construction and refurbishment methods.
- ~~2. Participate in DWR's Renewable Energy Procurement Plan.~~
- ~~23.~~ 23. Investigate and implement, if feasible, opportunities for renewable energy development at the facilities subject to safety, emergency, and environmental considerations.
- ~~34.~~ 34. Consider and implement, if feasible, opportunities for environmental restoration activities that will increase the sequestration of carbon at the project site.
- ~~5. Participate in local utility green energy and/or carbon offset programs to the extent feasible.~~

46. Implement DWR's Sustainability Policy, which includes tracking GHG emissions; incorporating recycled wastewater into facilities when technically feasible and cost effective; maximizing opportunities to reduce, reuse, and recycle materials; developing sustainable business practices for facilities, fleet, workplace, procedures, and management decisions; utilizing purchasing power to meet sustainability objectives; incorporating energy and water efficiency and conservation in all capital and renovation projects, as well as operation activities, within budgetary constraints and programmatic requirements; providing electric vehicle charging stations in employee parking areas of all new or renovated buildings, when feasible; and ensuring Energy Star® purchasing to reduce energy use of appliances.

57. Implement BMPs for vegetation management activities, which include using fuel-efficient landscaping equipment; shutting down equipment when not in use after 5 minutes; using spot application of herbicides; controlling nonnative weed species as soon as populations are found; planning and scheduling vegetation maintenance activities to minimize driving time and return trips to the site; using native or drought-resistant landscaping around facilities; and encouraging landscaping contracts to use manual techniques to the extent possible to reduce use of gas powered equipment.

CHAPTER 7. BIOLOGICAL RESOURCES – TERRESTRIAL

To reflect modifications to Alternative 2, the following text has been revised under Impact BIO-8 (page 7-67 of the Draft EIR/EIS).

While detailed designs have not been completed, the marina and ~~boat ramp debris reflector~~ would be approximately 21.2 acres in size within waters, ~~although not all of this area would be impacted.~~ Impacts would result over a portion of this area from installation of piles and docks, ~~placement of fill for the boat ramp and shoreline protection~~ installation of the debris deflector, and possibly sedimentation or erosion during site grading.

To correct a typographical error, the following text has been revised under Impact BIO-10 (page 7-70 of the Draft EIR/EIS).

Implementation of **Mitigation Measure BIO-10 (Use Native, Drought-Tolerant Plants for Landscaping)**, along with the other mitigation measures (BIO-1 through BIO-9~~10~~) listed in this chapter and Chapter 8, Biological Resources – Aquatic (Mitigation Measures FISH-1a through FISH-9), would ensure that development of the ERS and FTC under Alternatives 2 and 3 is consistent with the City of Rio Vista

General Plan and the ABD Design Guidelines such that impacts would be **less than significant with mitigation**.

CHAPTER 8. BIOLOGICAL RESOURCES – AQUATIC

In response to Comment K-6, the following text from Table 8-1 has been revised under the column entitled “Distribution” for Green Sturgeon (page 8-5 of the Draft EIR/EIS).

Pacific Ocean, Bay-Delta, SR, & SJR

The following citation has been revised to correct a minor editorial error on page 8-8 of the Draft EIR/EIS.

California sea lions (*Zalophus californianus*) are occasionally observed foraging in the Sacramento River as far upstream as Discovery Park in Sacramento (CBS13 2012, ABC13 2010) and as far south as Merced County on the San Joaquin River (Kay 2004, USFWS 2014e).

In response to Comment K-6, the following text from Table 8-2 has been revised under the column entitled “Habitat Characteristics” for Green Sturgeon (page 8-12 of the Draft EIR/EIS).

These are the most marine species of sturgeon. Abundance increases northward of Point Conception. Spawns in the Sacramento, ~~Klamath, and Trinity~~ Rivers. Spawns at temps between 8-14 degrees C. Preferred spawning substrate is large cobble, but can range from clean sand to bedrock. Occasionally reported in the San Joaquin River upstream from Stockton (Jackson, Z. J., and J. P. Van Eenennaam 2013)

The following citation has been revised to correct a minor editorial error on page 8-10 of the Draft EIR/EIS.

- USFWS Critical Habitat mapper (USFWS 2015c) and NOAA essential fish habitat mapper (NMFWS 2010).

The following citation has been revised to correct a minor editorial error in Table 8-2 (second row and third column) of page 8-12 of the Draft EIR/EIS.

Occasionally reported in the San Joaquin River upstream from Stockton (Jackson, ~~Z. J., and J. P.~~ Van Eenennaam 2013)

The following citation has been revised to correct a minor editorial error in Table 8-2 (second row and far right-hand column) of page 8-14 of the Draft EIR/EIS.

Not Expected. Naturally spawned spring-run Chinook have been extirpated from the San Joaquin drainage (Lindley et al. 2004). Strays from populations in the Sacramento River basin may occasionally occur.

To reflect modifications to Alternative 2, the following text has been revised in Section 8.3.1 (page 8-18 of the Draft EIR/EIS).

Construction of the marina and boat ramp for the ERS at the RVARC site would occur either (1) partially excavated in lands adjacent to the ~~within the~~ Sacramento River and within the river (Alternative 2, Configuration 1; Figure 3-1), or (2) excavated in lands adjacent to the river and allowed to flood once construction is complete (Alternative 3, Configuration 2; Figure 3-2).

To reflect modifications to Alternative 2, the following text has been revised under Impact FISH-1 (page 8-20 of the Draft EIR/EIS).

Effects on Fish. Instream construction for the proposed marina would include installation of approximately 30-35~~15-20~~ new pilings to secure floating docks and slips.

The following citation has been revised to correct a minor editorial error on page 8-21 of the Draft EIR/EIS.

Eggs, larvae, and juvenile fish might be affected more acutely than other life stages 12 because they lack the physical ability, or have reduced ability compared to adults, to move 13 away from loud noise (ICF International Jones & Stokes, and Illingworth and Rodkin 2009).

To reflect modifications to Alternative 2, the following text has been revised under Impact FISH-3 (page 8-26 of the Draft EIR/EIS).

Under Alternative 2, aside from ERS marina construction, other in-water and shoreline construction activities ~~associated with the ERS include installation of the boat launch, and in-water work associated with the FTC~~ includes construction of the intake and outfall associated with the FTC.

To correct a typographical error, the following text has been revised on page 8-30 of the Draft EIR/EIS.

According to Sommers and Meria (2013), Delta Smelt are not present when turbidities are less than about 12 NTU and post-larvae are strongly associated with lower Secchi depths.

Since publication of the Draft EIR/EIS, unpublished data that was cited in Chapter 8 has now been published. The following text has been modified to address this update on page 8-32 of the Draft EIR/EIS.

Sabal et al. (2016) ~~and Merz (unpublished data)~~ found evidence of several species of concern, including Pacific Lamprey, Chinook Salmon, and Delta Smelt, in the stomachs of Striped Bass sampled at a marina in the Delta.

To reflect modifications to Alternative 2, the following text has been revised under Impact FISH-5, Alternative 3 (page 8-34 of the Draft EIR/EIS).

Development of an off-channel marina would adversely affect special-status fishes similar to that of in-channel the partially excavated marina as described above for Alternative 2, such as by creating habitat that favors invasive or predator species.

1 *To correct an error regarding the description of Mitigation Measure FISH-5 for Alternative 3,*
2 *the following sentence has been revised under the heading 'Estuarine Research Station' (page*
3 *8-35 of the Draft EIR/EIS).*

4 Mitigation Measure FISH-5 which requires that ~~docks be constructed of materials that~~
5 ~~maximize light transfer~~proper methods are employed for compensating impacts to
6 aquatic habitat, would be implemented to reduce potential adverse effects of
7 constructing new docks.

8 *To correct an error regarding the description of Mitigation Measure FISH-5 for Alternative 3,*
9 *the following sentence has been revised under the heading 'Delta Research Station' (page 8-35*
10 *of the Draft EIR/EIS).*

11 Mitigation Measure FISH-5 which requires that ~~docks be constructed of materials that~~
12 ~~maximize light transfer~~proper methods are employed for compensating impacts to
13 aquatic habitat, would reduce potential adverse effects of constructing new docks.

14 *To correct an error regarding the description of Mitigation Measure FISH-5 for Alternative 4,*
15 *the following sentence has been revised (page 8-36 of the Draft EIR/EIS).*

16 Implementation of Mitigation Measure FISH-5 which requires that ~~docks be~~
17 ~~constructed of materials that maximize light transfer~~proper methods are employed
18 for compensating impacts to aquatic habitat, would reduce potential adverse effects
19 of constructing new docks.

20 *To reflect modifications to Alternative 2, the following text has been revised under Impact FISH-*
21 *6 (page 8-36 of the Draft EIR/EIS).*

22 Under Alternative 2, development of the ERS marina ~~and boat ramp~~, the FTC intake
23 and outfall, and possibly other DRS facilities may result in temporary and permanent
24 impacts on tidal freshwater marsh and riparian vegetation along the shoreline of the
25 Sacramento River.

26 *To correct a minor edit, the following sentence has been revised on page 8-39 of the Draft*
27 *EIR/EIS.*

28 Impacts from ~~construction~~operation of the DRS would be described above for the ERS
29 and FTC.

30 *The following citation has been revised to correct a minor editorial error on page 8-44 of the*
31 *Draft EIR/EIS.*

32 Water temperatures in the San Joaquin River at Rough 33 and Ready Island (RRI)
33 downstream of the Proposed Project site in Stockton range from 34 about 5.0°C to

27°C, and average temperatures in summer months are relatively stable at 35 around 22–25°C (RRI station; CDEC 2015c).

CHAPTER 9. CULTURAL RESOURCES

Since publication of the Draft EIR/EIS, the consultation process with SHPO occurred through Section 106 of the National Historic Preservation Act (NHPA) and was completed in November 2016. To reflect the current status of the Section 106 consultation process, the following paragraph has been added before the last paragraph on page 9-17 of the Draft EIR/EIS.

The SHPO was contacted by the USFWS in 2015 to initiate consultation under Section 106 of the NHPA for the Proposed Project; consultation continued into 2016. In their most recent letter to SHPO, the USFWS did not nominate the District to the NRHP, but stated that “it is clear that the District is potentially eligible to the NRHP” and, that for the purposes of the current project, would treat the District as eligible for the NRHP. The SHPO did not disagree with the USFWS’s statement on NRHP eligibility and the intent to treat the resource as an eligible property. The SHPO also acknowledged the 2015 evaluation of the District as eligible for the CRHR. The SHPO was not asked to make a determination regarding whether the potential Historic District is eligible for listing in the CRHR; for this reason, it is referred to throughout this document as a “potential Historic District.”

To reflect modifications to Alternative 2, the following text has been revised under Impact CUL-2 (pages 9-30 to 9-31 of the Draft EIR/EIS).

Under Alternative 2, with the exception of the marina and debris deflector (shown in Figure 3-1), the majority of the new facilities would be constructed outside of the potential Historic District boundary (see Figure 3-1 in Chapter 3, Description of Alternatives), which is the only resource on the RVARC site that has been determined to potentially be a significant historical resource. Construction of the debris deflector would require removal of a large wooden pier (S-104), which is considered a contributing element of the potential Historic District.

Protective measures implemented under **Mitigation Measure CUL-2a(i) (Protect Historic Structures During Project Construction)**, would ensure that the buildings, other than the large wooden wharf, within the potential Historic District would not be inadvertently damaged during construction of the facilities. **Mitigation Measure CUL-2a(ii) (Prepare Historic Structure Reports/Historic American Building Records)** cannot mitigate the impacts of demolition but will allow the wharf, which was inaccessible at the time of the field inventory, to be fully recorded.

As described in Chapter 14, *Noise*, construction activities would not create vibration and noise to a level that would have the potential to affect nearby sensitive receptors. Since buildings within the potential Historic District are located closer to the construction than the nearest sensitive receptors (approximately 113 feet away), potential vibration effects to buildings within the potential Historic District were evaluated. Consistent with Chapter 14, this analysis used the same vibration impact threshold of 0.2 peak particle velocity (PPV) inch/second as the threshold for determining potential adverse effects on “non-engineered timber and masonry” structures. Vibration effects on these buildings were determined by using the

Caltrans *Transportation and Construction-Induced Vibration Guidance Manual* (Jones & Stokes 2004). Using equations from the Caltrans vibration guidance manual, vibratory pile driving activities associated with the marina could generate vibration levels of 0.11 inch per second at the closest building. Since estimated vibration levels are well below the 0.2 in/second threshold, marina construction would not result in damage to these buildings due to ground-borne vibration.

In addition, the district is potentially eligible for listing in the CRHR because of its association with activities that focused on the Sacramento River and Delta region, and its current setting along the Sacramento River waterfront would not be compromised or diminished by construction of Alternative 2. Structures that were involved with the operations of USACE and the U.S. Army once occupied the space where the ERS facilities would be constructed, but the addition of new buildings would not significantly affect the setting of the Historic District, providing that the new buildings comply with the ABD Guidelines (MIG 2011: 33), which state that development “should protect, incorporate and enhance the unique visual character and ‘sense of place’ of the site created by the combination of the adjacent Sacramento River, the existing riverfront complex of buildings and structures and the mature trees.” The Guidelines (MIG 2011:33-34) provide standards and guidelines for building design to ensure that new buildings would be compatible with the potential Historic District.

Compliance with the ABD Guidelines and implementation of Mitigation Measure CUL-2a(i) would avoid impacts on the potential Historic District, other than the wharf that will be removed in order to construct the debris deflector. Application of Mitigation Measure CUL-2a(ii) would require additional recordation of the wharf prior to demolition. These mitigation measures are consistent with SHPO’s Section 106 concurrence letter dated November 7, 2016, which acknowledges that with the exception of pier S-104, the potential Historic District will not be impacted. The SHPO letter notes that pier S-104 will be photographed and documented and that interpretive signage will be installed. Furthermore, if SHPO ultimately determines that the potential Historic District is not eligible for listing in the CRHR, Mitigation Measure CUL-2a would not be needed. While the wharf is a contributing element to the potential Historic District, JRP noted that the integrity of the wharf was compromised by the addition of elements outside of the period of significance (JRP 1997). Its removal would not render the potential Historic District ineligible for listing in the NRHP or CRHR, as the District would still retain enough of its character-defining features to convey the reasons for its significance. As a result, Under CEQA, this impact would be reduced to a level that is less than significant with mitigation with the implementation of Mitigation Measures CUL-2a(i) and CUL-2a(ii). Because the Historic District is not eligible for the NRHP, there would be a finding of no effect under NEPA.

To reflect modifications to Alternative 2, Mitigation Measure CUL-2a has been revised and Mitigation Measure CUL-2a(ii) has been added (page 9-31 of the Draft EIR/EIS).

Mitigation Measure CUL-2a(i): Protect Historic Structures (Alternatives 2 and 3)

In the event that SHPO determines that the potential Historic District is not eligible for listing in the CRHR, no protective measures are required. However, in the event

that SHPO determines that the potential Historic District is eligible for the listing in the CRHR, or if no determination has been made by SHPO, construction activities in the vicinity of the potential Historic District have the potential to disturb buildings that are contributing elements to this potential historical resource. Precautions to protect built resources from construction vehicles and debris may include fencing or debris meshing. During construction, protective measures shall be field checked as needed by a qualified architectural historian with demonstrated experience conducting monitoring of this nature.

Mitigation Measure CUL-2a(ii): Prepare Historic Structure Report/Historic American Building Records/Historic American Engineering Records (Alternatives 2 – ERS)

Before developing plans for demolishing the wharf (S-104), a Historic American Building Records or Historic American Engineering Record (HAER), as determined through consultation with SHPO, would be prepared to thoroughly document the current conditions of the structure to be demolished. These documents would include information about the wharf's construction design, methods, material, and measurements. The level of recordation would be determined by a qualified architectural historian, structural engineer, and/or architect experienced in the recordation of historical structures in consultation with DWR. In addition to HAER or other SHPO approved documentation of the dock that would be removed to make way for a debris deflector under Alternative 2, an interpretive sign would be designed and installed on the principal path that accesses the District. The sign would describe the U.S. Engineers Storehouse Historic District, its role in the Sacramento River Flood Control Project, and deliver a message of conservation and protection of historical sites.

To reflect modifications to Alternative 2, the cross-reference to Mitigation Measure CUL-2a has been revised as follows on page 9-31 of the Draft EIR/EIS:

Estuarine Research Station

For the water tower and all of the buildings in the potential Historic District that would not be demolished, Mitigation Measure CUL-2a(i) would protect historic structures during construction.

To reflect modifications to Alternative 2, the cross-reference to Mitigation Measure CUL-2a has been revised as follows on page 9-32 of the Draft EIR/EIS:

Implementation of Mitigation Measures CUL-2a(i), CUL-2b, CUL-2c ~~through~~ and CUL-2d would serve to minimize impacts of construction of ERS on the potential Historic District.

To reflect modifications to Alternative 2, the cross-reference to Mitigation Measure CUL-2a under the heading 'Fish Technology Center' has been revised as follows on page 9-34 of the Draft EIR/EIS:

As a result, impacts on the potential Historic District would be the same as those under the FTC for Alternative 2, and with implementation of Mitigation Measure CUL-2a(i), would be reduced to a level that is **less than significant with mitigation**.

CHAPTER 10. GEOLOGY, SOILS, AND SEISMICITY

To correct a minor citation at the bottom of Table 10-2, the following source has been revised (page 10-6 of the Draft EIR/EIS).

Sources: ABAG 2014; City of Rio Vista 2002; USGS 2003, 2014a and 2014b.

To correct a minor citation at the bottom of Table 10-3, the following source has been revised (page 10-11 of the Draft EIR/EIS).

Sources: ABAG 2014; City of Rio Vista 2002; USGS 2003, 2014a and 2014b.

CHAPTER 12. HYDROLOGY AND WATER QUALITY

In response to Comment D-1, the following text has been revised (page 12-4 of the Draft EIR/EIS).

From 1978 to 1997, the historical mean and diurnal tidal ranges at the Rio Vista monitoring station were 3.02 and 4.08 feet, respectively (NOAA 2015).

To correct a minor editorial error to a citation, the following text has been revised (page 12-7 of the Draft EIR/EIS).

In Solano County, tsunami inundation areas are generally limited to areas surrounding the Mare Island Strait (Napa River) and San Pablo Bay (Solano County 2012, CGS 2013b).

In response to Comment R-7, the following text has been added to page 12-21 of the Draft EIR/EIS.

Executive Order 13690

On January 30, 2015, President Obama issued Executive Order 13690 – Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input, which amends Executive Order 11988 – Floodplain Management. The Federal Flood Risk Management Standard builds upon work completed by the Hurricane Sandy Rebuilding Task Force, which announced in April 2013 that all Sandy-related rebuilding projects funded by the Sandy Supplemental (Public Law 113-2) must meet a consistent flood risk reduction standard. When implementing the Federal Flood Risk Management Standard, federal agencies are given the option to select one of three approaches for establishing the flood elevation and hazard area used in siting, design, and construction:

- Utilize best-available, actionable data and methods that integrate current and future changes in flooding based on science.

- Use the base flood elevation (or 1-percent-annual-chance flood determined using best available data) and an additional height to calculate the freeboard value, or
- 500-year, or 0.2%-annual-chance, flood elevation.

The new flood risk standard requires all future federal investments in and affecting floodplains to meet the level of resilience established by the standard. This standard applies to new structures and facilities that are federally funded such as the ERS and FTC.

To correct a minor editorial error to two citations, the following text has been revised (page 12-24 of the Draft EIR/EIS).

The Central Valley RWQCB regulates discharges from facilities for coldwater concentrated aquatic animal production (CAAP) to surface waters. The waste discharge requirements for CAAP facilities are specified in Order No. R5-2014-0161 (General NPDES No. CAG135001) (Central Valley RWQCB 2014~~be~~)... CAAP facilities that do not meet the above criteria and are not designated as a significant contributor are not considered to be a point source and are not required to obtain coverage under this order or another NPDES permit; however, Central Valley RWQCB allows enrollment under this order for facilities not designated significant and not meeting the above criteria. (Central Valley 2014~~be~~).

To reflect modifications to Alternative 2, the following text has been revised under Impact HYD/WQ-2 (page 12-38 of the Draft EIR/EIS).

~~Under Alternative 2, in-water activities, such as dredging or pile driving, would be required to construct the ERS marina and boat launch. In addition, shoreline protection would be installed on the landward side of the marina. This effort would entail removing 2,000 cy of sediment across a 13,000-square-foot area and installing 2,000 cy of rock along the shoreline.~~

To reflect modifications to Alternative 2, the following text has been revised under Impact HYD/WQ-4 (page 12-42 of the Draft EIR/EIS).

~~Under Alternative 2, the ERS would include in-water construction activities for the marina and boat launch.~~

To reflect modifications to Alternative 2, the following text has been revised under Impact HYD/WQ-5, "Alternative 2" (page 12-42 of the Draft EIR/EIS).

On-site groundwater levels range from approximately 6 to 25 feet bgs. Construction of the marina would require excavation to a level that is deep enough to accommodate watercraft and would likely encounter shallow groundwater. Under Alternative 2, groundwater dewatering is unlikely to be required because the maximum excavation depth would be approximately 4-6 feet bgs, and on-site groundwater could be encountered during excavation. Construction activities in contact with groundwater

could transport pollutants directly to the groundwater, and dewatering effluent could transport pollutants to local surface waters.

To reflect modifications to Alternative 2, the following text has been revised under Impact HYD/WQ-5, "Alternative 3" (page 12-42 of the Draft EIR/EIS).

~~Similar to Alternative 2, excavation activities under Alternative 3 for construction of the inland marina under Alternative 3 could encounter shallow groundwater. Because the marina would be excavated to a level that is deep enough to accommodate the required watercraft, it is more likely that shallow groundwater would be encountered during excavation under this alternative, compared to Alternative 2.~~ In the event that groundwater dewatering is required, the construction contractor would be required to comply with the General Dewatering Permit, including its stipulated waste discharge limitations and prohibitions.

To reflect modifications to Alternative 2, the following text has been revised under Impact HYD/WQ-14, "Alternative 2" (page 12-61 of the Draft EIR/EIS).

Proposed in-channel structures (e.g., partially excavated marina, ~~boat launch~~ and aquaculture facility outfall) could also affect river drainage patterns, as further described below.

In response to Comment R-7, the following text has been revised (page 12-61 and 12-62 of the Draft EIR/EIS).

Mitigation Measure HYD/WQ-14: Perform Hydraulic Analysis and Conform to Standards in Applicable County, ~~and State, and Federal~~ Requirements (Alternatives 2, 3 and 4)

Before finalizing the design of the ERS and FTC facilities, including but not limited to, the ERS marina and boat launch and the FTC aquaculture facility intake and outfall, DWR, USFWS, or their contractors shall conduct an analysis of pre- and post-Proposed Project hydraulic conditions, including erosive and flood conditions, in the Proposed Project area. The analysis shall include an assessment of the potential change in velocity, floodplain storage, and Base Flood Elevation (BFE) for the pre- and post-Proposed Project conditions. The analysis would also determine the Proposed Project's potential to affect any levees and alter existing or create new sea level-rise inundation areas. If the analysis determines that the Proposed Project would significantly decrease floodplain storage, affect the stability of any levees, create or alter sea level-rise inundation areas, or result in a significant increase in BFE or velocity or cause erosion, measures would be designed and implemented to reduce these potential effects to an acceptable level. This could include:

- implementing bank stabilization measures at erosional locations;
- providing increased floodplain storage;
- designing in-water facilities to accommodate flooding and sea level rise;

- designing upland facilities to avoid increases in BFE, such as by securely anchoring and floodproofing structures to at least 2 feet above the 100-year flood elevation or 2 feet above the design floodplain;
- locating and orienting structures to be outside of any sea level-rise inundation areas (based on the National Academy of Sciences' projection range of 16–65 inches);
- ensuring that existing facilities not previously in a sea level-rise hazard area would not be subjected to sea level-rise hazards as a result of the Proposed Project;
- locating and orienting structures to have a minimal impact on floodflows;
- designing facilities by using the 500-year flood elevation;
- using best available, actionable hydrologic and hydraulic data and methods that integrate current and future changes in flooding based on climate science or other factors or changes affecting flood risk to determine the vertical flood elevation and corresponding horizontal floodplain; and
- minimizing the number of structures in the floodplain.

As a performance standard, the design and construction shall conform to the standards contained in the most current version of the county codes and comply with the CVFPB permit requirements for the Proposed Project; such standards are considered by DWR and USFWS to be sufficient to reduce this impact to a level that is less than significant.

CHAPTER 13. LAND USE AND PLANNING

In response to Comment N-11, the following text has been revised (page 13-1 of the Draft EIR/EIS).

The 28.16-acre site is situated on the west bank of the Sacramento River (also Sacramento DWSC), which extends for approximately 1,600 feet as the southeastern site boundary.

CHAPTER 14. NOISE

To reflect modifications to Alternative 2, the following text has been revised under Impact NOI-1, "Alternative 2" (page 14-19 of the Draft EIR/EIS).

Table 14-6 summarizes the ~~in-channel~~ marina construction activities, duration, and equipment.

To reflect modifications to Alternative 2, the following text has been revised in Table 14-6 (page 14-19 of the Draft EIR/EIS).

Table 14-6. ~~In-Channel~~ Partially Excavated Marina Construction Activities, Estimated Durations, and Associated Construction Equipment—Alternative 2

Phase	Duration	Alternative 2
Demolition (In-water Structures Only)	13 6 weeks	Tug, crane barge, vibratory hammer, flat deck barge, work skiff
Pile Driving	5 4 weeks	Crane barge, impact pile hammer, flat deck barge, tug, work skiff
Float Installation	4 5 weeks	Crane (land based or barge mounted depending on dock delivery method), work skiff, generator, air compressor
<u>Marina Excavation and Rock Slope Protection</u>	11 2 weeks	Excavator, dozer, work skiff
<u>Sheet Pile Installation</u>	<u>4 weeks</u>	<u>Land-based crane, vibratory hammer</u>

CHAPTER 15. TRANSPORTATION AND TRAFFIC

To correct a typographical error, the following text has been revised on page 15-2 of the Draft EIR/EIS.

The Peak Hour Signal Warrant from the California Manual on Uniform Traffic Control Devices (MUTCD) (Caltrans 2014a) is used to determine whether the installation of a traffic signal is warranted.

To correct a typographical error, the following text has been revised at the bottom of Table 15-3 on page 15-4 of the Draft EIR/EIS.

Source: Transportation Research Board 2000, City of Stockton 2007b.

In response to Comment N-12, the following text has been revised (page 15-7 of the Draft EIR/EIS).

In addition to the roadway network, there are rail and waterways of regional significance. Water routes used for shipping freight include the Bay-Delta, Sacramento DWSC, and the Stockton DWSC. The Amtrak passenger rail passes through Stockton, providing access to Sacramento, San Francisco, and other locations throughout California and the U.S. Amtrak has an existing station in Suisun City (at Main Street) and plans to build a station in Fairfield/Vacaville (at Peabody/Vanden/Manual Campos Roads). Railroads used for shipping freight in this region include the Union Pacific Railroad and the Burlington Northern and Santa Fe Railway.

To correct a typographical error, the following text has been revised on page 15-17 of the Draft EIR/EIS.

The City of Stockton Bicycle Master Plan (2007a) proposes two facilities in the study area: a bike route on Monte Diablo Avenue and a bike path along the north shore of the San Joaquin River.

To correct a typographical error, the following text has been revised on page 15-22 of the Draft EIR/EIS.

- AM and PM peak-hour I-5 mainline volumes obtained from Caltrans' Performance Measurement System (PeMS; Caltrans 2014b)

In response to Comment N-15, the following text has been revised (page 15-24 of the Draft EIR/EIS).

15.3.2 Local Laws, Regulations, and Policies

The Solano Transportation Authority (STA) is the Congestion Management Agency of Solano County. It is responsible for countywide transportation planning; financing of priority projects; and programming of federal, state, and regional transportation funds. The following discussion summarizes STA's objectives and strategies relevant to Alternatives 2 and 3. In addition, STA studies and reports that pertain to SR 12 are summarized below.

In response to Comment N-15, the following text has been added after the second bullet item (page 15-24 of the Draft EIR/EIS).

- SR 12 Realignment/Rio Vista Bridge Preliminary Study. The SR 12 Realignment/Rio Vista Bridge Preliminary Study was initiated by STA at the request of the City of Rio Vista. This report documents the first step in identifying feasible corridor alternatives for an improved SR12 through Rio Vista and across the Sacramento River. In addition, the study reassesses alternatives that were previously considered as part of a 1994 Project Study Report with respect to potential impacts on existing and planned development. This 1994 study also evaluated environmental, river navigation, and engineering constraints, and investigated revised routes to minimize these impacts.
- SR 12 Comprehensive Evaluation and Corridor Management Plan (2012). The SR 12 Comprehensive Evaluation and Corridor Management Plan (Caltrans et al. 2012) report summarizes an evaluation conducted for SR 12 as it passes through the four counties of Napa, Solano, Sacramento and San Joaquin. The report outlines a short-term and long-term plan for the corridor and addresses questions such as whether SR 12 should be widened to four lanes, whether movable bridges at Rio Vista and Mokelumne be replaced, and the timing of when major improvements could be implemented. As SR 12 traverses multiple jurisdictions, the study was supported by various agencies including Caltrans (Districts 4, 3, and 10), MTC, STA, and SJCOG.

To reflect modifications to Alternative 2, the following text has been revised under Impact TRA-9 and Table 15-16.

Table 15-16 indicates the maximum number of construction truck and construction worker vehicle trips generated by the Alternatives 2 and 3 on a daily basis. For Alternative 2, it is expected that ~~22,198~~40,200 CY of cut would be exported from the site. Based on the CalEEMod modeling assumptions used in Chapter 6, *Air Quality and Greenhouse Gas Emissions*, it is estimated that approximately ~~15,466~~14,082 truck trips would be necessary for hauling cut-and-fill materials. Haul-truck trips for land-based hauling during the grading and site preparation phases are expected to occur over a 6.0-month period, which equates to approximately ~~128~~74 haul-truck trips per day. Based on the excavation volumes for marina construction, a total of ~~1,885~~5,295 haul trips would be necessary. Because the phasing of construction is unknown, this analysis conservatively presumed that marina construction could overlap with on-land activities. When considering the number of construction worker and vendor trips, the maximum number of daily trips would be approximately ~~341~~300.

Table 15-16. Daily Construction Vehicles Associated with Construction Activities

Alternative	Construction Type	Maximum Daily Trips			
		Construction Worker Trips	Vendor Trips	Hauling Trips	Total
Alternative 2	Land-based construction ^d	130 <u>134</u>	55 <u>56</u>	128 <u>74</u>	341 <u>300</u>
	Marina	10	0	18 ^a <u>26</u> ^a	
Alternative 3	Land-based construction ^d	126 <u>148</u>	62 <u>53</u>	121	396 <u>421</u>
	Marina	10	0	86 ^b <u>80</u> ^b	
Alternative 4	Land-based construction ^d	131 <u>150</u>	55 <u>63</u>	46	327
	Marina	10	0	85 ^c <u>81</u> ^c	

Notes: The number of trips shown include inbound and outbound vehicle trips.

^a Under Alternative 2, marina construction is estimated to occur over ~~105~~205 days.

^b Under Alternative 3, marina construction is estimated to occur over 115 days.

^c Under Alternative 4, marina construction is estimated to occur over 135 days.

^d Hauling-truck trips for all land-based construction work is expected to be spread out across 6 months.

To reflect modifications to Alternative 2, the following text has been revised under Impact TR-10 (page 15-52 of the Draft EIR/EIS).

Under Alternative 2, the ERS would include a partially excavated marina within the main channel of the Sacramento River/Sacramento DWSC, as shown in Figure 3-1. Construction of the marina would require work within the Sacramento

River/Sacramento DWSC and along the shoreline, including work from barges. The finished marina would protrude up to ~~up to~~ approximately ~~2001~~165 feet into the river.

To reflect modifications to Alternative 2, the following text has been revised under Impact TR-10 (page 15-53 of the Draft EIR/EIS).

In conclusion, the DRS would include construction of an ~~in-channel~~ partially excavated marina, boat ramp, intake, outfall, and potentially other ancillary in-water facilities. During operation, the DRS would generate vessel trips as described above for the ERS. None of these activities are anticipated to cause substantial adverse impacts on vessel traffic and transportation in the Sacramento River/Sacramento DWSC; therefore, this impact would be **less than significant**.

Alternative 3: Rio Vista Army Reserve Center, Configuration 2

One of the primary differences between Alternative 3 and Alternative 2 is that the configuration under Alternative 3 would not feature an ~~in-channel~~ partially excavated marina. The marina for the ERS under Alternative 3 would be excavated off-channel from the Sacramento River/Sacramento DWSC (see Figure 3-2) and would be connected to the river only during the final part of construction. Construction of this off-channel marina would not generate any barge trips within the main channel of the Sacramento River/Sacramento DWSC. Operations under Alternative 3 would generate the same number of vessel trips as for ERS under Alternative 2, described above. Construction of the process-water intake and outfall outfall in the Sacramento River would also be the same as that described above for Alternative 2 and would not generate any barge trips. As such, this impact would be **less than significant**.

Alternative 4: Ryde Avenue Site in Stockton

The Stockton DWSC is adjacent to the Ryde Avenue site. Shipping vessels routinely pass through this area on their way to docks in Stockton or en route to the San Francisco Bay and Pacific Ocean. As under Alternative 3, the site layout for Alternative 4 would not include an ~~in-channel~~ partially excavated marina (see Figure 3-3); the proposed marina would be completely inland from the Stockton DWSC and would be connected to the river only during the final part of construction.

To correct a minor error to a citation, the following text has been revised (page 15-57 of the Draft EIR/EIS).

The cumulative year of the Tri-County Travel Demand Model accounts for planned land use growth within Stockton according to the City's General Plan (2006~~7~~), as well as within the surrounding region.

CHAPTER 16. PUBLIC SERVICES, UTILITIES, AND ENERGY

In response to comment N-20, the following text has been revised (page 16-5 of the Draft EIR/EIS).

Construction of t~~The Del Rio Hills and Riverwalk development projects may commence in 2016~~are currently on hold, with no immediate plans for moving forward (Melilli, pers. comm., 2015a). Other residential projects that have been

entitled by the City of Rio Vista, including Liberty and Brann Ranch, may move forward in the future. The Del Rio Hills development project has not been entitled by the City of Rio Vista and therefore has no current official status (Rio Vista Army Base Steering Committee 2015).

In response to Comment N-19, the following text has been revised (page 16-20 of the Draft EIR/EIS).

As described in “Environmental Setting” above, the City of Rio Vista Fire Department has an adequate response time of 5 minutes, 43 seconds and has mutual and automatic aid agreements with neighboring departments, including the Montezuma Fire Protection District, which can respond to calls from Rio Vista in 4-510-11 minutes, or roughly 4-5 minutes longer than the City of Rio Vista Fire Department's average response time.

To reflect modifications to Alternative 2, the following text has been revised (page 16-28 of the Draft EIR/EIS).

The Preferred Alternative would require site grading and demolition of several structures at the RVARC site. In addition, Alternative 2 would include the construction of a partially excavated marina. Excavation at the upland portion of the site would generate approximately 8835,000 CY of fill material. For the purposes of this analysis, it is assumed that the majority of this soil would be re-used on-site as backfill. Some portion of this material would be spread on-site; if all of the excavated material were reused, the elevation of the site would be raised by up to approximately 4 feet. Some of this excavated material could be sent to the Potrero Hills Landfill for use as cover material; if all of the excavated material were used in this way, only 0.5 percent of the landfill's remaining capacity as of 2006 would be accounted for. Approximately 32,000 CY of material would be excavated for the marina. Some portion of this material would be spread on-site, with excess material Dredged material from marina construction that would be disposed of off-site at the Potrero Hills Landfill. If all of the excavated material were reused, the elevation of the site would be raised by approximately 1.4 feet. If all excavated material from marina construction were used as cover material at the Potrero Hills Landfill, Alternative 2 would account for 0.2 percent of the landfill's remaining capacity as of 2006, which would be reused on-site instead of requiring off-site disposal. Other types of debris generated during construction of DRS facilities would involve much smaller quantities, which would be well within the capacity of the Potrero Hills Landfill.

To reflect modifications to Alternative 2, the following text has been revised (page 16-29 of the Draft EIR/EIS).

Alternative 3 would also include an inland marina, as opposed similar but larger in scale than to the in-channel partially excavated marina proposed for Alternative 2., which Construction of an inland marina would require excavation of approximate 71,000 CY of additional material. Similar to Alternative 2, some portion of this material would be spread on-site; i. If all of the excavated material were reused, the elevation of the site would be raised by up to approximately 4 feet.

To reflect modifications to Alternative 2, the following text has been revised (page 16-31 of the Draft EIR/EIS).

The energy use associated with construction of Alternative 3 may differ slightly from that of Alternative 2 ~~because additional equipment would be used for~~ due to the larger volumes of excavated material fill handling and disposal associated with construction of the inland marina and the additional demolition and renovation of existing buildings on-site.

To correct a minor error (Mitigation Measure AQ/GHG-5 is mistakenly referenced), the following modifications have been made on page 16-31 of the Draft EIR/EIS.

Overall, Alternative 3 would have similar potential for wasteful, inefficient, or unnecessary energy use as described for Alternative 2; as with Alternative 2, all of the measures (including Mitigation Measure AQ/GHG-~~56~~) and project design features to avoid or reduce wasteful, inefficient, and/or unnecessary energy would be implemented.

To correct a minor error (Mitigation Measure AQ/GHG-5 is mistakenly referenced), the following modifications have been made on page 16-32 of the Draft EIR/EIS.

All measures to avoid or reduce wasteful, inefficient, and/or unnecessary energy use described under Alternatives 2 and 3 (e.g., Mitigation Measure AQ/GHG-~~56~~) would also be implemented under Alternative 4.

CHAPTER 17. RECREATION

In response to Comment N-21, the following text has been revised (page 17-4 of the Draft EIR/EIS).

Second, Trilogy, an active resort community, has a golf course, ~~as well as a community center and other facilities; however, these~~ and Sir Flair's Restaurant, which are open to the general public. The rest of the community facilities are open only to Trilogy residents (City of Rio Vista 2007).

To correct a minor error to an in-text citation, the following text has been revised (page 17-13 of the Draft EIR/EIS).

Such increased use could potentially accelerate the physical deterioration of recreational facilities over time to some degree; however, Sandy Beach County Park receives thousands of visitors each year (~~San Joaquin~~ Solano County 2015b) and any additional visitors generated by the DRS would be a small fraction of that.

To reflect modifications to Alternative 2, the following text has been revised (page 17-14 of the Draft EIR/EIS).

Development of the ERS facilities under Alternative 2 would include construction of a partially excavated marina within the main channel of the Sacramento River adjacent to the RVARC site. Marina construction is estimated to require demolition and removal of existing piles/moorings, excavation of approximately 32,000 cubic

yards, installation of 15-20 concrete piles, and securing approximately 8,000-13,000 square feet of floating docks. Construction would involve using a vibratory hammer, work skiff, generator, and air compressor, each of which would be operated from a barge. The finished marina would extend up to approximately ~~200~~160 feet into the river channel.

To reflect modifications to Alternative 2, the following text has been revised (page 17-15 of the Draft EIR/EIS).

One of the primary differences between Alternatives 2 and 3 is that the configuration under Alternative 3 would not feature a partially excavated ~~n in-channel~~ marina.

To reflect modifications to Alternative 2, the following text has been revised (page 17-16 of the Draft EIR/EIS).

As under Alternative 3, the site layout for Alternative 4 would not include a partially excavated ~~an in-channel~~ marina (see Figure 3-3).

CHAPTER 18. SOCIOECONOMICS

To correct a minor error to an in-text citation, the following text has been revised (page 18-7 of the Draft EIR/EIS).

Table 18-6 presents the most recent economic and employment data available for the RVARC study area and Solano County (U.S. Census Bureau; 2013a; California Employment ~~Economic~~ Development Department [EDD] 2014a, 2014b).

To correct an inconsistency in Table 18-9 (the average household incomes and poverty values are inconsistent with those in Table 18-4), Table 18-9 has been revised (page 18-9).

Table 18-9. Economic and Employment Characteristics for the Ryde Avenue Study Area (2013)

	San Joaquin County	Stockton	Ryde Avenue Study Area (a)	State of California
Income and Poverty				
Average household income (\$2013)	\$70,435 53,380	\$62,710 46,831	\$57,759	\$85,408
Families below poverty level (%)	14.2 18.2%	20.1 24.3%	18.2%	12.0%

To correct a minor error to an in-text citation, the following text has been revised (page 18-15 of the Draft EIR/EIS).

However, most (91.2 percent) Contra Costa residents work within the County, Alameda County and San Francisco metro area (~~CCEP 2014~~AASHTO 2010) and its economy is generally more focused on the Bay Area than the Central Valley.

To correct a minor error to an in-text citation, the following text has been revised (page 18-20 of the Draft EIR/EIS).

Using the Supplemental Economic Analysis (2002~~4~~) estimate of an average \$13.20 per day of per capita local spending, DRS employees' local retail spending would total \$359,700 annually.

CHAPTER 19. POPULATION AND HOUSING

In response to Comment N-25, the following text has been revised (page 19-3 of the Draft EIR/EIS).

In 2014, San Joaquin County had 236,943 housing units and 818,987 vacant housing units – a vacancy rate of 8.0 percent.

CHAPTER 20. CUMULATIVE IMPACTS

To correct a citation, the following text in Table 20-3 (row three) has been revised (page 20-7 of the Draft EIR/EIS).

The EIR for the redevelopment plan was certified and approved in January 2011 (City of Rio Vista 201~~0~~1).

To reflect modifications to Alternative 2, the following text has been revised (page 20-23 and 20-24 of the Draft EIR/EIS).

Under Alternative 2, with the exception of the debris deflector, construction and operation of DRS facilities would occur entirely outside of the potential Historic District boundary, and would be developed consistent with the ABD Design Guidelines in a manner that would support the historic character of the site. As

described in Chapter 9, *Cultural Resources*, removal of a large wooden pier (S-104), which is considered a contributing element of the potential Historic District would be needed prior to constructing the debris deflector. Implementation of Mitigation Measure CUL-2a would avoid impacts on the potential Historic District and application of Mitigation Measure CUL-2b would require additional recordation of the wharf prior to demolition. According to a study completed by JRP (2007), although the wharf is a contributing element to the potential Historic District, the integrity of the wharf was compromised by the addition of elements outside of the period of significance. Removal of the wharf would not render the potential Historic District ineligible for listing in the NRHP or CRHR, as the District would still retain enough of its character-defining features to convey the reasons for its significance. As a result, this alternative's contributions to this cumulative impact would not be considerable. This impact would be **less than significant with mitigation** under CEQA. Because the Historic District is not eligible for the NRHP, under NEPA there would be **no effect**.

CHAPTER 21. OTHER SECTIONS REQUIRED BY CEQA AND NEPA

Section 21.4, Significant and Unavoidable Impacts, mistakenly omitted significant and unavoidable impacts. The bulleted list of impacts on page 21-3 of the Draft EIR/EIS has been revised as follows:

- Impact CUL-2: Potential for a Substantial Adverse Effect on Built Environmental Resources (Alternative 3)
- Impact LU-2: Potential for the Proposed Project to Conflict with Applicable Land Use Plans, Policies, and Regulations (Alternative 3)
- Impact GEO-2: On- or Off-Site Landslide, Lateral Spreading, Subsidence, Liquefaction, or Collapse due to an Unstable Geologic Unit or Soil (Alternative 4)
- Impact HYD/WQ-9: Substantially Deplete Groundwater Supplies from Operational Water Usage (Alternative 4)
- Impact TRA-11: Impacts on Study Area Freeway Segments from DRS Operational Traffic (Existing-Plus-Approved Projects Analysis) (Alternative 4)
- Impact TRA-12: Cumulative Impacts on Study Area Intersections in Rio Vista (Cumulative Analysis) (Alternatives 2 and 3)
- Impact CUM-7: Cumulative Impacts on Land Subsidence (Alternative 4)
- Impact CUM-8: Cumulative Impacts on Hydrology and Water Quality (Alternative 4)

CHAPTER 22. CONSULTATION AND COORDINATION

The last row in Table 22-1 on page 22-4 has been revised to reflect the current status of the consultation process with SHPO.

Regulatory Agency	Law/Regulation	Purpose	Relevant Activities	Permit/Authorization Type
State Historic Preservation Officer	NHPA Section 106	Consultation with State Historic Preservation Officer if historic properties or prehistoric archaeological sites might be affected by the project	DRS construction	Consultation will be <u>has been</u> conducted by USFWS as needed <u>and has been concluded</u>

1

2

3

Chapter 22 mistakenly omitted discussion regarding the Proposed Project's consistency with the 2009 Delta Reform Act. The following text has been added to Table 22-1 on page 22-5 above the "Regional" row:

Regulatory Agency	Law/Regulation	Purpose	Relevant Activities	Permit/Authorization Type
<u>Delta Stewardship Council</u>	<u>2009 Delta Reform Act</u>	<u>Requires State or local public agencies proposing to undertake a proposed action within the boundaries of the Delta to obtain a written certification of consistency with the Delta Plan.</u>	<u>DRS construction and operation</u>	<u>Certification of consistency</u>
<i>Regional</i>				

4

The following text on page 22-7 has been modified to reflect the Proposed Project's current status regarding compliance with Section 106 of the National Historic Preservation Act.

National Historic Preservation Act

Title 54 U.S.C Section 306108, commonly known as Section 106 of the National Historic Preservation Act (NHPA) of 1966 (as amended in 19221992) requires federal agencies to evaluate the effects of federal undertakings on historic properties (i.e., cultural resources¹ that are listed on or eligible for listing on the National Register of Historic Places), ~~archaeological, and cultural resources.~~ Before federal funds can be approved for a particular project and the issuance of any license, any of these effects would be evaluated.

~~USFWS served~~ as the lead agency for compliance with the NHPA for the Proposed Project. To comply with NHPA, USFWS must "take into account the effect of the undertaking on any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register." To that end, USFWS and its partners has complied with the NHPA by preparing an archaeological inventory report and an inventory/evaluation report for the buildings associated with the Rio Vista Army Reserve Center for the Proposed Project. In addition, the NOP and, subsequently, a copy of the Draft EIR/EIS for DRS was sent to the State Historic Preservation Officer (SHPO), requesting review and soliciting input on the Proposed Project. ~~USFWS will conduct further consultation with the State Historic Preservation Officer as needed.~~ The USFWS initiated consultation under Section 106 with the SHPO in August 2015, in which they, requested their concurrence with a finding of No Adverse Effect to Historic Properties with respect to construction and operation of Alternative 2. In a letter dated September 2015, the SHPO requested additional information and the USFWS's Regional Historic Preservation Officer met with the SHPO's staff in April 2016. The USFWS submitted the additional information requested by the SHPO in August 2016. On November 7, 2016, the SHPO issued a letter concurring with the USFWS's finding of No Adverse Effect to Historic Properties and acknowledged that with the exception of the pier S-104, construction and operation of the Proposed Project would have no direct or indirect effects on historic properties within the area of potential effects. The letter acknowledges that the pier will be photographed and documentation and interpretive signage will be installed.

The following footnote has been added to the bottom of page 22-7 to reflect the Proposed Project's current status regarding compliance with Section 106 of the National Historic Preservation Act.

¹ Cultural resources include archaeological sites, buildings and structures, landscapes, districts and places important to the continuation of a culture.

The following sentence has been added to the end of the first paragraph on page 22-8, under the heading "Native American Consultation" to reflect the current consultation process with Native American tribes.

As described in Chapter 9, *Cultural Resources*, coordination with Native American tribes regarding important Native American sites within the vicinity of the Proposed

Project sites was initiated in December 2014. None of the tribes contacted identified important cultural sites within the Proposed Project area.

Chapter 22 mistakenly omitted discussion regarding the Proposed Project's consistency with the 2009 Delta Reform Act. The following paragraph has been added after text under the "Delta Protection Act" on page 22-10.

Delta Reform Act

The 2009 Delta Reform Act sets forth the State policy of establishing the following coequal goals: (1) providing a more reliable water supply for California; and (2) protecting, restoring, and enhancing the Delta ecosystem. The Legislature added that these two goals must be met in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place. When the Act was passed, the Delta Stewardship Council was established and entrusted with the responsibility of giving practical meaning to these directives. One of the Delta Stewardship Council's first tasks was to develop a legally enforceable, long-term, management plan. In May 2013, the Council adopted the *Delta Plan* which was prepared in consultation with multiple agencies including SWRCB, DWR, CDFW, the Delta Protection Commission, and many other agencies. Additionally, in implementing the *Delta Plan*, the Delta Stewardship Council has other authorities including the role in commenting on any State agency EIR, and requesting reports from State, federal and local agencies. The Council also has the authority to review and make consistency determinations for State and local actions that would have a significant impact on the coequal goals with the Delta Plan (Delta Stewardship Council 2013). Because the Proposed Project would be constructed and operated within the Delta, the Proposed Project proponents would need to notify the Delta Stewardship Commission about the Proposed Project, and DWR would need to submit a certification of consistency that details findings addressing specific requirements contained in Policy G P1 of the *Delta Plan*. To comply with the Delta Reform Act and the *Delta Plan*, the Delta Stewardship Council has been notified about publication of the Draft EIR/EIS. DWR will also submit a certification of consistency describing the Proposed Project's consistency with the Delta Plan.

CHAPTER 24. REFERENCES

The following reference included the incorrect publication year and has been revised on page 24-3 of the Draft EIR/EIS.

California Air Resources Board. 2010^{3b}. Clean Car Standards – Pavley, Assembly Bill 1493. Available online at: www.arb.ca.gov/cc/ccms/ccms.htm.

The following reference was accidentally omitted and has been added to page 24-6 of the Draft EIR/EIS.

Beedy, E.C. 2008. Tricolored Blackbird (*Agelaius tricolor*). In: Shuford, W. D., and Gardali, T. (Eds) California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1.

Western Field Ornithologists, Camarillo, California, and California
Department of Fish and Game, Sacramento.

The following references were accidentally omitted and has been added to page 24-7 of the Draft EIR/EIS.

Feldman, M. 1982. Notes on reproduction in *Clemmys marmorata*. Herpetological Review 13:10-11.

Horizon Water and Environment. 2015b. Wetland Delineation for the Rio Vista
Army Reserve Center.

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Wildlife Service Migratory Bird Treaty Act of 1918. Available:
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~~Bell, M.C. 1991. Fisheries handbook of engineering requirements and biological
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~~Mager, R. C. S. I. Doroshov, J. P. Van Eenennaam, and R. L. Brown. 2004. Early life stages
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9 County and San Joaquin County. Available at:
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1 *The following Chapter 12 reference was accidentally omitted and has been added to page 24-28*
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21 *The following reference was mistakenly included and has been deleted from page 24-40 of the*
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No references cited. Delta Stewardship Council. 2013. Delta Plan. Adopted May.

Chapter 4

REPORT PREPARATION

The following list presents the individuals who assisted in preparing and/or reviewing the Final EIR/EIS. For a list of individuals who assisted in preparing and/or reviewing the Draft EIR/EIS, please refer to Chapter 23 of the Draft EIR/EIS.

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7 555 Capitol Mall
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Charles Alexander, PE, AICP	Associate
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21

Chapter 5

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- Delta Stewardship Council's Delta Science Program. 2015. Enhancing the Vision for Managing California's Environmental Information – Draft. February. Available: <http://deltacouncil.ca.gov/docs/enhancing-vision-managing-california-s-environmental-information>. Accessed March 3, 2016.
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- Personal Communication**
- Bahrenfuss, Scott. Captain, Rio Vista Fire Department. February 3, 2016. Telephone conversation with Patrick Donaldson of Horizon Water and Environment regarding response times of the Montezuma Hills Fire District.

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Attachment A

DRAFT EIR/EIS NOTICES AND MAILING LIST

This appendix contains the CEQA Notice of Availability of the Draft EIR/EIS, the NEPA Notice of Availability of the Draft EIR/EIS, the Federal Register notice, the Notice of Completion of the Draft EIR/EIS that was sent to the State Office of Planning and Research (OPR), the newspaper advertisements announcing the availability of the Draft EIR/EIS, details about public meetings for the Proposed Project, and the distribution list for the Notice of Availability of the Draft EIR/EIS.

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CEQA Notice of Availability of the Draft EIR/EIS

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DEPARTMENT OF WATER RESOURCES

1416 NINTH STREET, P.O. BOX 942836
SACRAMENTO, CA 94236-0001
(916) 653-5791



October 30, 2015

**Re: Notice of Availability of a Draft Environmental Impact Report / Environmental Impact Statement Regarding the Proposed Delta Research Station –
Estuarine Research Station and Fish Technology Center**

To Interested Parties:

NOTICE IS HEREBY GIVEN that the California Department of Water Resources (DWR), as lead agency under the California Environmental Quality Act (CEQA); and the U.S. Fish and Wildlife Services (USFWS), lead agency under the National Environmental Policy Act (NEPA), are making available a draft environmental impact report / environmental impact statement (Draft EIR/EIS) for public review. DWR and USFWS have prepared this Draft EIR/EIS to provide the public, responsible agencies, and trustee agencies with information about the potential environmental effects of the proposed Delta Research Station (DRS) (Proposed Project). This Draft EIR/EIS was prepared in compliance with CEQA of 1970 (as amended), the State CEQA Guidelines (California Code of Regulations [CCR] title 14, section (§) 15000 et seq.), and the NEPA (U.S. Code [USC] 432). DWR hereby invites comments on the adequacy and completeness of the environmental analyses in the Draft EIR/EIS.

PROJECT LOCATION: The DRS would be located in a centralized area of the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta), California. Two alternative locations are evaluated in the Draft EIR/EIS: (1) the Rio Vista Army Reserve Center (RVARC) site in the City of Rio Vista, and (2) a site located at 845 Ryde Avenue in the City of Stockton (Ryde Avenue site).

PROJECT DESCRIPTION AND ENVIRONMENTAL REVIEW: The Proposed Project, as analyzed in this Draft EIR/EIS, consists of evaluation of the proposed construction and operation of two facilities, a proposed Estuarine Research Station (ERS) and Fish Technology Center (FTC). Collectively, these facilities are intended to serve as an aquatic research and monitoring facility that is located in centralized area of the Bay-Delta. The Proposed Project reflects the outcome of a multiyear collaboration between DWR, USFWS, California Department of Fish and Wildlife, and other agencies involved in the Interagency Ecological Program (IEP).

The proposed DRS would consolidate ongoing IEP research and monitoring activities throughout the Bay-Delta and provide facilities for study and production of endangered Delta fishes. Currently, the IEP has approximately 145 state and federal employees who conduct research throughout the Bay-Delta. The IEP collaboratively monitors, researches, models and synthesizes critical information for adaptive management water project operations, planning and regulatory purposes relative to the aquatic ecosystem in the Bay-Delta. USFWS and DWR plan to construct the DRS in a centrally located area within the Bay-Delta and the facilities are expected to enhance interagency coordination and collaboration.

The purpose of the DRS is to enhance interagency coordination and collaboration by developing a shared research facility. Currently, federal and state agency staff working on similar Bay-Delta issues are distributed among different locations that are often remote from the Bay-Delta. Construction and operation of the DRS would reduce travel times and costs and improve research and monitoring activity efficiency. The ERS would consolidate existing IEP programs currently located throughout the Delta, and the FTC would house a new program to develop and apply captive fish propagation technologies in support of population restoration.

The Draft EIR/EIS evaluates the potential environmental impacts of three action alternatives as well as the No Project Alternative: the No Project Alternative (DWR and USFWS would not construct the ERS or FTC); Alternative 2 (the ERS and FTC facilities would be consolidated in the predominantly undeveloped portions of the RVARC site); Alternative 3 (the ERS facilities would involve rehabilitation and reuse of existing facilities); and Alternative 4 (the ERS and FTC facilities would be located at 845 Ryde Avenue site in Stockton).

In accordance with CEQA Guidelines §15087, given the size of the Proposed Project area, it is possible that hazardous waste sites or listed toxic sites listed by the Department of Toxic Substances Control (Cal-EPA) may be present in the area. The analysis in the Draft EIR/EIS concluded that the location for the DRS facilities do not overlap with listed sites and did not identify any potentially significant impacts that would require mitigation to reduce effects to a less-than-significant level, or that would be significant and unavoidable.

DOCUMENT AVAILABILITY: The Draft EIR/EIS and supporting documents are available for download from the following website: www.deltaresearchstation.com. Printed copies of the Draft EIR/EIS and supporting documents are available to review during regular business hours at DWR's office in Sacramento (listed below). Copies are also available to review at the Rio Vista Library and Stockton-San Joaquin County Library (listed below). CDs are available on request by phoning (510) 986-1850 or emailing comments@deltaresearchstation.com. They will also be available at the public meetings in Rio Vista and Stockton. Printed copies are also available at cost plus postage, upon request using the above contact information.

Locations where DEIR copies can be reviewed:

- California Department of Water Resources, 1415 Ninth Street, Room 315-3, Sacramento, CA 95814
- Rio Vista Library, 44 South Second Street, Rio Vista, CA 94571
- Stockton-San Joaquin County Library, 605 N. El Dorado Street, Stockton, CA 95202

PUBLIC REVIEW PERIOD: The Draft EIR/EIS is available for a 45-day public review and comment period, which begins on October 30, 2015 and ends at 5 p.m. on December 14, 2015. **Please send comments on the DEIR at the earliest possible date, but postmarked no later than 5 p.m. on December 14, 2015 in order for your comments to be considered.**

Comments may be mailed to the following address:

California Department of Water Resources
ATTN: John Engstrom, DRS Draft EIR/EIS Comments
1416 Ninth Street, Room 315-3
Sacramento, CA 95814

Comments may also be submitted by email to: comments@deltaresearchstation.com. Emailed comments are preferred, and should include your name, address, and daytime telephone number so a representative of DWR can contact you if clarifications regarding your comments are required. All comments received, including names and addresses, will become part of the official public record. A Final Environmental Impact Report / Environmental Impact Statement will be prepared which will include responses to comments received during the public review period.

PUBLIC MEETINGS: All interested persons are encouraged to attend the public meetings to present written and/or verbal comments on the Draft EIR/EIS. Two public meetings will be held at the following locations and times:

- D.H. White Elementary School, 500 Elm Way, Rio Vista, CA 94571 on December 1, 2015 at 6:00 p.m.
- Arnold Rue Community Center, 5758 Lorraine Avenue, Stockton, CA 95210 on December 3, 2015 at 5:30 p.m.

Sincerely,

A handwritten signature in black ink, appearing to read 'John Engstrom', written over a horizontal line.

John Engstrom
Supervising Architect

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NEPA Notice of Availability of the Draft EIR/EIS

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Billing Code: 4333–15

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

[FWS–R8–FAC–2015–N163]; [FRFR48370810680–XXX–FF08F00000]

**Delta Research Station, Sacramento, CA; Draft Environmental Impact
Report/Environmental Impact Statement, and Announcement of Public Meetings**

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Notice of availability; request for comments.

SUMMARY: This notice announces the availability of the Delta Research Station Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for public review and comment. The Draft EIR/EIS evaluates impacts regarding construction and operation of the Delta Research Station (DRS) in the San Francisco Bay/Sacramento–San Joaquin Delta Estuary (Bay-Delta), California. The planned DRS would consist of two facilities, a proposed Estuarine Research Station (ERS) and Fish Technology Center (FTC). The U.S. Fish and Wildlife Service (USFWS) is the lead Federal agency responsible for coordinating the environmental analysis for the proposed action under the

National Environmental Policy Act (NEPA). The California Department of Water Resources (DWR) is the lead State agency responsible for coordinating the environmental analysis under the California Environmental Quality Act (CEQA).

DATES: Comments on the Draft EIR/EIS must be received or postmarked by 5 p.m. Pacific Time on **[INSERT 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. Two public meetings will be held to receive comments on the Draft EIR/EIS. See the **SUPPLEMENTARY INFORMATION** section for meeting dates and times. The public meetings are physically accessible to people with disabilities. Requests for reasonable accommodations (e.g., auxiliary aids or sign language interpretation) should be directed to Michael Stevenson of Horizon Water & Environment at (510) 986-1852, at least 5 working days prior to the applicable meeting date.

ADDRESSES: To view or download the Draft EIR/EIS, or for a list of locations to view hard-bound copies, go to www.deltaresearchstation.com.

You may submit written comments by one of the following methods:

1. By email: Submit comments to comments@deltaresearchstation.com.
2. By hard-copy: Submit comments by U.S. mail or by hand-delivery, to USFWS,
Attn: Barbara Beggs, 650 Capitol Mall Suite 8-300, Sacramento, CA 95814.

For how to view comments on the EIS from the Environmental Protection Agency (EPA), or for information on EPA's role in the EIS process, see **EPA's Role in the EIS Process** under **SUPPLEMENTARY INFORMATION**.

FOR FURTHER INFORMATION CONTACT: Barbara Beggs, USFWS, at 916–930–5603.

SUPPLEMENTARY INFORMATION:

Introduction

With this notice, we continue the process for developing a DRS, which we began by publishing a notice of intent for scoping in the Federal Register on December 10, 2014 (79 FR 73332). In addition to this notice of the draft EIR/EIS, EPA is publishing a notice announcing the draft EIS, as required under section 309 of the Clean Air Act (42 U.S.C. 7401 *et seq.*). The publication of EPA’s notice is the official start of the minimum requirement for a 45-day public comment period for an EIS (see **EPA’s Role in the EIS Process** under **SUPPLEMENTARY INFORMATION**).

Background

The proposed DRS would consolidate ongoing Interagency Ecological Program (IEP) research and monitoring activities throughout the Bay-Delta and provide facilities for study and production of endangered Delta fishes. Currently, the IEP has approximately 145 State and Federal employees who conduct research throughout the Bay-Delta. The IEP collaboratively monitors, researches, models, and synthesizes critical information for adaptive management water project operations, planning, and regulatory purposes relative to the aquatic ecosystem in the Bay-Delta. USFWS and DWR plan to

construct the DRS in a centrally located area within the Bay-Delta, and the facilities are expected to enhance interagency coordination and collaboration.

Purpose

The purpose of the DRS is to enhance interagency coordination and collaboration by developing a shared research facility. Currently, Federal and State agency staff working on similar Bay-Delta issues are distributed among different locations that are often remote from the Bay-Delta. Construction and operation of the DRS would reduce travel times and costs and improve research and monitoring activity efficiency. The ERS would consolidate existing IEP programs currently located throughout the Delta, and the FTC would house a new program to develop and apply captive fish propagation technologies in support of population restoration.

The specific objectives of each component of the DRS are as follows:

- ERS –
 - Establish a research station in a central location within the Bay-Delta to facilitate conducting monitoring and research; and
 - Co-locate the research station with a facility capable of studying fish in captivity (i.e., the FTC); and
 - Provide facilities to conduct monitoring and research on the Bay-Delta's aquatic resources.
- FTC –
 - Develop captive propagation technologies for the Bay-Delta's rare fish species;
 - Test and refine the captive propagation techniques;

- Locate the facility where suitable water quality and quantity are available, and ability to discharge waste water is available, given the facility's various functions and operations; and
- Co-locate the FTC with a facility conducting conservation research on Bay-Delta rare fish species (i.e., the ERS).

Project Area

Two alternative locations are evaluated in the Draft EIR/EIS: the Rio Vista Army Reserve Center (RVARC) site in the City of Rio Vista and a site located at 845 Ryde Avenue in the City of Stockton (Ryde Avenue site).

Project Overview

The Draft EIR/EIS analyzes three action alternatives, as well as the No Project Alternative.

The No Project Alternative would be a continuation of existing conditions.

For the action alternatives, certain components would be the same for all alternatives. For the ERS, these include provision of office space; boat storage facilities, including a marina; a boat/equipment wash facility; laboratory facilities; shop space; and a storage building. For the FTC, common components include three buildings with aquaculture and research components for the study of individual fish species; an office and administrative building; a shop and vehicle storage building; a surface water intake and groundwater wells, a surface water treatment facility, and an effluent treatment system.

As required by NEPA, the Draft EIR/EIS identifies direct, indirect, and cumulative effects, and possible mitigation for those effects, on biological resources, land use, air quality, water resources, socioeconomics, environmental justice, cultural resources, and other environmental resources that could occur with implementation of each alternative. A summary of each alternative is provided below.

No Project Alternative: Under this alternative, no DRS facilities would be built and existing IEP activities would continue at their current locations. Some of the existing IEP activities that would continue to operate from various offices are fish population estimates, net surveys, and estuarine and marine fish abundance and distribution surveys. No FTC would be built.

Alternative 2: This alternative would be located at the RVARC site on the southern edge of Rio Vista. Alternative 2 is the preferred alternative of DWR and USFWS, and would include all of the components described above for the action alternatives. Under Alternative 2, development of ERS and FTC facilities would be consolidated in the predominantly undeveloped portions of the site, and the marina would be established in the Sacramento River at the southeastern end of the site. The development footprint would be approximately 14 acres. Several existing buildings at the RVARC would be demolished.

Alternative 3: Alternative 3 would include all of the components described above, and would also be located at the RVARC site. The development footprint under Alternative 3 would be approximately 18 acres. Alternative 3 would demolish or repurpose some existing buildings situated adjacent to the Sacramento River. The marina and other ERS facilities would be constructed

within the northern and northeastern portions of the site. In contrast with Alternative 2, the marina would be excavated in an upland portion of the site.

Alternative 4: Alternative 4 would be located at 845 Ryde Avenue in Stockton.

This alternative would include all of the components described above. No existing buildings are located at the Ryde Avenue site, so no buildings would be demolished or repurposed. Similar to Alternative 3, the marina would be excavated in an upland portion of the site.

NEPA Compliance

We are conducting environmental review in accordance with the requirements of NEPA, as amended (42 U.S.C. 4321 *et seq.*), its implementing regulations (40 CFR 1500 *et seq.*), other applicable regulations, and our procedures for compliance with those regulations. The Draft EIR/EIS discusses the direct, indirect, and cumulative impacts of the alternatives on biological resources, cultural resources, water quality, and other environmental resources. Measures to minimize adverse environmental effects are identified and discussed in the Draft EIR/EIS.

EPA's Role in the EIS Process

The EPA is charged under section 309 of the Clean Air Act to review all Federal agencies' EISs and to comment on the adequacy and the acceptability of the environmental impacts of proposed actions in the EISs.

EPA also serves as the repository (EIS database) for EISs prepared by Federal agencies and provides notice of their availability in the **Federal Register**. The EIS

database provides information about EISs prepared by Federal agencies, as well as EPA's comments concerning the EISs. All EISs are filed with EPA, which publishes a notice of availability on Fridays in the **Federal Register**.

For more information, see <http://www.epa.gov/compliance/nepa/eisdata.html>.

You may search for EPA comments on EISs, along with EISs themselves, at

<https://cdxnodengn.epa.gov/cdx-enepa-public/action/eis/search>.

Public Meeting Information

Two public meetings will be held to provide an overview of the project and allow public comment and discussion. Meeting dates, times, and locations will be announced in local media and at www.deltaresearchstation.com.

Public Comments

This notice is provided pursuant to NEPA. Submitting timely comments to the email and hard-copy addresses identified in the **ADDRESSES** section of this notice will also constitute effective filing of the CEQA comments on the EIR portion of the Draft EIR/EIS. USFWS is publishing this notice to allow other agencies and the public an opportunity to review and comment on this document. All comments received will become part of the public record for this action. Comments on the Draft EIR/EIS should be submitted to the address listed in the **ADDRESSES** section of this document. Comments submitted to the above address will be reviewed and considered by all of the lead agencies.

Public Availability of Comments

Before including your address, phone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you may ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

Next Steps

The lead agencies will compile and review all public comments on the Draft EIR/EIS submitted to them prior to preparation of a Final EIR/EIS.

Dated: _____

A handwritten signature in black ink, appearing to read "Alexandra Pitts", is written over a horizontal line.

**Alexandra Pitts,
Deputy Regional Director,
Pacific Southwest Region,
Fish and Wildlife Service.**

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Federal Register Notice

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Landholding Agency: Navy
 Property Number: 77201540003
 Status: Underutilized
 Directions: FAC#483; FAC#482; FAC#482A;
 FAC#479; FAC#390; FAC#455; FAC#399A;
 FAC#5160; 10.56 acres; 9.10 acres.

Comments: public access denied and no
 alternative method to gain access without
 compromising national security.

Reasons: Secured Area

Mississippi

2 Buildings
 Stennis Space Center
 Hancock County MS 39529
 Landholding Agency: NASA
 Property Number: 71201540002
 Status: Unutilized

Directions: Building 4312 & 8304
 Comments: public access denied and no
 alternative method to gain access without
 compromising national security.

Reasons: Secured Area

Ohio

Radio Building & Tower
 23560 Jenkins Dam Road
 Glouster OH 45732
 Landholding Agency: COE
 Property Number: 31201540001
 Status: Unutilized

Directions: TJE-01-X01
 Comments: public access denied and no
 alternative method to gain access without
 compromising national security.

Reasons: Secured Area

[FR Doc. 2015-27365 Filed 10-29-15; 8:45 am]

BILLING CODE 4210-67-P

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

[FWS-R8-FAC-2015-N163];
 [FRFR48370810680-XXX-FF08F00000]

Delta Research Station, Sacramento, CA; Draft Environmental Impact Report/Environmental Impact Statement, and Announcement of Public Meetings

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Notice of availability; request for comments.

SUMMARY: This notice announces the availability of the Delta Research Station Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for public review and comment. The Draft EIR/EIS evaluates impacts regarding construction and operation of the Delta Research Station (DRS) in the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta), California. The planned DRS would consist of two facilities, a proposed Estuarine Research Station (ERS) and Fish Technology Center (FTC). The U.S. Fish and Wildlife Service (USFWS) is

the lead Federal agency responsible for coordinating the environmental analysis for the proposed action under the National Environmental Policy Act (NEPA). The California Department of Water Resources (DWR) is the lead State agency responsible for coordinating the environmental analysis under the California Environmental Quality Act (CEQA).

DATES: Comments on the Draft EIR/EIS must be received or postmarked by 5 p.m. Pacific Time on December 14, 2015. Two public meetings will be held to receive comments on the Draft EIR/EIS. See the **SUPPLEMENTARY INFORMATION** section for meeting dates and times. The public meetings are physically accessible to people with disabilities. Requests for reasonable accommodations (e.g., auxiliary aids or sign language interpretation) should be directed to Michael Stevenson of Horizon Water & Environment at (510) 986-1852, at least 5 working days prior to the applicable meeting date.

ADDRESSES: To view or download the Draft EIR/EIS, or for a list of locations to view hard-bound copies, go to www.deltaresearchstation.com.

You may submit written comments by one of the following methods:

1. By email: Submit comments to comments@deltaresearchstation.com.
2. By hard-copy: Submit comments by U.S. mail or by hand-delivery, to USFWS, Attn: Barbara Beggs, 650 Capitol Mall Suite 8-300, Sacramento, CA 95814.

For how to view comments on the EIS from the Environmental Protection Agency (EPA), or for information on EPA's role in the EIS process, see EPA's Role in the EIS Process under **SUPPLEMENTARY INFORMATION**.

FOR FURTHER INFORMATION CONTACT: Barbara Beggs, USFWS, at 916-930-5603.

SUPPLEMENTARY INFORMATION:

Introduction

With this notice, we continue the process for developing a DRS, which we began by publishing a notice of intent for scoping in the **Federal Register** on December 10, 2014 (79 FR 73332). In addition to this notice of the draft EIR/EIS, EPA is publishing a notice announcing the draft EIS, as required under section 309 of the Clean Air Act (42 U.S.C. 7401 *et seq.*). The publication of EPA's notice is the official start of the minimum requirement for a 45-day public comment period for an EIS (see EPA's Role in the EIS Process under **SUPPLEMENTARY INFORMATION**).

Background

The proposed DRS would consolidate ongoing Interagency Ecological Program (IEP) research and monitoring activities throughout the Bay-Delta and provide facilities for study and production of endangered Delta fishes. Currently, the IEP has approximately 145 State and Federal employees who conduct research throughout the Bay-Delta. The IEP collaboratively monitors, researches, models, and synthesizes critical information for adaptive management water project operations, planning, and regulatory purposes relative to the aquatic ecosystem in the Bay-Delta. USFWS and DWR plan to construct the DRS in a centrally located area within the Bay-Delta, and the facilities are expected to enhance interagency coordination and collaboration.

Purpose

The purpose of the DRS is to enhance interagency coordination and collaboration by developing a shared research facility. Currently, Federal and State agency staff working on similar Bay-Delta issues are distributed among different locations that are often remote from the Bay-Delta. Construction and operation of the DRS would reduce travel times and costs and improve research and monitoring activity efficiency. The ERS would consolidate existing IEP programs currently located throughout the Delta, and the FTC would house a new program to develop and apply captive fish propagation technologies in support of population restoration.

The specific objectives of each component of the DRS are as follows:

- ERS—
 - Establish a research station in a central location within the Bay-Delta to facilitate conducting monitoring and research; and
 - Co-locate the research station with a facility capable of studying fish in captivity (*i.e.*, the FTC); and
 - Provide facilities to conduct monitoring and research on the Bay-Delta's aquatic resources.
- FTC—
 - Develop captive propagation technologies for the Bay-Delta's rare fish species;
 - Test and refine the captive propagation techniques;
 - Locate the facility where suitable water quality and quantity are available, and ability to discharge waste water is available, given the facility's various functions and operations; and
 - Co-locate the FTC with a facility conducting conservation research on

Bay-Delta rare fish species (*i.e.*, the ERS).

Project Area

Two alternative locations are evaluated in the Draft EIR/EIS: The Rio Vista Army Reserve Center (RVARC) site in the City of Rio Vista and a site located at 845 Ryde Avenue in the City of Stockton (Ryde Avenue site).

Project Overview

The Draft EIR/EIS analyzes three action alternatives, as well as the No Project Alternative.

The No Project Alternative would be a continuation of existing conditions.

For the action alternatives, certain components would be the same for all alternatives. For the ERS, these include provision of office space; boat storage facilities, including a marina; a boat/equipment wash facility; laboratory facilities; shop space; and a storage building. For the FTC, common components include three buildings with aquaculture and research components for the study of individual fish species; an office and administrative building; a shop and vehicle storage building; a surface water intake and groundwater wells, a surface water treatment facility, and an effluent treatment system.

As required by NEPA, the Draft EIR/EIS identifies direct, indirect, and cumulative effects, and possible mitigation for those effects, on biological resources, land use, air quality, water resources, socioeconomic, environmental justice, cultural resources, and other environmental resources that could occur with implementation of each alternative. A summary of each alternative is provided below.

No Project Alternative: Under this alternative, no DRS facilities would be built and existing IEP activities would continue at their current locations. Some of the existing IEP activities that would continue to operate from various offices are fish population estimates, net surveys, and estuarine and marine fish abundance and distribution surveys. No FTC would be built.

Alternative 2: This alternative would be located at the RVARC site on the southern edge of Rio Vista. Alternative 2 is the preferred alternative of DWR and USFWS, and would include all of the components described above for the action alternatives. Under Alternative 2, development of ERS and FTC facilities would be consolidated in the predominantly undeveloped portions of the site, and the marina would be established in the Sacramento River at the southeastern end of the site. The

development footprint would be approximately 14 acres. Several existing buildings at the RVARC would be demolished.

Alternative 3: Alternative 3 would include all of the components described above, and would also be located at the RVARC site. The development footprint under Alternative 3 would be approximately 18 acres. Alternative 3 would demolish or repurpose some existing buildings situated adjacent to the Sacramento River. The marina and other ERS facilities would be constructed within the northern and northeastern portions of the site. In contrast with Alternative 2, the marina would be excavated in an upland portion of the site.

Alternative 4: Alternative 4 would be located at 845 Ryde Avenue in Stockton. This alternative would include all of the components described above. No existing buildings are located at the Ryde Avenue site, so no buildings would be demolished or repurposed. Similar to Alternative 3, the marina would be excavated in an upland portion of the site.

NEPA Compliance

We are conducting environmental review in accordance with the requirements of NEPA, as amended (42 U.S.C. 4321 *et seq.*), its implementing regulations (40 CFR part 1500 *et seq.*), other applicable regulations, and our procedures for compliance with those regulations. The Draft EIR/EIS discusses the direct, indirect, and cumulative impacts of the alternatives on biological resources, cultural resources, water quality, and other environmental resources. Measures to minimize adverse environmental effects are identified and discussed in the Draft EIR/EIS.

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For more information, see <http://www.epa.gov/compliance/nepa/eisdata.html>. You may search for EPA comments on EISs, along with EISs

themselves, at <https://cdxnodengn.epa.gov/cdx-enepa-public/action/eis/search>.

Public Meeting Information

Two public meetings will be held to provide an overview of the project and allow public comment and discussion. Meeting dates, times, and locations will be announced in local media and at www.deltaresearchstation.com.

Public Comments

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Next Steps

The lead agencies will compile and review all public comments on the Draft EIR/EIS submitted to them prior to preparation of a Final EIR/EIS.

Alexandra Pitts,

Deputy Regional Director, Pacific Southwest Region, Fish and Wildlife Service.

[FR Doc. 2015-27683 Filed 10-29-15; 8:45 am]

BILLING CODE 4333-15-P

Notice of Completion

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Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
 For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH #2014122017**Project Title:** Delta Research Station

Lead Agency: California Department of Water Resources

Contact Person: John Engstrom

Mailing Address: 1416 Ninth Street, Room 315-3/P.O. Box 942836

Phone: (916) 651-8745

City: Sacramento

Zip: 94236-0001

County: Sacramento

Project Location: County: Solano or San Joaquin City/Nearest Community: Rio Vista or Stockton

Cross Streets: Rio Vista: Beach Dr. and South 2nd St; Stockton: West Fremont St and Ryde Ave. Zip Code: various

Longitude/Latitude (degrees, minutes and seconds): _____ ° _____ ' _____ " N / _____ ° _____ ' _____ " W Total Acres: approx. 17

Assessor's Parcel No.: various

Section: _____

Twp.: _____

Range: _____

Base: _____

Within 2 Miles: State Hwy #: _____ Waterways: Rio Vista: Sacramento River; Stockton: San Joaquin River

Airports: various

Railways: various

Schools: various

Document Type:CEQA: ☐ NOP☒ Draft EIRNEPA: ☐ NOIOther: ☒ Joint Document☐ Early Cons☐ Supplement/Subsequent EIR☐ EA☐ Final Document☐ Neg Dec

(Prior SCH No.) _____

☐ Draft EIS☐ Other: _____☐ Mit Neg Dec

Other: _____

☐ FONSI**Local Action Type:**☐ General Plan Update☐ Specific Plan☐ Rezone☐ Annexation☐ General Plan Amendment☐ Master Plan☐ Prezone☐ Redevelopment☐ General Plan Element☐ Planned Unit Development☐ Use Permit☐ Coastal Permit☐ Community Plan☒ Site Plan☐ Land Division (Subdivision, etc.)☒ Other: Research facility**Development Type:**☐ Residential: Units _____ Acres _____

Acres _____

Employees _____

☐ Transportation: Type _____☐ Office: Sq.ft. _____ Acres _____

Acres _____

Employees _____

☐ Mining: Mineral _____☐ Commercial: Sq.ft. _____ Acres _____

Acres _____

Employees _____

☐ Power: Type _____ MW☐ Industrial: Sq.ft. _____ Acres _____

Acres _____

Employees _____

☐ Waste Treatment: Type _____ MGD☐ Educational: _____☐ Hazardous Waste: Type _____☐ Recreational: _____☐ Other: _____☐ Water Facilities: Type _____ MGD**Project Issues Discussed in Document:**☒ Aesthetic/Visual☐ Fiscal☒ Recreation/Parks☒ Vegetation☐ Agricultural Land☒ Flood Plain/Flooding☒ Schools/Universities☒ Water Quality☒ Air Quality☐ Forest Land/Fire Hazard☐ Septic Systems☒ Water Supply/Groundwater☒ Archeological/Historical☒ Geologic/Seismic☒ Sewer Capacity☒ Wetland/Riparian☒ Biological Resources☐ Minerals☒ Soil Erosion/Compaction/Grading☒ Growth Inducement☐ Coastal Zone☒ Noise☒ Solid Waste☒ Land Use☒ Drainage/Absorption☒ Population/Housing Balance☒ Toxic/Hazardous☒ Cumulative Effects☒ Economic/Jobs☒ Public Services/Facilities☒ Traffic/Circulation☐ Other: _____**Present Land Use/Zoning/General Plan Designation:**

various

Project Description: (please use a separate page if necessary)

The Delta Research Station (DRS) will be a science and research center in the Bay-Delta, which would consolidate a number of existing and new activities into two proposed facilities, the Estuarine Research Station and the Fish Technology Center, bringing together State and Federal agency staff working on similar Bay-Delta issues. The purpose of the DRS is to enhance interagency coordination and collaboration by developing a shared research facility. Currently, federal and state agency staff working on similar Bay-Delta issues are distributed among different locations that are often remote from the Bay-Delta. Construction and operation of the DRS would reduce travel times and costs and improve research and monitoring activity efficiency.

Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

Reviewing Agencies Checklist

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with an "X".
If you have already sent your document to the agency please denote that with an "S".


<input checked="" type="checkbox"/> Air Resources Board	<input checked="" type="checkbox"/> Office of Historic Preservation
<input checked="" type="checkbox"/> Boating & Waterways, Department of	<input checked="" type="checkbox"/> Office of Public School Construction
<input checked="" type="checkbox"/> California Emergency Management Agency	<input type="checkbox"/> Parks & Recreation, Department of
<input checked="" type="checkbox"/> California Highway Patrol	<input type="checkbox"/> Pesticide Regulation, Department of
<input checked="" type="checkbox"/> Caltrans District #4, 10	<input checked="" type="checkbox"/> Public Utilities Commission
<input type="checkbox"/> Caltrans Division of Aeronautics	<input checked="" type="checkbox"/> Regional WQCB #5
<input checked="" type="checkbox"/> Caltrans Planning	<input checked="" type="checkbox"/> Resources Agency
<input checked="" type="checkbox"/> Central Valley Flood Protection Board	<input type="checkbox"/> Resources Recycling and Recovery, Department of
<input type="checkbox"/> Coachella Valley Mtns. Conservancy	<input type="checkbox"/> S.F. Bay Conservation & Development Comm.
<input type="checkbox"/> Coastal Commission	<input type="checkbox"/> San Gabriel & Lower L.A. Rivers & Mtns. Conservancy
<input type="checkbox"/> Colorado River Board	<input type="checkbox"/> San Joaquin River Conservancy
<input checked="" type="checkbox"/> Conservation, Department of	<input type="checkbox"/> Santa Monica Mtns. Conservancy
<input type="checkbox"/> Corrections, Department of	<input checked="" type="checkbox"/> State Lands Commission
<input checked="" type="checkbox"/> Delta Protection Commission	<input type="checkbox"/> SWRCB: Clean Water Grants
<input type="checkbox"/> Education, Department of	<input checked="" type="checkbox"/> SWRCB: Water Quality
<input type="checkbox"/> Energy Commission	<input type="checkbox"/> SWRCB: Water Rights
<input checked="" type="checkbox"/> Fish & Game Region #2, 3	<input type="checkbox"/> Tahoe Regional Planning Agency
<input type="checkbox"/> Food & Agriculture, Department of	<input checked="" type="checkbox"/> Toxic Substances Control, Department of
<input type="checkbox"/> Forestry and Fire Protection, Department of	<input type="checkbox"/> Water Resources, Department of
<input type="checkbox"/> General Services, Department of	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Health Services, Department of	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Housing & Community Development	
<input checked="" type="checkbox"/> Native American Heritage Commission	

Local Public Review Period (to be filled in by lead agency)

Starting Date October 30, 2015 Ending Date December 14, 2015

Lead Agency (Complete if applicable):

Consulting Firm: <u>Horizon Water and Environment</u>	Applicant: _____
Address: <u>180 Grand Avenue, Suite 1405</u>	Address: _____
City/State/Zip: <u>Oakland, CA</u>	City/State/Zip: _____
Contact: <u>Michael Stevenson</u>	Phone: _____
Phone: <u>510-986-1850</u>	

Signature of Lead Agency Representative:  Date: 10/28/15

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.

Newspaper Advertisements of Draft EIR/EIS Availability and Public Meeting

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**THE RECORD
PROOF OF PUBLICATION**

STATE OF CALIFORNIA
COUNTY OF SAN JOAQUIN

THE UNDERSIGNED SAYS:

I am a citizen of the United States and a resident of San Joaquin County; I am over the age of 18 years and not a part to or interested in the above-entitled matter. I am the principal clerk of the printer of THE RECORD, a newspaper of general publication, printed and published daily in the City of Stockton, County of San Joaquin by the Superior Court of the County of San Joaquin, State of California, under the date of February 26, 1952, File No. 52857, San Joaquin County Records; that the notice of which the annexed is a printed copy (set in type not smaller than nonpareil), has been published each regular and entire issue of said newspaper and not in any supplement thereof on the following dates,
To wit, October 30 2015

I declare under penalty of perjury that the foregoing is true and correct. Executed on October 30, 2015 In Stockton California



Carlette Schnell,
The Record

0001053314

*Join us for a
CEQA and NEPA public meeting
on the
Delta Research Station Project -
Estuarine Research Station and Fish Technology Center EIR/EIS*

.....
The California Department of Water Resources (DWR) and U.S. Fish and Wildlife Service (USFWS), with assistance from the California Department of General Services, have prepared a draft environmental impact report / environmental impact statement (EIR/EIS) for construction and operation of the Delta Research Station, pursuant to the California Environmental Quality Act and National Environmental Policy Act. The EIR/EIS is being circulated for a 45-day public review and comment period. Information regarding the project is available at: <http://deltaresearchstation.com/>. The document is also available for public review at the Rio Vista Library (44 South Second Street, Rio Vista, CA 94571) and the Stockton-San Joaquin County Library (605 N. El Dorado Street, Stockton, CA 95202). The purpose of public review of the EIR/EIS, including public meetings, is to provide agencies and interested individuals with opportunities to comment on or express concerns regarding the contents of the EIR/EIS. The review period will begin on October 30, 2015 and ends on December 14, 2015. During this period, DWR and USFWS will hold two public meetings. Details of these meetings are as follows:

Tuesday, December 1, 2015 at 6:00 p.m.

D.H. White Elementary School

500 Elm Way

Rio Vista, CA 94571

Thursday, December 3, 2015 at 5:30 p.m.

Arnold Rue Community Center

5758 Lorraine Avenue

Stockton, CA 95210

Public comments on the Draft EIR/EIS may be submitted via email to comments@deltaresearchstation.com.

Will you need an accommodation in order to attend and/or participate in this event? If so, please contact Michael Stevenson, Horizon Water and Environment, at (510) 986-1852. Auxiliary aides and services are available to individuals with disabilities upon request.

#1053314 10/30/2015

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Distribution List for Draft EIR/EIS Notice of Availability and EIR/EIS Hard Copies

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									No. Notice of Availability Copies	Mailing Method
FIRST NAME	LAST NAME	ORGANIZATION	ADDRESS	ADDRESS 2	CITY	STATE	ZIP	EMAIL ADDRESS		
JEFF	MELBY	CA COASTAL CONSERVANCY	1330 BROADWAY	11TH FLOOR	OAKLAND	CA	94612		1	Certified mail
SCOTT	CANTRELL	CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE	1416 NINTH ST	ROOM 1342C	SACRAMENTO	CA	95814		1	Certified mail
MARK	CLIFFORD	CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE	#3 NORTH OLD STAGE ROAD		MT. SHASTA	CA	96067		1	Certified mail
LARRY	ENG	CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE	1701 NIMBUS RD	SUITE A	RANCHO CORDOVA	CA	95670		1	Certified mail
GREG	ERICKSON	CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE	850 GUILD AVE	SUITE 105	LODI	CA	95240		1	Certified mail
MARK	STEVENSON	CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE	MARINE REGION, 20 LOWER RAGSDALE DR.	SUITE 100	MONTEREY	CA	93940		1	Certified mail
SCOTT	WILSON	CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE	7329 SILVERADO TRAIL		NAPA	CA	94558		1	Certified mail
MARINA	BRAND	CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE - ECOSYSTEM RESTORATION UNIT (CVBD BRANCH)	2109 ARCH ROAD		STOCKTON	CA	95206		1	Certified mail
JOHN P	DONNELLY	CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE - WILDLIFE CONSERVATION BOARD	1807 13TH ST	SUITE 103	SACRAMENTO	CA	95811		1	Certified mail
TERRI	PENCOVIC	CALIFORNIA DEPARTMENT OF TRANSPORTATION	1120 N ST		SACRAMENTO	CA	95814		1	Certified mail
DENNIS	AGAR	CALIFORNIA DEPARTMENT OF TRANSPORTATION - DISTRICT 10	1976 EAST CHARTER WAY / EAST DR. MARTIN LUTHER KING JR. BLVD.		STOCKTON	CA	95205		1	Certified mail
BIJAN	SARTIPI	CALIFORNIA DEPARTMENT OF TRANSPORTATION - DISTRICT 4	P.O. BOX 23660		OAKLAND	CA	94612		1	Certified mail
PAUL D.	THAYER	CALIFORNIA STATE LANDS COMMISSION	100 HOWE AVE	SUITE 100 SOUTH	SACRAMENTO	CA	95825		1	Certified mail
Len	Marino, PE	CENTRAL VALLEY FLOOD PROTECTION BOARD	3310 EL CAMINO AVENUE	Room 151	Sacramento	CA	95821		1	Certified mail
ELIZABETH	LEE	CENTRAL VALLEY REGIONAL WATER QUALITY CONTROL BOARD	11020 SUN CENTER DR	SUITE 200	RANCHO CORDOVA	CA	95670-6114		1	Certified mail
MELILLI	DAVID	CITY OF RIO VISTA	1 MAIN ST		RIO VISTA	CA	94571		1	Certified mail
MARK J.	MADISON	CITY OF STOCKTON	2500 NAVY DR		STOCKTON	CA	95206		1	Certified mail
CAMPBELL	INGRAM	DELTA CONSERVANCY	1450 HALYARD DRIVE		WEST SACRAMENTO	CA	95691		1	Certified mail
ERIK	VINK	DELTA PROTECTION COMMISSION	2101 STONE BLVD	SUITE 210	WEST SACRAMENTO	CA	95691		1	Certified mail
PETER	GOODWIN	DELTA SCIENCE PROGRAM	980 NINTH STREET	SUITE 1500	SACRAMENTO	CA	95814		1	Certified mail
STEVE	WATANABE	DEPT OF BOATING & WATERWAYS	ONE CAPITAL MALL	SUITE 500	SACRAMENTO	CA	95814		1	Certified mail
JEFF	MCCLAIN	NATIONAL MARINE FISHERIES SERVICE	650 CAPITAL MALL	SUITE 5-100	SACRAMENTO	CA	95814		1	Certified mail
Gayle	Totton	NATIVE AMERICAN HERITAGE COMMISSION	1550 HARBOR BLVD	SUITE 100	WEST SACRAMENTO	CA	95691		1	Certified mail
		RECLAMATION DISTRICT 341	18419 STATE HIGHWAY 160		RIO VISTA	CA	94571		1	Certified mail
		RECLAMATION DISTRICT 828	P.O. Box 20		STOCKTON	CA	95201		1	Certified mail
KERRY	SULLIVAN	SAN JOAQUIN COUNTY	1810 EAST HAZELTON AVE		STOCKTON	CA	95205		1	Certified mail
KERRY	SULLIVAN	SAN JOAQUIN COUNTY COMMUNITY DEVELOPMENT DEPARTMENT	1810 E. HAZELTON AVE.		STOCKTON	CA	95205		1	Certified mail
Arnaud	Marjollet	SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT - CENTRAL REGION	1990 E GETTYSBURG AVE		FRESNO	CA	93726		1	Certified mail
		SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT - NORTHERN REGION	4800 ENTERPRISE WAY		MODESTO	CA	95356		1	Certified mail
		SOLANO CO. CLERK OF THE BOARD OF SUPERVISORS	675 TEXAS ST.		FAIRFIELD	CA	94533		1	Certified mail
		SOLANO CO. RESOURCE MANAGEMENT	675 TEXAS ST.	#5500	FAIRFIELD	CA	94533		1	Certified mail
MIKE	YANKOVICH	SOLANO COUNTY PLANNING SERVICES DIVISION	675 TEXAS ST	SUITE 5500	FAIRFIELD	CA	94533-6341		1	Certified mail
		SOLANO TRANSPORTATION AUTHORITY	ONE HARBOR CENTER #130		SUISUN CITY	CA	94585		1	Certified mail
		Solano County Clerk's Office	675 Texas Street	Suite 1900	Fairfield	CA	94533		1	FedEx
		San Joaquin County Clerk's Office	P.O. Box 1968		Stockton	CA	95201			FedEx
		STATE CLEARINGHOUSE	1400 TENTH STREET		SACRAMENTO	CA	95814		1	FedEx
CAROL	ROLAND-NAWI	STATE HISTORIC PRESERVATION OFFICER	1725 23RD STREET	SUITE 100	SACRAMENTO	CA	95816		1	Certified mail
PEDRO	VILLALOBOS	STATE WATER PROJ ANALYSIS OFFICE	1416 NINTH ST	ROOM 1620	SACRAMENTO	CA	95814		1	Certified mail
JOHN P	GERLACH	STATE WATER RESOURCES CONTROL BOARD	1001 I ST		SACRAMENTO	CA	95814		1	Certified mail
		STOCKTON PORT DISTRICT	P O BOX 2089		STOCKTON	CA	95201		1	Certified mail
RODNEY	MCINNIS	U S DEPT OF COMMERCE NOAA	501 W OCEAN BLVD	SUITE 4200	LONG BEACH	CA	90802		1	Certified mail
MARK	FUGLAR	U.S. ARMY CORPS OF ENGINEERS	1325 J ST	ROOM 1350	SACRAMENTO	CA	95814		1	Certified mail
		U.S. COAST GUARD - 11TH COAST GUARD DISTRICT	900 BEACH DRIVE		RIO VISTA	CA	94571		1	Certified mail
SUSAN	FRY	US BUREAU OF RECLAMATION	801 I STREET	SUITE 140	SACRAMENTO	CA	95814		1	Certified mail
MICHAEL	ORCUTT	US DEPARTMENT OF INTERIOR: BUREAU OF INDIAN AFFAIRS	2800 COTTAGE WAY		SACRAMENTO	CA	95825		1	Certified mail
ERIN	FORESMAN	US ENVIRONMENTAL PROTECTION AGENCY REGION IX	75 HAWTHORNE ST		SAN FRANCISCO	CA	94105		1	Certified mail
PAUL	WORK	USGS	6000 J. ST, PLACER HALL		SACRAMENTO	CA	95819		1	Certified mail
MAT	EHRARHDT	YOLO-SOLANO AIR QUALITY MANAGEMENT DISTRICT	1947 GALILEO CT.	SUITE 103	DAVIS	CA	95618		1	Certified mail
MARY	SMALL	CA COASTAL CONSERVANCY	1330 BROADWAY	11TH FLOOR	OAKLAND	CA	94612		1	Certified mail
BRIAN	FINLAYSON	CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE	1701 NIMBUS RD	SUITE F	RANCHO CORDOVA	CA	95670		1	Certified mail
CARL	WILCOX	CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE	1416 NINTH ST	ROOM 1342C	SACRAMENTO	CA	95814		1	Certified mail
SANDY	MOREY	CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE - CENTRAL REGION	1701 NIMBUS RD		RANCO CORDOVA	CA	95670		1	Certified mail
TODD	GARDNER	CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE - DELTA LEVEE HABITAT IMPROVEMENT PROGRAM	1701 NIMBUS RD	SUITE A	RANCHO CORDOVA	CA	95670		1	Certified mail
		DELTA MARINA YACHT HARBOR	100 MARINA ST		RIO VISTA	CA	94571		1	Regular mail
SAM	HARADER	DELTA SCIENCE PROGRAM	980 NINTH STREET	SUITE 1500	SACRAMENTO	CA	95814		1	Regular mail
LAUREN	HASTINGS	DELTA SCIENCE PROGRAM	980 NINTH STREET	SUITE 1500	SACRAMENTO	CA	95814		1	Regular mail
CINDY	MESSER	DELTA STEWARDSHIP COUNCIL	980 NINTH STREET	SUITE 1500	SACRAMENTO	CA	95814		1	Regular mail
		FRONTIER COMMUNICATIONS	9262 E. STOCKTON BLVD.		ELK GROVE	CA	95624		1	Regular mail
BRUCE	OPPENHEIM	NATIONAL MARINE FISHERIES SERVICE	650 CAPITOL MALL	SUITE 8-300	SACRAMENTO	CA	95814		1	Certified mail
MARIA	REA	NATIONAL MARINE FISHERIES SERVICE	650 CAPITOL MALL	SUITE 8-300	SACRAMENTO	CA	95814		1	Certified mail
JEFF	STUART	NATIONAL MARINE FISHERIES SERVICE	650 CAPITOL MALL	SUITE 8-300	SACRAMENTO	CA	95814		1	Certified mail

NAME	ADDRESS	CITY	STATE	ZIP	SEND VIA CERTIFIED MAIL?	NOP NOTES	NOA Copies	Mailing Method
Resident	725 Beach Dr	Rio Vista	CA	94571	N		1	regular mail
Resident	714 Beach Dr	Rio Vista	CA	94571	N		1	regular mail
Resident	733 Beach Dr	Rio Vista	CA	94571	N		1	regular mail
City Gardens Mobile Home Park	2635 W Fremont Street	Stockton	CA	95203	N		1	regular mail
Gametime Gear	2894 Monte Diablo Ave	Stockton	CA	95203	N		1	regular mail
All Star Sports	2894 Monte Diablo Ave	Stockton	CA	95203	N		1	regular mail
Klamath Meeting & Reception	2894 Monte Diablo Ave	Stockton	CA	95203	N		1	regular mail
Rare Parts Inc	621 Wilshire Avenue	Stockton	CA	95203	N		1	regular mail
Resident	2808 Monte Diablo Ave	Stockton	CA	95203	N		1	regular mail
Resident	2816 Monte Diablo Ave	Stockton	CA	95203	N		1	regular mail
Resident	2824 Monte Diablo Ave	Stockton	CA	95203	N	Sent 01062015	1	regular mail
Resident	2732 Monte Diablo Ave	Stockton	CA	95203	N	Sent 01062015	1	regular mail
Resident	2718 Monte Diablo Ave	Stockton	CA	95203	N	Sent 01062015	1	regular mail
Resident	2844 Monte Diablo Ave	Stockton	CA	95203	N	Sent 01062015	1	regular mail
Resident	2894 Monte Diablo Ave	Stockton	CA	95203	N	Sent 01062015	1	regular mail
Resident	2650 Monte Diablo Ave	Stockton	CA	95203	N	Sent 01062015	1	regular mail
Resident	2505 W. Fremont St	Stockton	CA	95203	N	Sent 01062015	1	regular mail
Resident	2511 W. Fremont St	Stockton	CA	95203	N	Sent 01062015	1	regular mail
Resident	815 King Ave.	Stockton	CA	95203	N	Sent 01062015	1	regular mail
Resident	2411 W. Fremont St	Stockton	CA	95203	N	Sent 01062015	1	regular mail
Resident	2419 W. Fremont St	Stockton	CA	95203	N	Sent 01062015	1	regular mail
Resident	2223 W. Fremont St	Stockton	CA	95203	N	Sent 01062015	1	regular mail
Resident	2327 W. Fremont St	Stockton	CA	95203	N	Sent 01062015	1	regular mail
Resident	2319 W. Fremont St	Stockton	CA	95203	N	Sent 01062015	1	regular mail
Resident	2303 W. Fremont St	Stockton	CA	95203	N	Sent 01062015	1	regular mail
Resident	747 Wilshire Ave	Stockton	CA	95203	N	Sent 01062015	1	regular mail
Resident	734 Wilshire Ave	Stockton	CA	95203	N	Sent 01062015	1	regular mail
Resident	100 Marina Dr.	Rio Vista	CA	94571		Sent 01062015	1	regular mail
Resident	8430 Montezuma Hills Rd	Rio Vista	CA	94571		Sent 01062015	1	regular mail

Total:

29

Organization	Name	Address 1	Address 2	City	State	Zip	No. Hard NOA Copies	No. CDs	Date to Receive
CA Department of Water Resources	John Engstrom	1416 Ninth Street	Room 315	Sacramento	CA	95814		4	10/30/2015
U.S. Fish and Wildlife Service	Barbara Beggs	650 Capitol Mall	Suite 8-300	Sacramento	CA	95691		3	1 hard copy and 40 CDs need to be delivered by Monday (10/26). Other 2 hard copies can be 40 delivered later.
CA Department of General Services	Jennifer Parson	707 Third Street 44 South Second Street	Suite 4-430	West Sacramento	CA	95605		2	10/30/2015
Rio Vista Library				Rio Vista	CA	94571	1	1	10/30/2015
Stockton-San Joaquin County Library		605 N. El Dorado Street		Stockton	CA	95202	1	1	10/30/2015
Horizon	Michael Stevenson	180 Grand Ave.	Suite 1405	Oakland	CA	94612		2	
TOTAL:							2	13	40

Attachment B

MEETING MATERIALS

This attachment contains the materials associated with the public meetings that were held during the public review period of the Draft EIR/EIS, including the Rio Vista meeting sign-in sheet, comment and speaker forms, posters, and presentation.

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Draft EIR/EIS Public Meeting Sign-in Sheet

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Public Meeting Sign In Sheet

Name	Address	Email Address	Organization (optional)	Phone Number (optional)
Tim Rentzel		TDR@MYIIP.com	Army Base comm	
JAN VICK		SEAWINGJAN@GMAIL.COM	ABSC chair	
GENE VICK		SEAWING@SPRINTERNET.NET	LIONS	
RON BARTMAN				
TOM SURH	724 Deerfield Way Rio Vista	tsurh2000@yahoo.com	Rio Vision	
BART BARTER		B.BARTER@msn.com		
MARY ELLEN LAMOTHE	50 Highland Dr	Mamelan2@frontiernet.net	Rio Vision	
Gerry Swan	301 Springfield Dr	Swanmom82@SBCglobal.net		570 507 4080
Karen Seaford	675 Texas, FF	Ktedford@Solano County. Com	Board of Supervisors	707- 784-6131
ZOE HOLDER		holdfam@gmail.com		

Disclaimer: Before including your name, address, e-mail address or other personal identifying information, please be aware that your name and contact information will be added to the project mailing list and your personal identifying information may be made publicly available at any time. While you can request that your personal identifying information be withheld from public review, the lead agency cannot guarantee that this will be possible.

Public Meeting Sign In Sheet

Name	Address	Email Address	Organization (optional)	Phone Number (optional)
Marcus Holder	518 California Rio Vista			
Dan Christians	one Main St Rio Vista, CA	dchris3734@aol.com	City of R.V.	(707) 580-0905
Andrew March			Congressman Garamendi	
Michelle Marmor	Rio Vista		DWR	
Tina Drummer	529 Black Diamond Rio Vista	TLD3DRUMMER@Gmail.com		
Judith Kirkley	525 BLACK DIAMOND DR RIO VISTA	JUDYNSAN@yahoo.com		707 374 6878
Janice Kirkley	525 BLACK DIAMOND DR RIO VISTA	"		"
Ed Vitrano	217 BORDEAUX Way, RV	edvitrano@comcast.net	TRACCA	707.374.6826
Everett Upham		ecupham@frontiernet.net		707-249-8631

Disclaimer: Before including your name, address, e-mail address or other personal identifying information, please be aware that your name and contact information will be added to the project mailing list and your personal identifying information may be made publicly available at any time. While you can request that your personal identifying information be withheld from public review, the lead agency cannot guarantee that this will be possible.

Draft EIR/EIS Public Meeting Comment and Speaker Forms

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**CALIFORNIA DEPARTMENT OF WATER RESOURCES AND
U.S. FISH AND WILDLIFE:
DELTA RESEARCH STATION PROJECT**

Public Meeting Comment Form

Name:
Group/Organization (optional):
Mailing Address:
Telephone No. (optional):
Email (optional):

Comments/Issues:

Please use additional sheets if necessary.

SUBMIT WRITTEN COMMENTS (POSTMARKED NO LATER THAN DECEMBER 14, 2015) TO:

MAIL: California Department of Water Resources
Attn: John Engstrom, DRS Draft EIR/EIS Comments
1416 Ninth Street, Room 315-3
Sacramento, CA 95814

EMAIL: comments@deltaresearchstation.com

Place
Stamp
Here

California Department of Water Resources
Attn: John Engstrom, DRS Draft EIR/EIS
Comments
1416 Ninth Street, Room 315-3
Sacramento, CA 95814

(fold here)

Tape
Here-
Do not
staple

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Draft EIR/EIS Public Meeting Posters

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Welcome to the Delta Research Station CEQA/NEPA Public Meetings

California Department of Water Resources
U.S. Fish and Wildlife Service

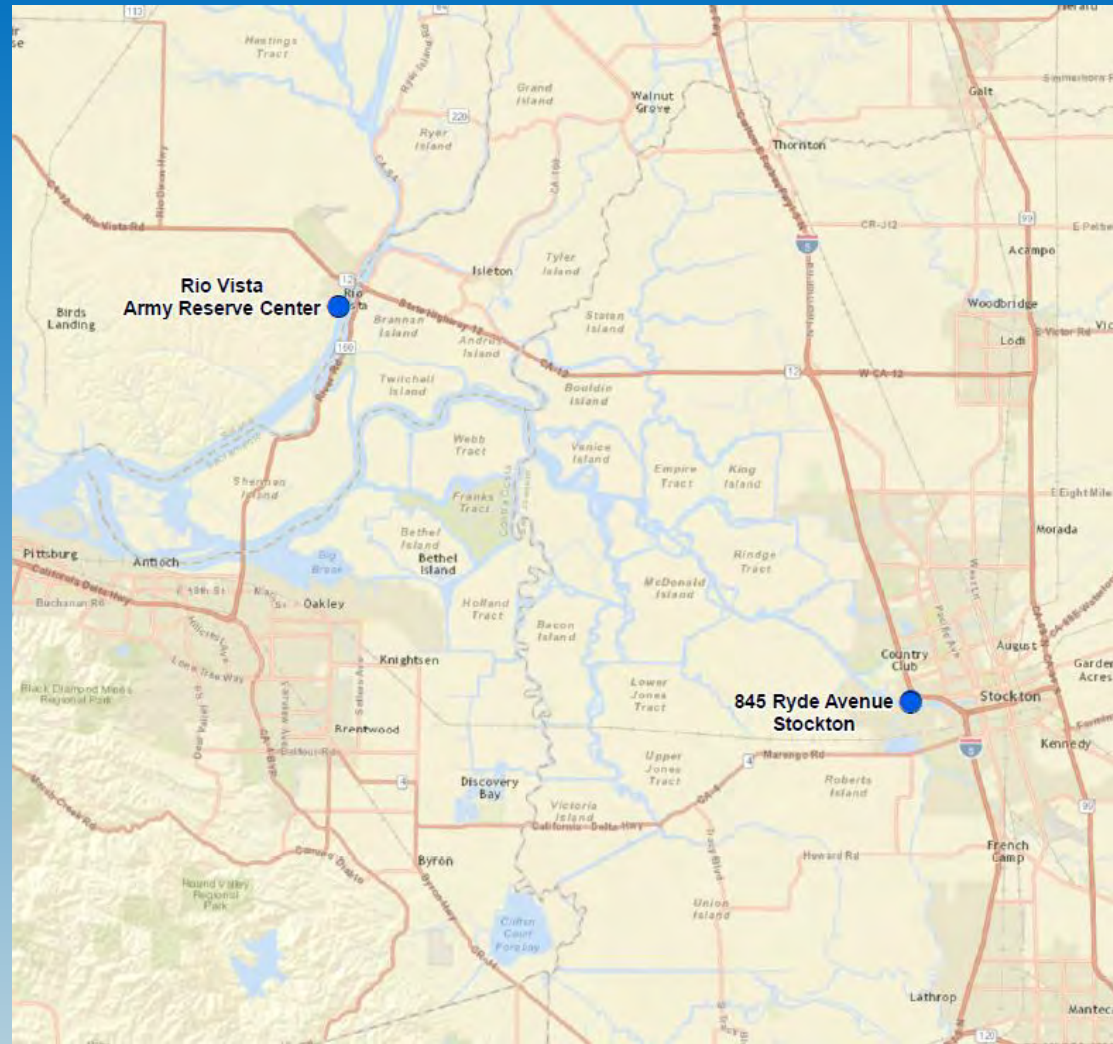


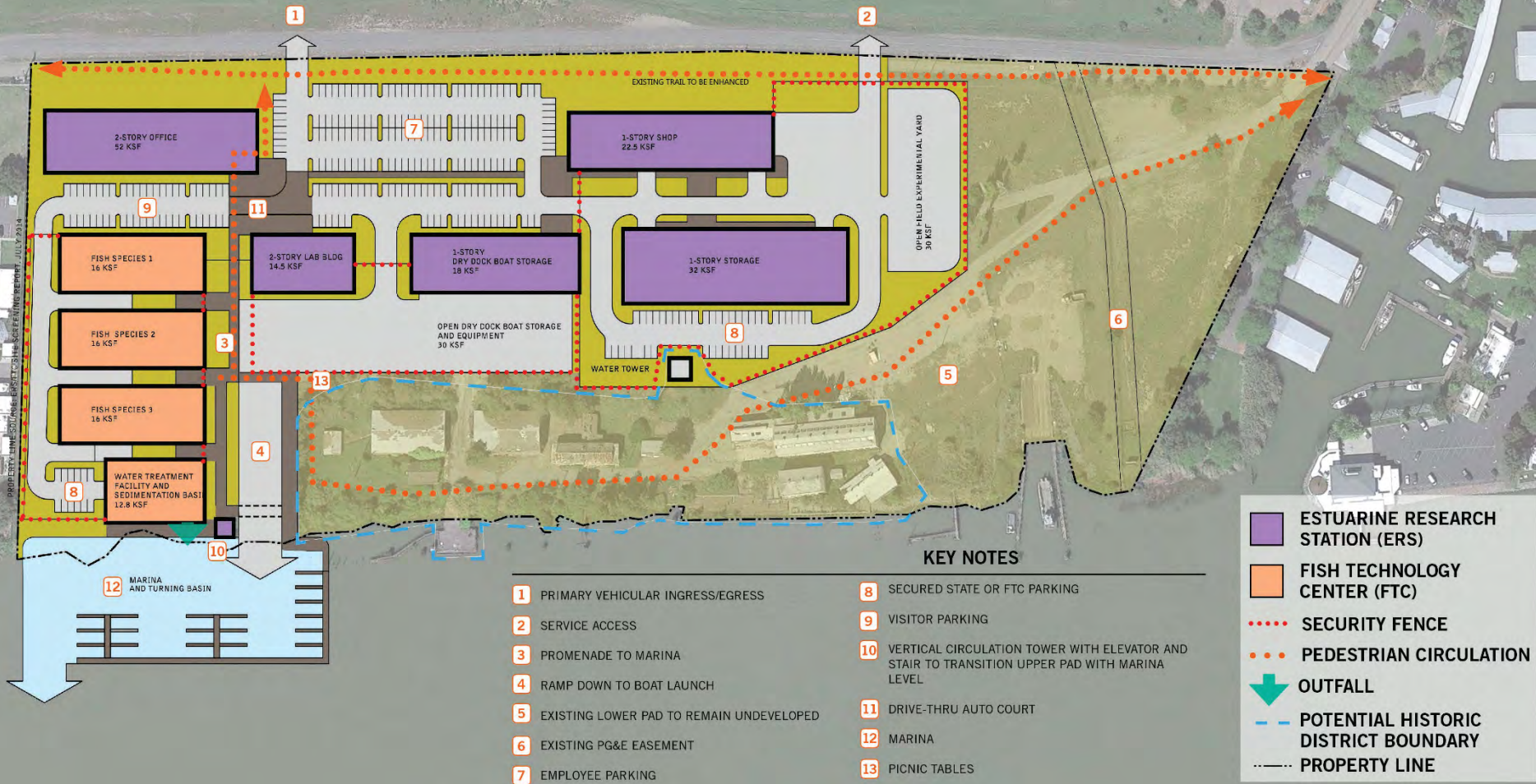
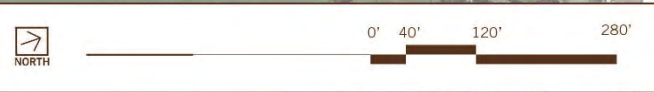
SIGN-IN / ORIENTATION

- ❖ All Guests Sign-in Here
- ❖ Information, Handouts, and Comment Cards for Tonight's Meeting

Sites Under Consideration

- Rio Vista Army Reserve Center
- 845 Ryde Ave, Stockton





RIO VISTA ARMY RESERVE CENTER

Configuration 1



0' 40' 120' 280'



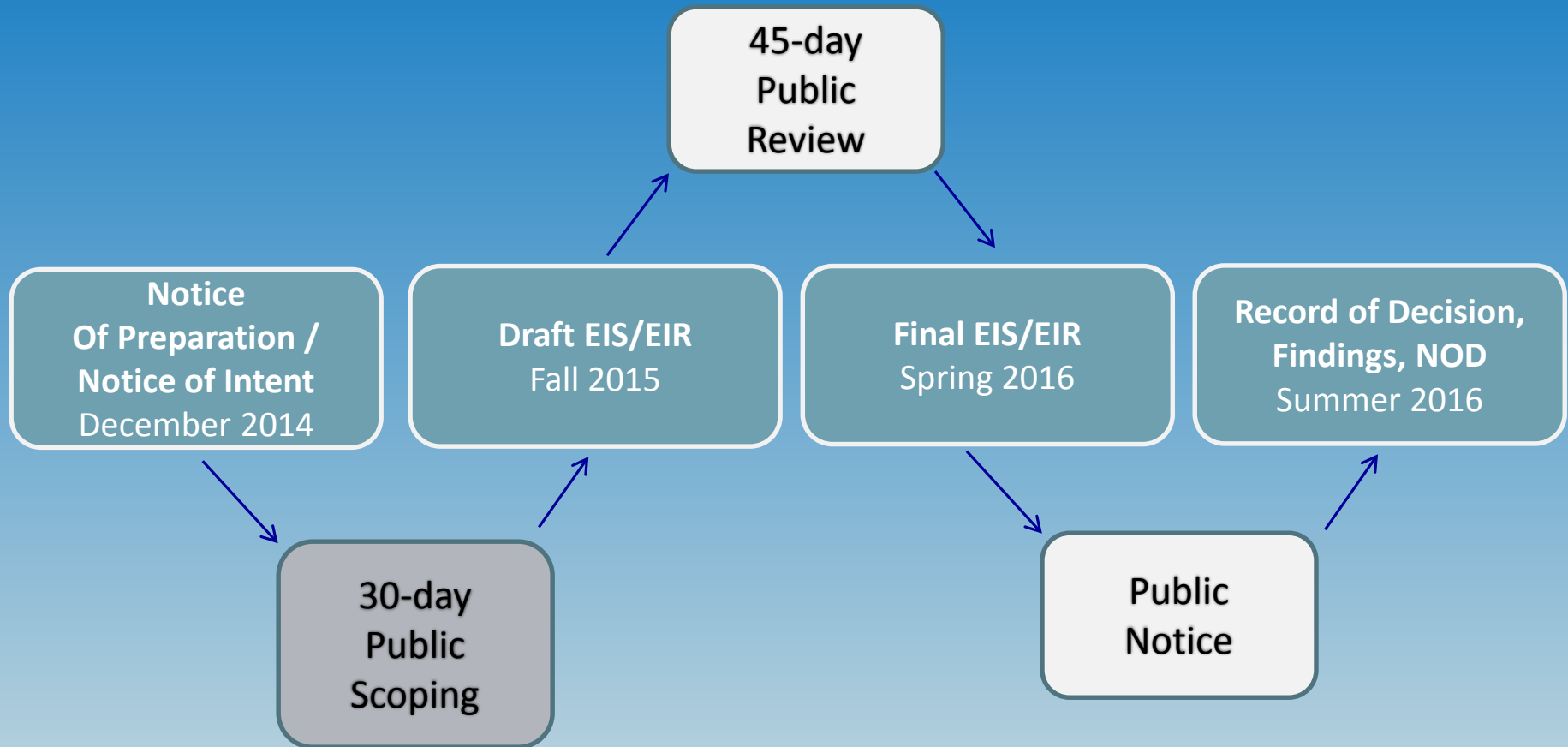
RIO VISTA ARMY RESERVE CENTER

Configuration 2



845 Ryde Ave, Stockton

CEQA/NEPA Process and Schedule



PUBLIC REVIEW PROCESS

PUBLIC COMMENT SUBMITTAL

- Please provide input regarding the Draft EIR/EIS on the comment cards provided.

- Or mail your comment card before the deadline:

California Department of Water Resources

Attn: John Engstrom

1416 Ninth Street, Room 315-3

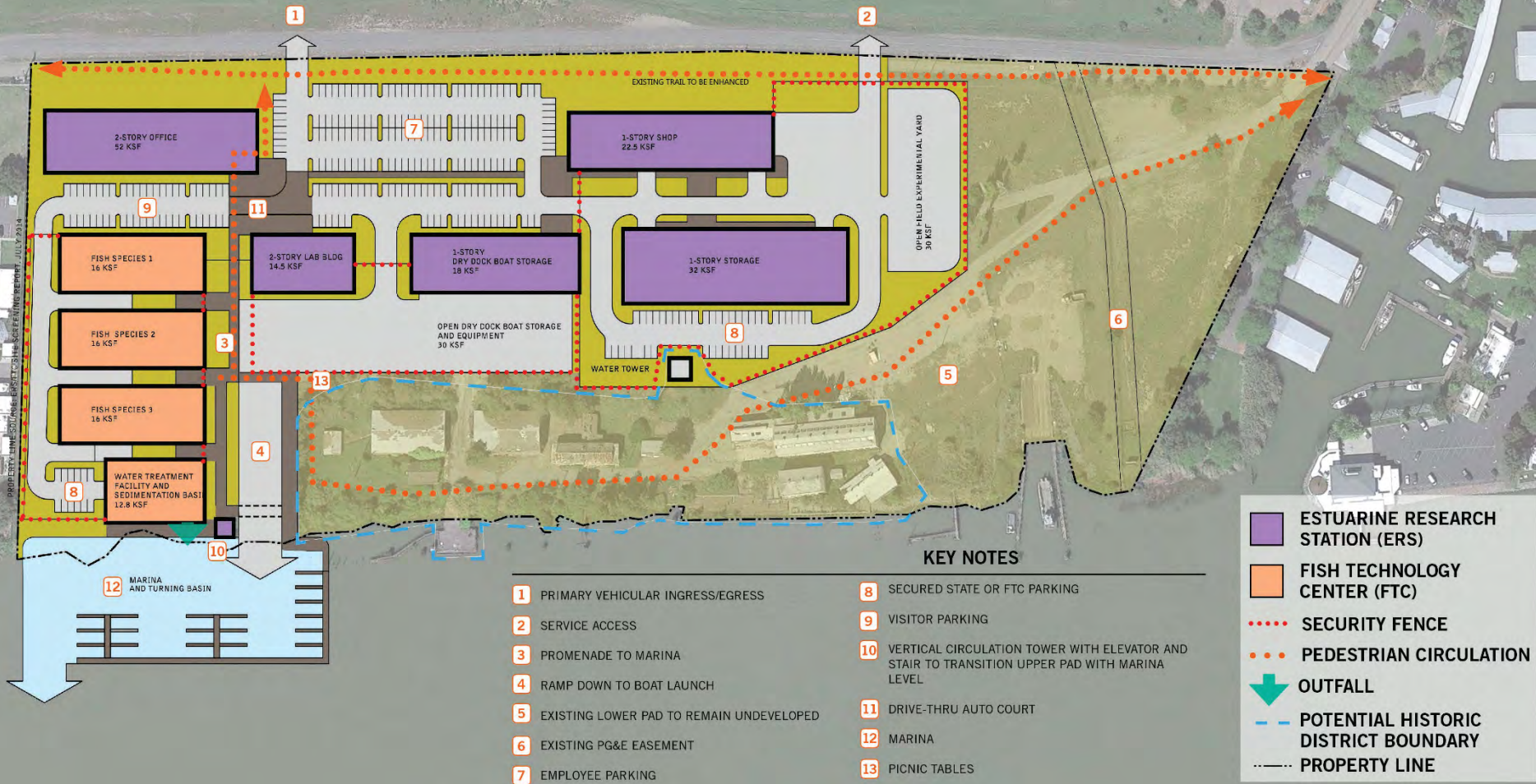
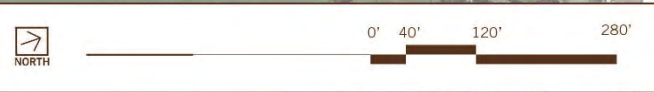
Sacramento, CA 94236

- Or Email your comments to:
comments@deltaresearchstation.com

Visit the Program Website: **www.deltaresearchstation.com**



COMMENTS DUE DECEMBER 14, 2015



RIO VISTA ARMY RESERVE CENTER

Configuration 1



0' 40' 120' 280'



RIO VISTA ARMY RESERVE CENTER

Configuration 2



845 Ryde Ave, Stockton

PUBLIC COMMENT SUBMITTAL

- Please provide input regarding the Draft EIR/EIS on the comment cards provided.
- Or mail your comment card before the deadline:
California Department of Water Resources
Attn: John Engstrom
1416 Ninth Street, Room 315-3
Sacramento, CA 94236
- Or Email your comments to:
comments@deltaresearchstation.com

Visit the Project Website: **www.deltaresearchstation.com**



COMMENTS DUE DECEMBER 14, 2015

Draft EIR/EIS Public Meeting Presentation

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Delta Research Station

Estuarine Research Station and Fish Technology Center

CEQA/NEPA Public Meetings

December 1 and 3, 2015



CALIFORNIA DEPARTMENT OF WATER RESOURCES | U.S. FISH AND WILDLIFE SERVICE |
CALIFORNIA DEPARTMENT OF GENERAL SERVICES



Welcome and Opening Remarks



Please silence all cell phones

Presentation Outline

1. Meeting Purpose
2. Project and Alternatives Overview
3. Overview of California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA)
4. Highlights of the Draft EIR/EIS
5. How to Comment During Public Review Period
6. Receive Public Input



Meeting Purpose

Public Comment and Review Period

Opportunity for the public and agencies to provide comments on the sufficiency of the Draft EIR/EIS in evaluating:

- Potential environmental issues
- Ways to avoid or mitigate significant effects

Commenters are encouraged to suggest additional specific alternatives or mitigation measures to provide better ways to address significant environmental effects.

The public review period provides 45 days to receive public input (October 30 – December 14).

Project Background & Purpose

The Proposed Project would construct a Delta Research Station (DRS).

- The DRS is intended to serve as an aquatic research and monitoring facility that is located in the centralized area of the Bay-Delta.
- The DRS would consolidate ongoing Interagency Ecological Program (IEP) activities and provide facilities for study of endangered Delta fishes

The IEP provides ecological information for use in management of the Bay-Delta



Interagency
Ecological Program
COOPERATIVE ECOLOGICAL
INVESTIGATIONS SINCE 1970



Project and Alternatives Overview

The Delta Research Station consists of two separate but related facilities:

- Estuarine Research Station (ERS)
- Fish Technology Center (FTC)



Project and Alternatives Overview

Objectives

ERS

- Establish a research station in a central location within the Bay-Delta to facilitate ease of conducting monitoring and research
- Co-locate the research station with a facility capable of studying fish in captivity (i.e., the FTC)
- Provide facilities to conduct monitoring and research on the Bay-Delta's aquatic resources.

FTC

- Develop captive propagation technologies for the Bay-Delta's rare fish species
- Test and refine the captive propagation techniques
- Locate the facility where suitable water quality and quantity are available, and ability to discharge waste water given its various functions and operations is available
- Co-locate the FTC with a facility conducting conservation research on Bay-Delta rare fish species (i.e., the ERS)

Project and Alternatives Overview

Project Components

ERS facilities:

- Office and work space
- Wet and dry laboratory facilities
- Warehouse and boat storage space
- Marina
- Vehicle and boat repair shop



FTC facilities:

- Fish tanks
- Office and administration building
- Shop and vehicle storage building
- Water treatment facility
- Effluent treatment facility

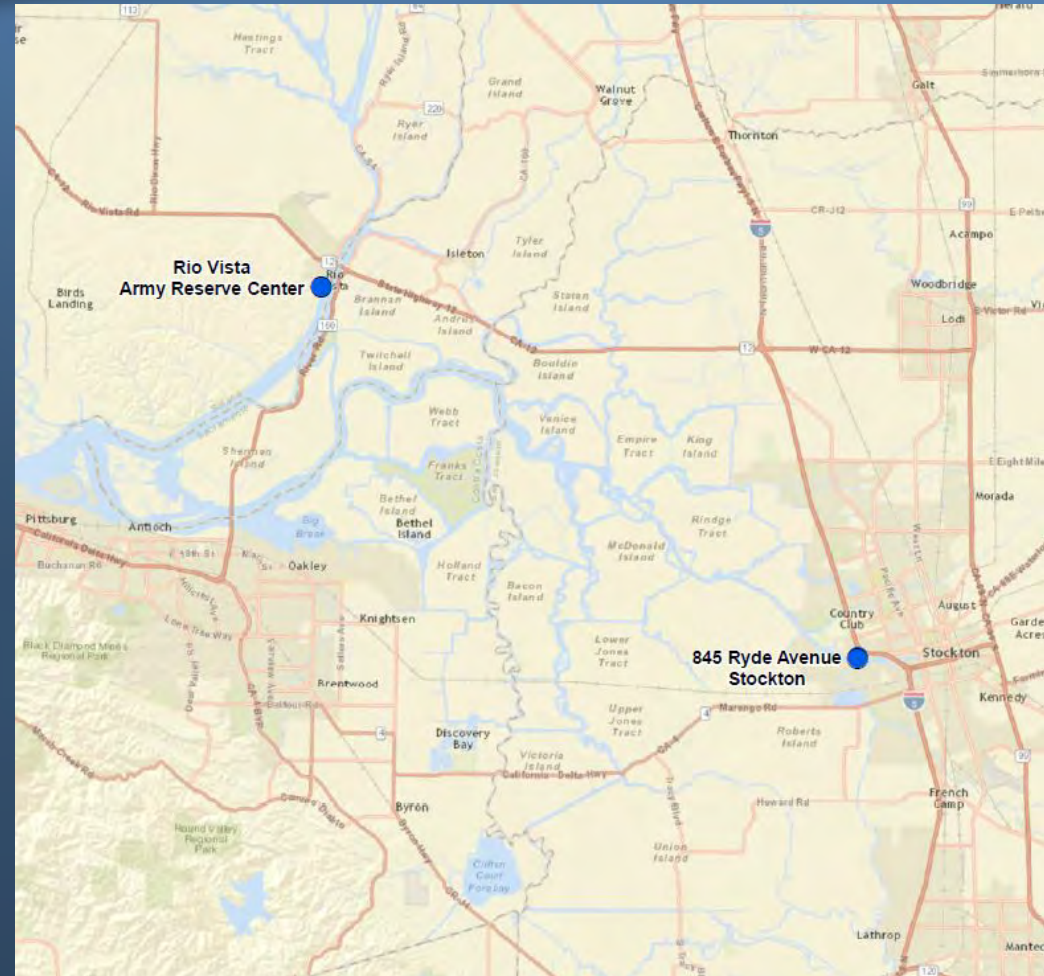


Project and Alternatives Overview

Alternative Sites

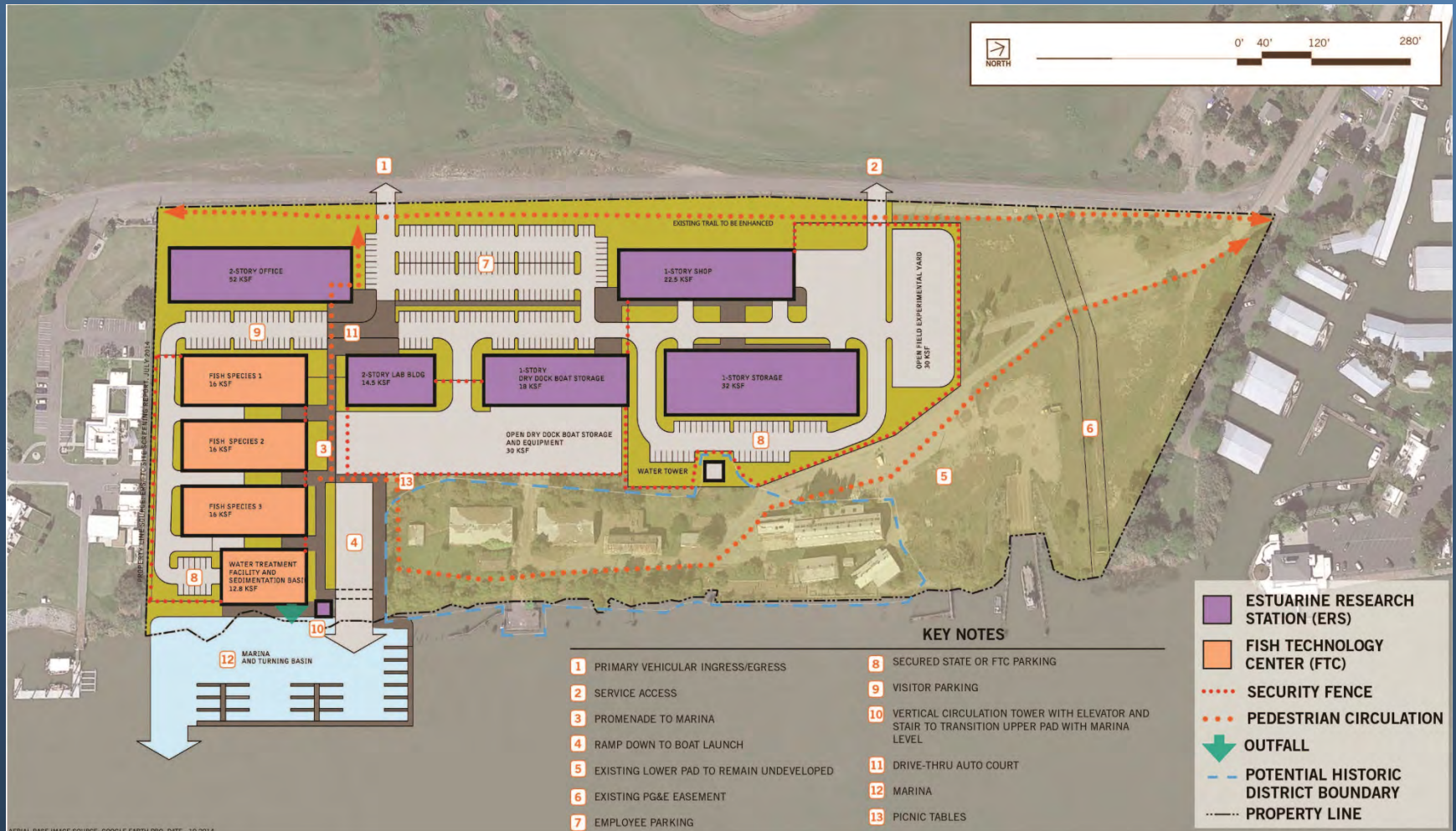
Sites under Consideration:

- Rio Vista Army Reserve Center (preferred site)
- 845 Ryde Ave, Stockton



Rio Vista Army Reserve Center

Configuration 1 (Preferred)



AERIAL BASE IMAGE SOURCE: GOOGLE EARTH PRO. DATE: 10/2014

Rio Vista Army Reserve Center

Configuration 2



845 Ryde Ave, Stockton



No Project Alternative

The No Project Alternative consists of the continuation of existing IEP activities at their current locations (*no new DRS facility would be built*).

Current office locations include CDFW Stockton, DWR Antioch and West Sacramento, and USFWS Stockton. This alternative has 145 staff and 48 vessels, but would expand to 165 staff.

Examples of IEP activities that would continue:

- Fish population estimates
- Townet surveys
- Estuarine and marine fish abundance and distribution surveys

CEQA/NEPA Requirements

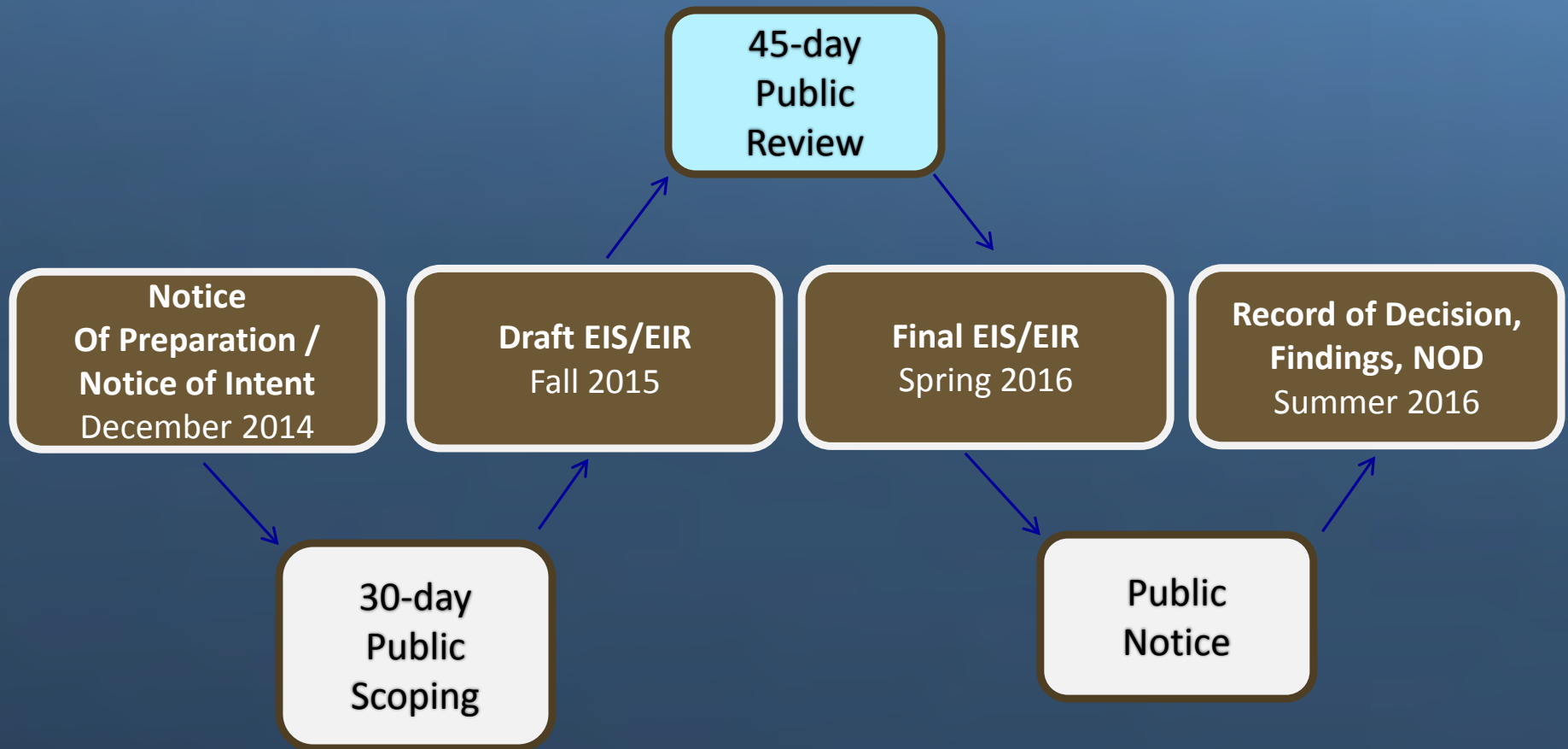
California Environmental Quality Act (CEQA) requires:

- Environmental review and public disclosure for discretionary actions conducted by public agencies
- Disclosure of potential environmental impacts
- Identification of mitigation measures and project alternatives to potentially reduce or avoid these impacts

National Environmental Policy Act (NEPA) requires:

- Disclosure of environmental impacts and benefits of proposed action and alternatives

CEQA/NEPA Process and Schedule



Draft EIR/EIS Structure

Executive Summary

Chapter 1. Introduction

Chapter 2. Purpose, Need, and Project Objectives

Chapter 3. Description of Alternatives

Chapters 4 – 20. Topical Impact Chapters

Chapter 21. Other Sections Required by CEQA and NEPA

Chapters 22 – 24. Consultation and Coordination, Report Preparers, References, Index

Appendices

Environmental Resources Evaluated

- ✓ Aesthetics
- ✓ Air quality
- ✓ Biological resources
- ✓ Cultural resources
- ✓ Geology and soils
- ✓ Greenhouse gas emissions
- ✓ Hazards and hazardous materials
- ✓ Hydrology and water quality
- ✓ Land use
- ✓ Noise
- ✓ Recreation
- ✓ Transportation/traffic
- ✓ Public services
- ✓ Utilities
- ✓ Environmental justice
- ✓ Socio-economics
- ✓ Cumulative impacts

Highlights of the Draft EIR/EIS

Numerous less than significant or mitigated impacts:

- Construction-related effects
- Operation of the project/alternatives

Possible significant and unavoidable impacts:

- Substantial Adverse Effect on Built Resources (Alt. 3)
- Conflict with Land Use Plans/Policies (Alt. 3)
- Traffic Impacts on Local Freeways (Alt. 4)
- Cumulative Traffic Impacts – intersections (Alts. 2 and 3)

Conclusions of Alternatives Analysis

Four alternatives were analyzed in the Draft EIR/EIS:

- Alternative 1: No Project Alternative
- Alternative 2: RVARC Site, Configuration 1
- Alternative 3: RVARC Site, Configuration 2
- Alternative 4: Ryde Avenue Site in Stockton

Among the Action Alternatives, the environmentally superior alternative is Alternative 2 (Preferred Alternative).

Under CEQA, after Alternative 2, Alternative 3 would be environmentally superior of other alternatives.

Next Steps and Timeline

**Public Review of
Draft EIR/EIS**

Oct 30 – Dec 14

Publish Final EIR/EIS

Spring 2016

**Certify EIR/EIS,
adopt CEQA findings,
file NOD/ROD**

**At least 30 days after
completion of Final
EIR/EIS**

How to Comment after Today

Comments will be accepted until:

5:00 pm on December 14, 2015

Send written comments to:

California Department of Water Resources

Attn: John Engstrom

1416 Ninth Street, Room 315-3

Sacramento, CA 95814

Email: **comments@deltaresearchstation.com**

Subject Line: DRS Draft EIR/EIS Comments

Include name, address, contact number, and email address for any contact regarding comment clarification, if necessary

Thank you



Attachment C

CORRESPONDENCE WITH SHPO

This attachment contains correspondence between the U.S. Fish and Wildlife Service and State Historic Preservation Officer regarding the Section 106 of the National Historic Preservation Act consultation process.

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United States Department of the Interior

FISH AND WILDLIFE SERVICE

Anan Raymond, Regional Archaeologist
Region 1+ Region 8 Cultural Resource Team
20555 Gerda Lane, Sherwood, OR 97140
phone: 503-625-4377, fax: 503-625-4887, cell: 503-803-7913
email: anan_raymond@fws.gov



24 August 2015

To: Ms. Julianne Polanco
Office of Historic Preservation
1725 23rd St., Suite 100
Sacramento, CA 95816

Attention: Brendon Greenaway

From: Anan Raymond, Regional Historic Preservation Officer (RHPO)

Subject: Section 106 of the National Historic Preservation Act (NHPA) for **Delta Research Station – Rio Vista**, Solano County, California

Dear Ms. Polanco:

The U.S. Fish and Wildlife Service (FWS) is proposing, in partnership with the California Department of Water Resources (DWR) and with assistance from the California Department of General Services (DGS), to plan and develop a joint-use field station facility on property belonging to the City of Rio Vista in Solano County, California (T4N, R2E, unsec., Rio Vista 7.5' USGS quad) (Figure 1). Pursuant to 36 CFR 800.4, the FWS requests consultation and concurrence on the adequacy of the identification efforts and the evaluation of cultural resources associated with the project. Because the FWS is contributing federal funding, the project is subject to compliance with Section 106 of the National Historic Preservation Act (NHPA).

The Undertaking and Area of Potential Effects: The FWS and its partners propose to develop the Delta Research Station, a science and research center which will include an Estuarine Research Station (ERS) and a Fish Technology Center (FTC) on the former Rio Vista Army Reserve Center property (Figure 2).

The ERS, managed by DWR, will be a center for research and study of the Bay-Delta ecosystem which will provide improved and additional facilities for science and research activities and would consolidate over 160 State and Federal employees from the Interagency Ecological Program (IEP). ERS facilities will include office and workspace, wet and dry laboratory facilities, warehouse and boat storage space, a marina, and a vehicle and boat repair shop. It will also include a dry electrical lab to house electronic sensing, monitoring, and telecommunications equipment used to monitor tagged fish and the estuarine environment.

The FTC, managed by FWS, will be a center for propagation, research, conservation, and study of rare Bay-Delta fishes and will house and maintain a refugial population of rare fish species (i.e., captively raised fish). The FTC will include research and study facilities, an office and administration building, a shop and vehicle storage building, a water treatment facility for surface water, and an effluent treatment facility. The FTC will include separate aquaculture and research components for individual study species and a laboratory space to support water quality, genetic, and fish health analysis.

The area of potential effects (APE) for the station includes the footprint of building and infrastructure

construction within the 28-acre Army Reserve Center property (assessor's parcel number 049-320-060).

Environmental Setting and Land Use History: The project area is located in unsectioned land of the Los Ulpinos Mexican Land Grant within the city of Rio Vista. It is bounded by the Sacramento River on the east, a marina on the north, Beach Drive to the west, and a U.S. Coast Guard station to the south. A 1910 Rio Vista 7.5' USGS topo map shows the APE as a marsh/wetland (Figure 3). By 1919, the land had been filled and the U.S. Corps of Engineers (USACE) was using it as a staging area for activities associated with the Sacramento River Flood Control Project (SRFCP) (URS 2015:1-1). After this phase, which lasted until 1944 and included construction of numerous buildings, the property was subsequently reassigned as a military installation to store harbor craft, partially transferred to the U.S. Coast Guard (1964), redesignated for Army Reserve Training (1980) and finally deactivated (1989) and closed as part of the federal Base Realignment and Closure Act in 1995 (Rio Vista 2010:6-4). The City of Rio Vista annexed the land in 2006.

Research and Fieldwork: The project consultant secured the services of URS Corporation to conduct an archaeological inventory of the APE to determine if the project has the potential to affect cultural resources (URS 2015). A copy of the report is attached for your review. The report includes an overview of the prehistory, ethnography and history of the project area, tribal consultation, as well as the results of the literature search, which identified no previously recorded archaeological sites within the APE. The report also investigated another potential construction site (Stockton-Ryde Avenue). However, the Rio Vista location has been identified as the preferred alternative and therefore the Stockton location is not included in this Section 106 compliance effort.

The field survey included pedestrian survey of the entire APE.

Results: No prehistoric or previously undocumented historic resources were identified. With regard to prehistoric resources, the authors noted:

“The close proximity of the property to the river channel, its low elevation, the presence of sands, and absence of soil development suggests a low sensitivity for buried archaeological resources at this location. Furthermore, the likelihood that the property contained an abundance of plant resources is low, given the on-site soil type and frequent disturbance by high water events on the river. It is more likely that a beach was present at this location during the dry portion of the year and may have provided the indigenous population with an access point to the river, but it is not a likely location for long-term habitation.” (URS 2015:2-2)

With regard to historic resources, the authors confirmed that the APE is within the boundaries of the U.S. Army Reserve Center (which had not previously been provided with a CHRIS number), and that various items related to the Army Reserve Center and its usage were noted during survey (URS 2015:4-3).

Finding of Effect: The APE occurs within the 28-acre U.S. Army Reserve Center parcel. As noted above, the property has been used for various functions throughout its history. In 1997, the Army contracted for an evaluation of the complex to determine its eligibility for listing on the National Register of Historic Places (NRHP) (JRP 1997). While the contractor recommended that 12 of the buildings were collectively eligible to the NRHP as a district, the Army in consultation with the State Historic Preservation Office (SHPO) concluded that there were no buildings that individually or collectively met the eligibility requirements for listing on the NRHP. This determination was codified in a memo dated 9 July 1997 and signed by both Department of the Army and SHPO (Figure 4).

After the property was acquired by the City of Rio Vista, the city summarized the history of the property's evaluation in an Environmental Impact Report (EIR) (City of Rio Vista 2010, 2011). The two-volume document indicates that the SHPO was contacted to confirm the finding, resulting in the statement that “this SHPO concurrence in the Army finding remains a conclusive determination that there are no historical resources eligible for the National Register within the proposed Project Area” (City of Rio Vista 2010:6-6) (Figure 5).

The statement cites personal communication with Mark Beason, State Historian II, California Office of Historic Preservation, Project Review Unit, as the source for confirmation of the non-eligibility determination.

The City notes in the EIR that despite the NRHP non-eligibility determination, the 12 buildings should be collectively considered eligible to the California Register of Historic Resources (CRHR) as the “U.S. Engineer Storehouse Historic District” (City of Rio Vista 2010:6-6). It does not appear that the City of Rio Vista and the SHPO have come to a consensus regarding inclusion of the district on the state register. Regardless of the status of that consultation, however, the district boundaries as proposed in the original 1997 JRP report and shared in the 2010 EIR (City of Rio Vista 2010: Figure 6.3) (Figure 6) place the footprint of the current federal undertaking **outside of the proposed potentially CRHR-eligible historic district** (Figure 7).

Determination of Effect and Recommendations: The professional archaeologist conducted a survey of the APE and identified no historic resources within the APE. Based on a review of the natural topography, land use history, and the completed archaeological investigation in the area, including the determination that the potentially CRHR-eligible historic district is not within the APE, the U.S. Fish and Wildlife Service has determined that the project will have a *no historic properties affected* outcome. The FWS is requesting that the SHPO concur with the determination.

If you have any questions regarding the project, please contact me at (anan_raymond@fws.gov) (503)625-4377 for questions regarding cultural resources.

Sincerely,

A handwritten signature in blue ink that reads "Anan Raymond". The signature is fluid and cursive, with the first name "Anan" and last name "Raymond" clearly distinguishable.

Regional Historic Preservation Officer

Figure 1. Project location on Rio Vista 7.5' USGS quad.

Figure 2. Project location on aerial photograph showing placement of proposed structures.

Figure 3. 1910 7.5' USGS quad showing project area prior to infilling.

Figure 4. copy of COE and SHPO correspondence, 1997

Figure 5. Excerpt from City of Rio Vista EIR, 2010 (page 6-6).

Figure 6. Aerial photograph showing proposed CRHR-eligible U.S. Engineer Storehouse Historic District boundary, from 2010 EIR (Figure 6.3)

Figure 7. Aerial photograph showing current APE juxtaposed with proposed CRHR-eligible U.S. Engineer Storehouse Historic District boundary

Attachments:

Appendix 1.

URS Corporation

2015 Archaeological Inventory Report: Delta Research Station Project, Solano and San Joaquin Counties, California. Prepared by URS Corporation for Horizon Environmental Consultants. Sacramento, California.

References:

City of Rio Vista

2010 Draft Environmental Impact Report: Rio Vista Army Reserve Center Redevelopment Plan. Prepared by Redevelopment Agency of the City of Rio Vista. August 17, 2010.

2011 Final Environmental Impact Report: Rio Vista Army Reserve Center Redevelopment Plan (State Clearinghouse #2010012028). January 11, 2011

JRP Historical Consulting Services

1997 Evaluation of National Register Eligibility Rio Vista Army Reserve Center.

Figure 1. Project location on Rio Vista 7.5' USGS quad.

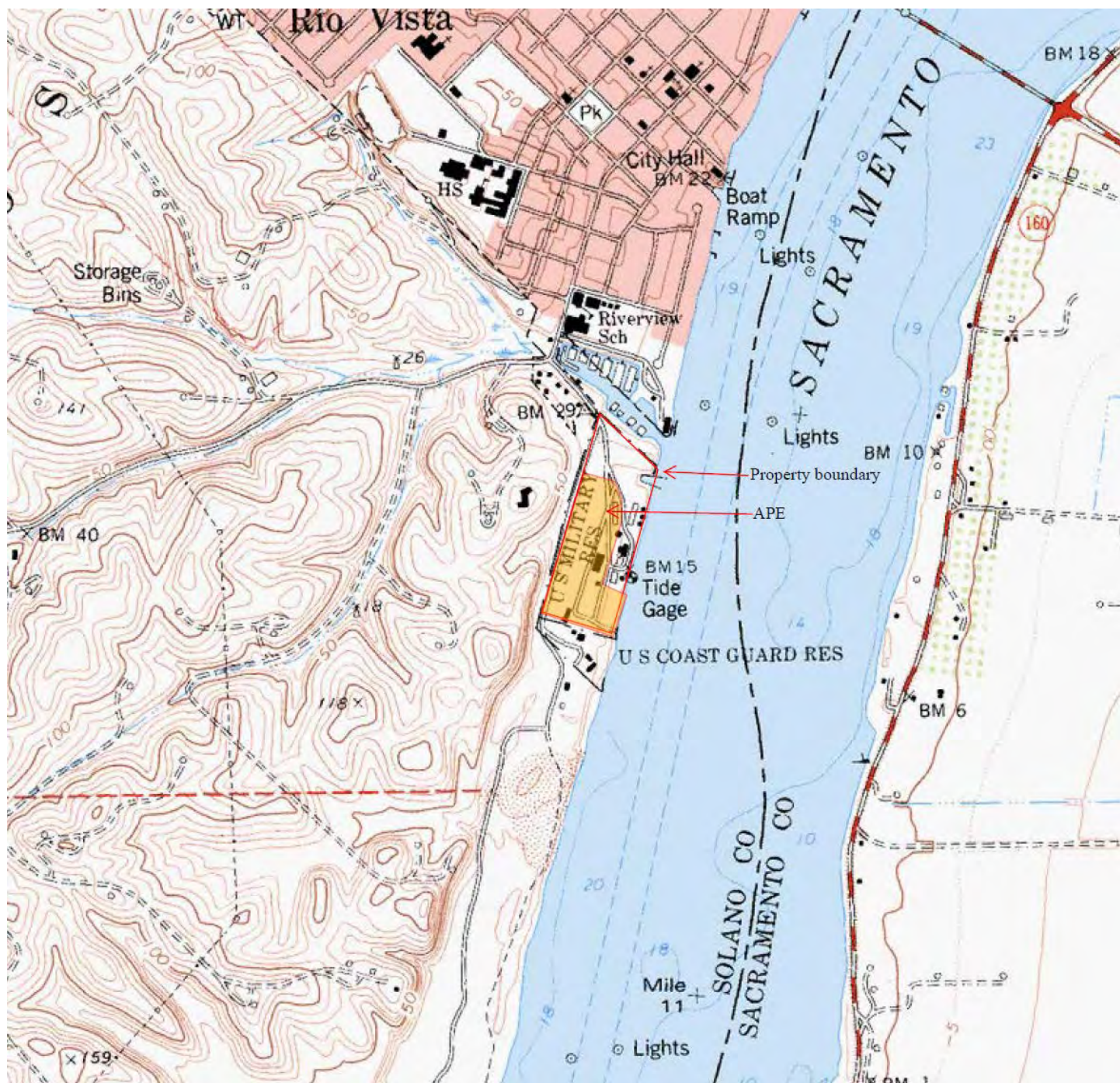


Figure 2. Project location on aerial photograph showing placement of proposed structures (in purple).

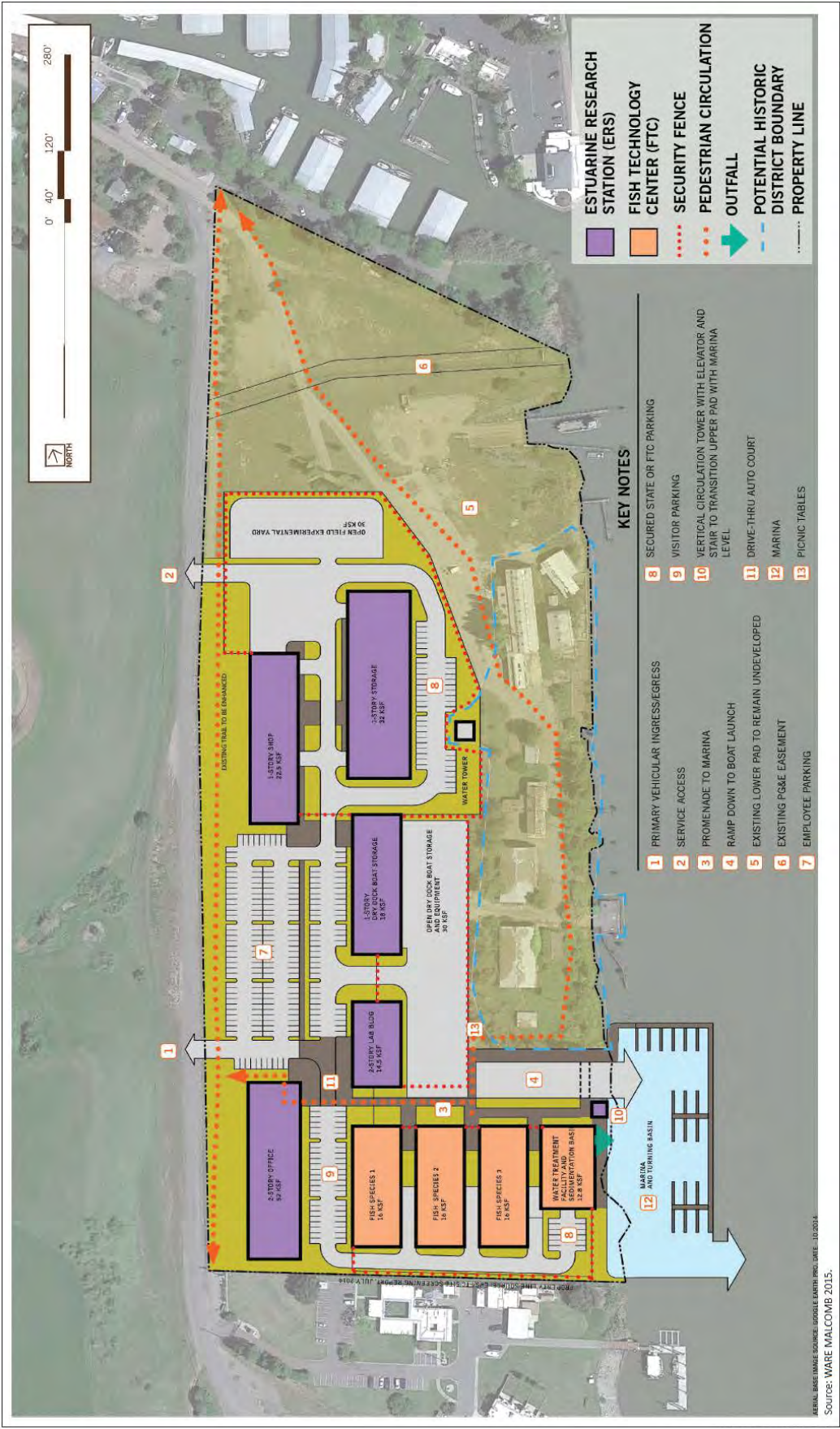


Figure 3-1
Alternative 2 - RVARC, Configuration 1

Figure 3. 1910 7.5' USGS quad showing project area prior to infilling.

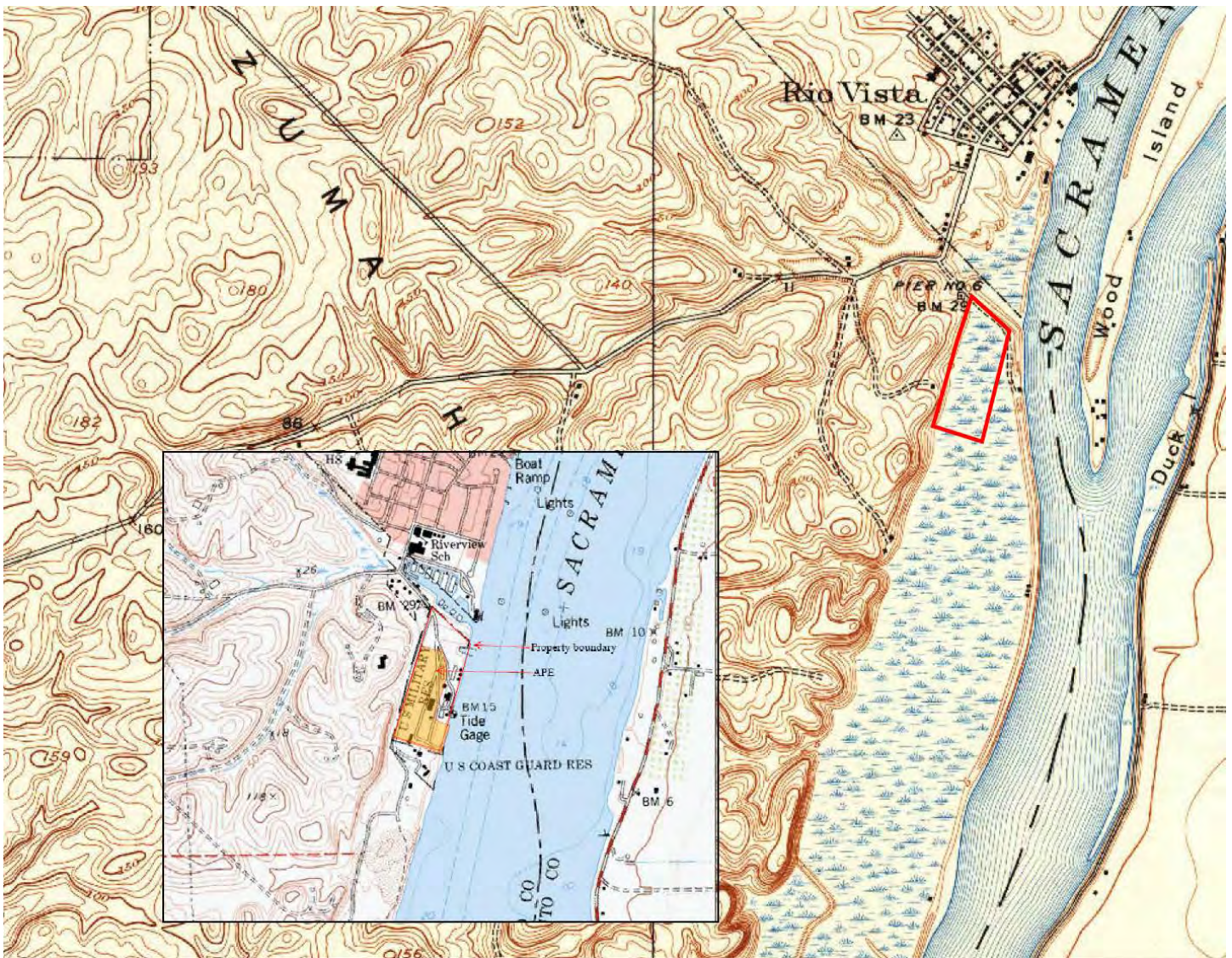


Figure 4. copy of COE and SHPO correspondence, 1997



DEPARTMENT OF THE ARMY
HEADQUARTERS, 1 CORPS AND FORT LEWIS
BOX 339600
FORT LEWIS, WASHINGTON 98433-9600

July 9, 1997

REPLY TO
ATTENTION OF:

Public Works

RECEIVED

JUL 14 1997

OHP

Ms. Cheryl Widell
State Historic Preservation Officer
P.O. Box 942896
Sacramento, California 94296-0001

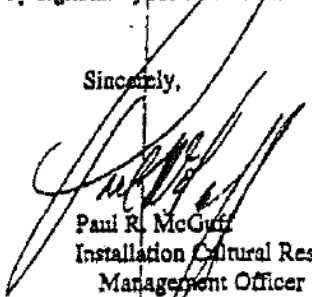
Reference: Rio Vista Army Reserve Center, National Register Determination
Log Number: USA940325A

Dear Ms. Widell:

On April 14, I wrote you with an agency determination that there are no buildings at Rio Vista Army Reserve Center that individually or collectively meet the eligibility requirements for the National Register of Historic Places. This determination was contrary to the recommendation of IRP Historical Services, a firm that studied the facility for us under contract with the Sacramento District Army Corps of Engineers.


On Monday, June 16, you visited the Rio Vista Army Reserve Center with me to examine buildings. At the conclusion of the visit you indicated that you concurred with the Army's determination of no properties for the Rio Vista Army Reserve Center. On June 20, I faxed a note to Hans Kreutzberg in which I made a request that the California Office of Historic Preservation finalize with written comment the National Register of Historic Places status of buildings at Rio Vista Army Reserve Center. I have prepared this letter to assist with that goal. Please indicate below by signature your concurrence with the Agency determination of no properties.

Sincerely,


Paul R. McGuff
Installation Cultural Resources
Management Officer

I have examined the evidence made available to me by the Army that pertains to the determination of National Register of Historic Places status of buildings and landscapes at the Rio Vista Army Reserve Center. Based upon review of these materials and a visit to that location I find that I concur with the Army's determination of no properties.

Signed:


State Historic Preservation Officer

Date:

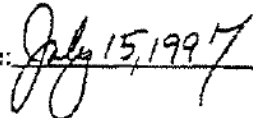


Figure 5. Excerpt from City of Rio Vista EIR, 2010 (page 6-6).

6.1.4 Historical Resources

The proposed Project Area contains many buildings and structures, such as a water tower and docks, remaining from the former military use, which qualify under CEQA as historic resources. The State Office of Historic Preservation (SHPO) has determined that buildings, structures and objects 45 years or older may be of historical value. Buildings 50 years or older may be eligible for the National Register of Historic Places (National Register). All of the buildings and structures within the proposed Project Area were built before 1960 and are 50 years or older.

In 1997, a report was prepared by JRP Historical Consulting Services under contract with the Corps of Engineers to evaluate the Rio Vista Army Reserve Center complex for eligibility to the National Register. The report concluded that 12 of the buildings and structures appeared to collectively be eligible for the National register as a possible U.S. Engineer Storehouse Historic District. The report also concluded that none of the individual buildings or structures within the proposed Project Area appeared to be individually eligible for the National Register.¹

Subsequent to issuance of the JRP report, the Army determined that no buildings at the Rio Vista Army Reserve Center individually or collectively met the eligibility requirements for inclusion in the National Register. The SHPO concurred with the Army determination that no buildings individually or collectively met the eligibility requirements for inclusion in the National Register. A copy of a July 1997 correspondence documenting this determination and SHPO concurrence, as well as earlier Army correspondence explaining the basis for its determination, is included as Appendix 21.6.² This SHPO concurrence in the Army finding remains a conclusive determination that there are no historical resources eligible for the National Register within the proposed Project Area.³

Despite these determinations with respect to actions by the federal government and National Register eligibility, the 12 buildings and structures nonetheless appear to be collectively eligible for the California Register of Historic Resources (California Register), for the reasons explained in the JRP report and summarized below, and therefore appear to be "historical resources" for purposes of CEQA. A substantial adverse change in the significance of these historical resources would be a significant effect under CEQA.

Laws, regulations and guidelines pertaining to historical resources, including those of CEQA, the National Register and the California Register, are described in Section 6.2, Pertinent Plans and Policies, of this EIR chapter.

(a) U.S. Engineer Storehouse Historic District. The following section summarizes the findings of the JRP report regarding the eligibility to the National Register of historical resources within the proposed Project Area and describes the U.S. Engineer Storehouse Historic District

¹JRP Historical Consulting Services, Evaluation of National Register Eligibility Rio Vista Army Reserve Center, February 1997, Davis, California.

²Letter from Paul R. McGuff, Installation Cultural Resources Management Officer, Department of the Army, Fort Lewis, Washington to Cheryl Widdel, State Historic Preservation Officer referencing Rio Vista Army Reserve Center National Register Determination, July 9, 1997.

³Mark Beason, State Historian II, California Office of Historic Preservation, Project Review Unit. Personal communication with Ricardo Bressanutti, Wagstaff/MIG, January 11, 2010.

Figure 6. Aerial photograph showing proposed CRHR-eligible U.S. Engineer Storehouse Historic District boundary, from 2010 EIR (Figure 6.3)



SOURCE: JRP Historical Consulting Services 1997

Figure 6.3

PROPOSED U.S. ENGINEER STOREHOUSE HISTORIC DISTRICT

Storehouse Historic District boundary (light blue dashed line).

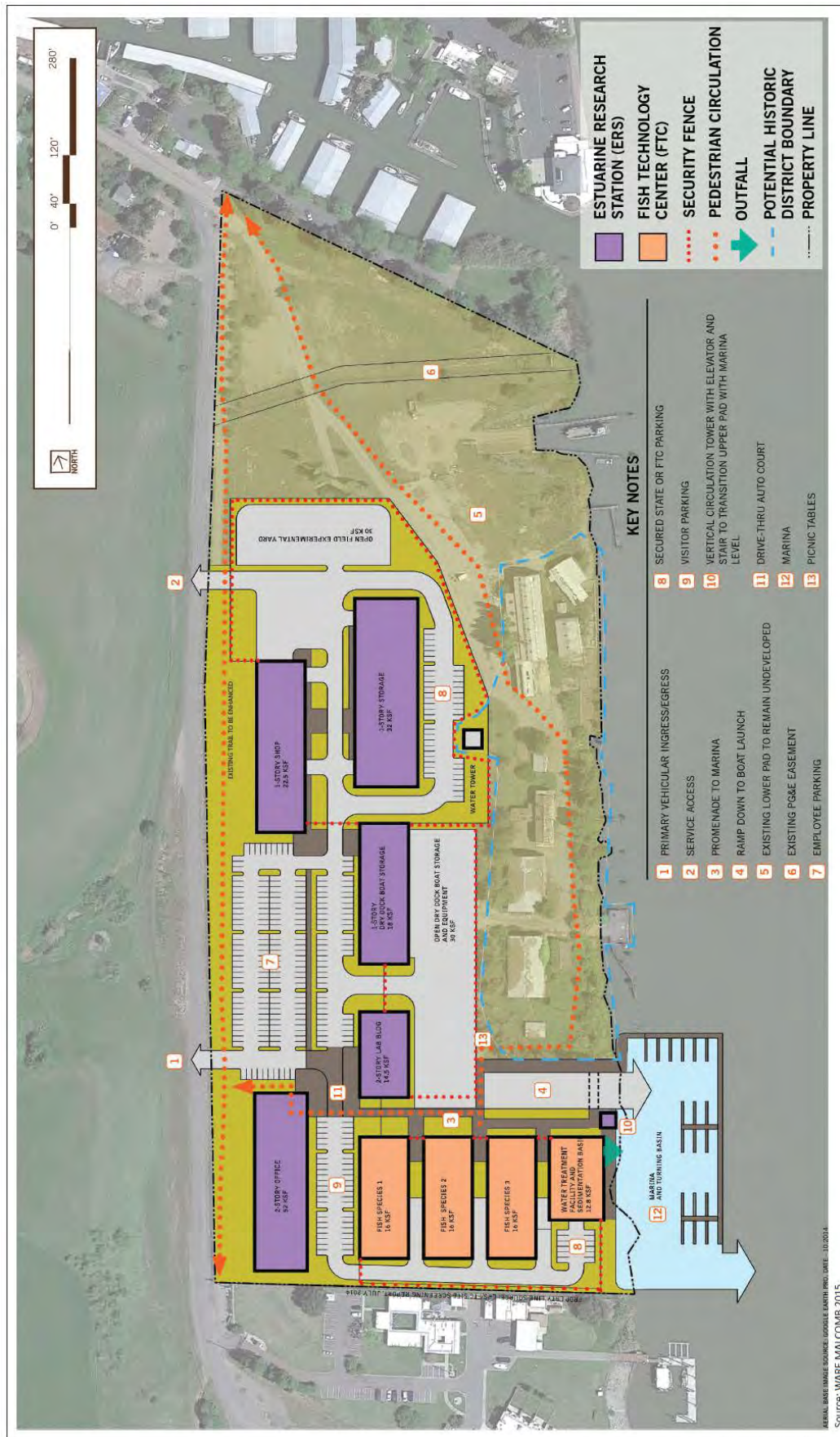


Figure 3-1
Alternative 2 - RVARC, Configuration 1



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Anan Raymond, Regional Archaeologist
Region 1+ Region 8 Cultural Resource Team
20555 Gerda Lane, Sherwood, OR 97140
phone:503-625-4377, fax:503-625-4887, cell:503-803-7913
email: anan_raymond@fws.gov



23 August 2016

To: Ms. Julianne Polanco
Office of Historic Preservation
1725 23rd St., Suite 100
Sacramento, CA 95816
Attention: Tristan Tozer

From: Anan Raymond, Regional Historic Preservation Officer

Subject: FWS_2015_0827_001
Section 106 of the National Historic Preservation Act (NHPA) for Delta Research
Station, Rio Vista, Solano County, California

Dear Ms. Polanco:

I write to continue consultation regarding the subject undertaking. On April 13, 2016 I met with Tristan Tozer of your staff at the undertaking location to discuss the Section 106 path forward for the undertaking. This letter summarizes the field trip, acknowledges the consultation discussions, and concludes with a determination of *no adverse effect to historic properties*. This letter updates our previous finding of effect on the undertaking.

The purpose of the field trip was to discuss the undertaking, examine the area of potential effect, acknowledge the historic property identification effort, assess potential affects, and identify the Section 106 outcome for the undertaking. In addition to Tristan and myself the field trip was attended by Barbara Beggs, FWS; Dan Christians and others from the City of Rio Vista; Michael Stevenson and others from Horizon Water and Environment LLC; John Engstrom and Jennifer Parson from the state of California; and others.

While our previous correspondence with you described the undertaking, area of potential effect, and historic property identification effort, this letter reviews information that is pertinent to the recent fieldtrip and onsite consultation.

A. Undertaking

The U.S. Fish and Wildlife Service (FWS) is proposing, in partnership with the California Department of Water Resources (DWR) and with assistance from the California Department of

General Services (DGS), to plan and develop a joint-use field station facility on property belonging to the City of Rio Vista in Solano County, California (T4N, R2E, unsec., Rio Vista 7.5' USGS quad) (Figure 1). Because the FWS is contributing federal funding, the project is subject to compliance with Section 106 of the National Historic Preservation Act (NHPA). The FWS and its partners propose to develop the "Delta Research Station," a science and research center which will include an Estuarine Research Station (ERS) and a Fish Technology Center (FTC) on the former Rio Vista Army Reserve Center property.

B. Area of Potential Effects

The FWS has determined that the area of potential effects (APE) is the entire 28-acre Army Reserve Center property (assessor's parcel number 049-320-060) (Figure 1 and Figure 2). This includes the construction footprint of proposed buildings and infrastructure that compose the Delta Research Station and the neighboring Army Reserve Center buildings on the bank of the Sacramento River. The FWS agrees with your recommendation that the APE be expanded from our earlier definition to include the Army Reserve Center buildings on the bank of the Sacramento River.

C. Historic Properties

With the exception of a wooden pier (S-104) in the Sacramento River, no historic properties were identified within the construction footprint of the Delta Research Station. However, the neighboring Army Reserve Center Buildings collectively constitute a property known as the U.S. Engineers Storehouse Historic District. "The 14 buildings and structures that comprise the core of the complex appear to be collectively eligible to the California Register of Historic Resources (CRHR) under Criterion 1 as the U.S. Engineers Storehouse Historic District for their association with the Sacramento River Flood Control Project, a large and historically significant California public works project" (Brunzell 2015, see attached report). While the FWS is not presently nominating the District to the National Register of Historic Places (NRHP), it is clear that the District is potentially eligible to the NRHP. Therefore, and for the purposes of the Delta Research Station undertaking, the FWS considers the U.S. Engineers Storehouse Historic District eligible to NRHP (Figure 3).

D. Assessment of Effects

The FWS has considered whether construction and operation of the Delta Research Station will have direct and indirect effects on historic properties, particularly U.S. Engineers Storehouse Historic District, in the APE. The assessment is based on discussion and consensus developed with Mr. Tozer during the field trip and a subsequent telephone conversation.

1. Direct impacts

With one exception (wood pier S-104) (see Figure 3 for location), the construction and operation of the Delta Research Station will have no direct physical impact on the U.S.

Engineers Storehouse Historic District. That is, the Delta Research Station building and infrastructure construction footprint does not coincide with the buildings and associated landscape of the U.S. Engineers Storehouse Historic District. The exception is the wood pier (S-104) that extends into the Sacramento River northeast of building T-41. Wooden pilings and what appears to be a wooden walkway extend to the south of the pier. The pier is inaccessible due to chain link fences and heavily overgrown vegetation. The pier (S-104) is a potential contributing element to the District. The undertaking will remove the pier to accommodate the construction of a debris deflector (Figure 2).

To mitigate for the loss of the pier (S-104), the FWS will ensure that it receives more detailed documentation than presently provided in Brunzell's report. The documentation will include a description of the construction design, method, material, and measurements. The documentation will be augmented by appropriate drawings and photographs. The documentation will also endeavor to elaborate on the function and history of the pier. We welcome any additional documentation standards your office may wish to provide.

2. Pedestrian flow

The planning map (Figure 2) displays the potential flow of pedestrians near the District. However, pedestrian flow is not part of the FWS undertaking. The City of Rio Vista has a long range plan called "bridge to beach," which would include a waterfront connection for pedestrians between Rio Vista Bridge and Sand Beach Park. The planning map illustrates that the undertaking will not impede the pedestrian circulation envisioned by the City's "bridge to beach" project when and if the City ever implements it in the future.

3. Visual impact

Given the proximity of the undertaking activities (construction of the Delta Research Station) with the U.S. Engineers Storehouse Historic District, it is reasonable to consider the visual impact of the undertaking on the District. Several factors serve to obstruct the view of the future Delta Research Station buildings from the District. Most effective is the corridor of trees that presently grow between the two ensembles (Figure 4). Not only does this tree grove obscure the Delta Research Station from the District, it also maintains the orientation of the District towards the river (Figure 5).

Another landscape feature is a natural terrace that rises above the tree corridor. The Delta Research Station will be constructed on this terrace and will not be clearly visible from the lower terrace where the District is located. Moreover, no buildings will be constructed near the boundary of the District. Instead, parking areas and other open space will provide a setback to separate the Delta Research Station from the District. This setback will be particularly effective at the northwest edge of the District where the trees become

less dense around the water tower. As a result of these natural and designed visual barriers, the construction of the Delta Research Station will have minimal visual impact on the District.

While the view of the District from the river will include a view of a low-profile debris deflector instead of the wood pier (S-104), the larger and more impressive ensemble of warehouse buildings will remain dominant.

Finally, the buildings that compose the Delta Research Station will be designed to echo the architecture and character of a warehouse district, particularly the U.S. Engineers Storehouse Historic District (Figures 6-9).

4. Cumulative effects

The FWS has considered whether the undertaking will have a long term or cumulative effect on the District. There will be no long term direct effect. The FWS and its partners have no plans to expand the footprint of the Research station in the future. With respect to indirect effects to the District such as increased visitor impacts, the FWS and its partners believe that the presence of the research station will help deter negative impacts associated with vagrancy and vandalism.

E. Reducing effects of the undertaking on the District

In addition to the measures described in section D above, the FWS will ensure that permanent interpretive signage is designed and installed at an appropriate location (such as the entry lobby or outdoor assembly/access area) at the Delta Research Station. The signage will describe the U.S. Engineers Storehouse Historic District and its role in the Sacramento River Flood Control Project, and deliver a message to conserve and protect the District and other historical sites. The FWS will provide your office and the Northwest Information Center of the California Historical Resources Information System with copies of the additional pier documentation and photographs of the interpretive signage.

F. Determination of Effect

Given the foregoing, including the implementation of items described in paragraphs D and E above, the FWS has determined that the Delta Research Station undertaking is a *no adverse effect* outcome (36CFR800.5.b) under Section 106 of the NHPA. We respectfully request your review and concurrence with this finding.

Sincerely,

A handwritten signature in blue ink, reading "Aaron Raymone". The signature is fluid and cursive, with a large loop at the end of the last name.

Anan Raymond
Regional Historic Preservation Officer

Attachments:

Brunzell, Kara

2015 Historic Architectural Evaluation for the Delta Research Station Project, Solano and San Joaquin Counties, California. Prepared for URS Corporation. Sacramento, California.

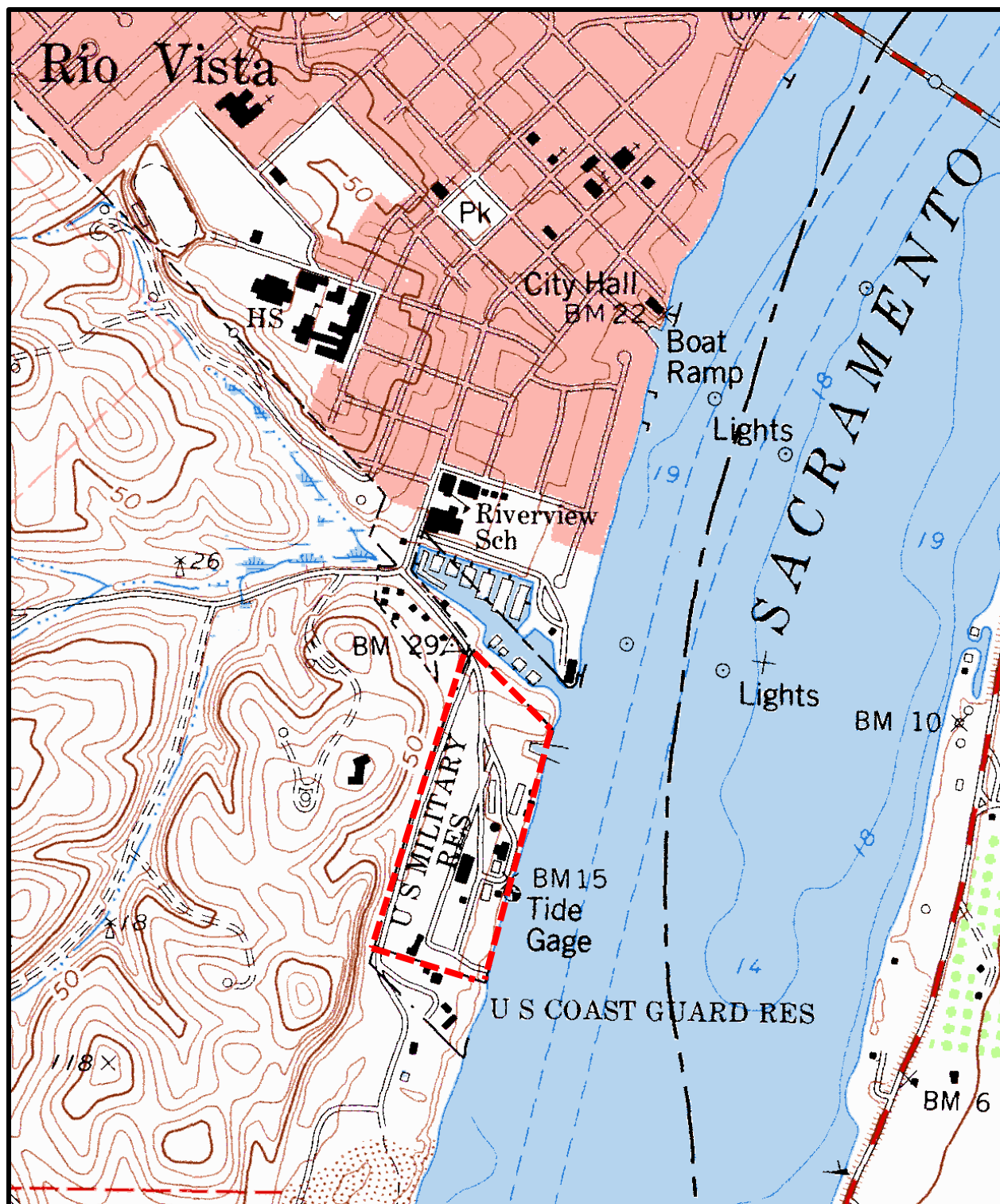


Figure 1. The Delta Research station APE is enclosed by a red dashed line, on an enlarged portion of the Rio Vista 7.5 USGS quad..

Figure 2 The APE of the Delta Research Station is enclosed by the black dashed line (property boundary). The Historic District is enclosed by the blue dashed line.

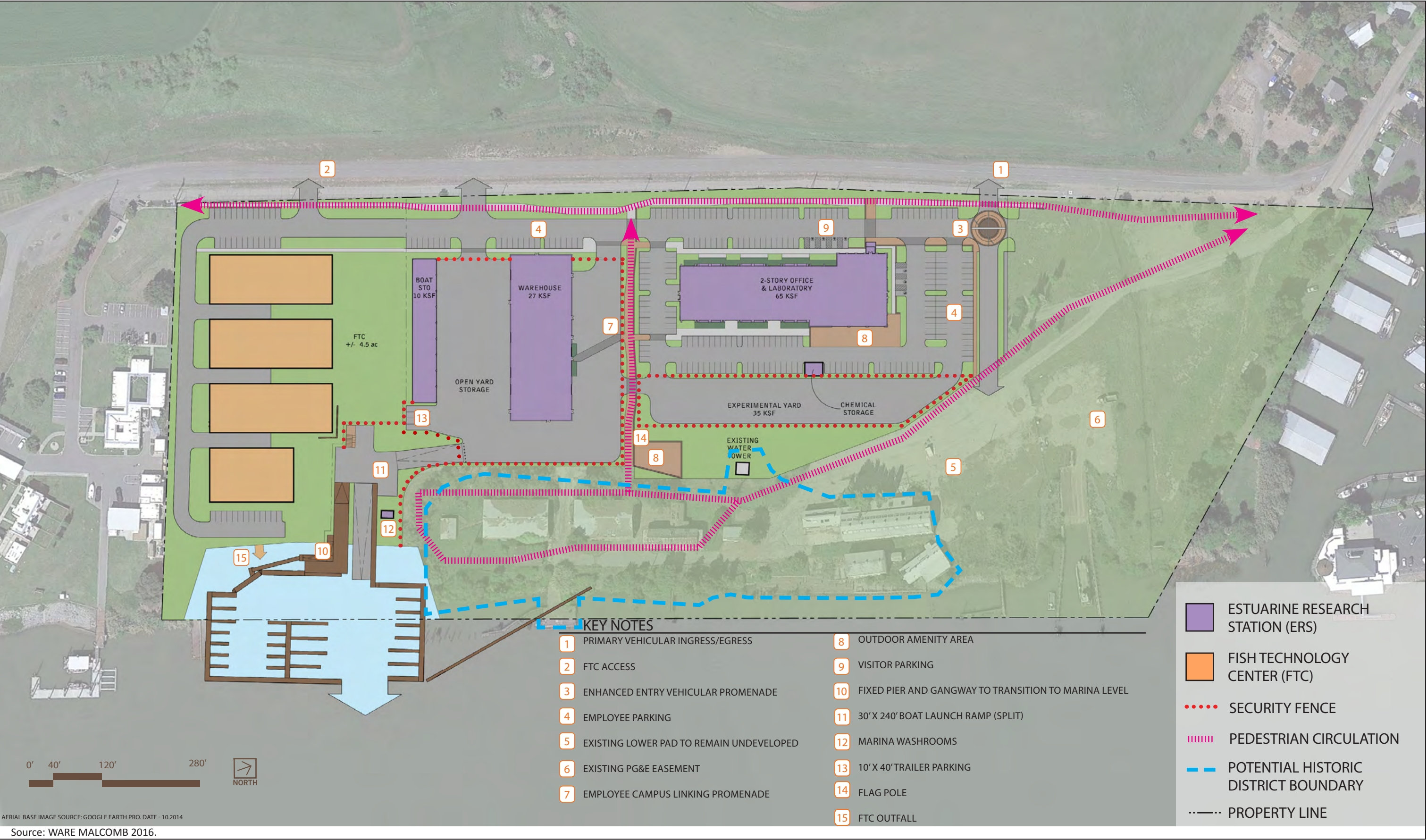


Figure 3. The U.S. Engineers Storehouse Historic District

Historical Architectural Assessment
of the Delta Research Station

Current Conditions





Figure 4. Birdseye view of the APE (red outline) showing how trees and sloping topography will visually separate the historic district from the Delta Research Station.



Figure 5. View of the U.S. Engineers Storehouse Historic District buildings in the foreground showing trees and terraced landscape that create a natural barrier between the district and the Delta Research Station.

Figure 6. Concept design for Delta Research Station.



Architectural Forms

Security and Sun Shading Elements

Material Concepts

Architectural Form & Material Concepts

ESTUARINE RESEARCH CAMPUS
RIO VISTA, CALIFORNIA

WARE MALCOMB

SNR14-0051-00
04.12.2016

SHEET
6

This conceptual design is based upon a preliminary review of all relevant requirements and is intended to provide conceptual site and/or building information, and is intended merely to assist in exploring how the project might be developed.



Figure 7. Concept design for Delta Research Station.



KEY NOTES

- 1

CURTAIN WALL
GLAZING SYSTEM
- 2

METAL TUBE SUPPORTS WITH STONE VENEER
PYLASTER AND UPLIGHTING
- 3

WOOD SIDING VENEER
- 4

METAL SIDING
- 5

ANGLED GLAZING SYSTEM
FOR SOLAR ORIENTATION
- 6

SPANDREL GLAZING
- 7

STONE VENEER ON ANGLED WALL
- 8

WOOD CANOPY
- 9

INDIGENOUS LANDSCAPE THROUGHOUT
- 10

BENCH SEATING AND CAMPUS INFORMATION
FOR PEDESTRIAN EXPERIENCE

This conceptual design is based upon a preliminary review of site-specific requirements and is intended to provide conceptual site and/or building information, and is intended merely to assist in exploring how the project might be developed.



Conceptual Design_Office & Laboratory

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RIO VISTA, CALIFORNIA

WARE MALCOMB

SNR14-0051-00
04.12.2016

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7

Figure 8. Concept design for Delta Research Station.



Perspective_East Detail



Perspective_Approach



Aerial_North East



Perspective_Amenity Area

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SNR14-0051-00
04.12.2016

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8

This conceptual design is based upon a preliminary review of site information and is intended to provide a general overview of the project. It is not intended to be used for detailed design or construction purposes. It is intended to be used for planning and conceptual design purposes only.



Figure 9. Concept design for Delta Research Station.



Perspective_South Bound on Beach Drive



Perspective_North Bound on Beach Drive

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RIO VISTA, CALIFORNIA

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04.12.2016

SHEET
9

This conceptual design is based upon a preliminary review of site information and is intended to provide a general overview of the project. It is not intended to be used for detailed design or construction purposes. It is intended to be used for planning and conceptual design purposes only.



**OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION**

1725 23rd Street, Suite 100
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(916) 445-7000 Fax: (916) 445-7053
calshpo@parks.ca.gov
www.ohp.parks.ca.gov



November 7, 2016

Refer To: FWS_2015_0827_001

Anan Raymond
Regional Historic Preservation Officer
Fish and Wildlife Service
20555 Gerda Lane
Sherwood, OR 97140

RE: Delta Research Station Project, Rio Vista, Solano County, California

Dear Mr. Raymond:

Thank you for letter of August 23, 2016 continuing consultation with the State Historic Preservation Officer (SHPO). You do so in an effort to comply with 36 CFR Part 800 of the National Historic Preservation Act of 1966, as amended. You are requesting concurrence with a finding of No Adverse Effect to Historic Properties.

The U.S. Fish and Wildlife Service (FWS) is proposing, in partnership with the California Department of Water Resources and with assistance from the California Department of General Services, to plan and develop a joint-use field station facility on the former Rio Vista Army Reserve Center (Reserve Center), property belonging to the City of Rio Vista. The facility will consist of an Estuarine Research Station and a Fish Technology Center.

In prior consultation, the SHPO did not concur with Fish and Wildlife's finding of No Historic Properties as the delineation of the project's Area of Potential Effects (APE) excluded the former Rio Vista Army Reserve Center. The National Register status of the property was, at the time of the FWS submittal, unclear. A study undertaken in the late 1990s when the Reserve Center was conveyed to the City of Rio Vista concluded that the property was ineligible for listing on the National Register of Historic Places (NRHP). However, a recent study concluded that the property is eligible for listing on the California Register of Historical Resources.

The FWS has determined that the APE consists of the entire 28-acre Army Reserve Center property. This includes the construction footprint of proposed buildings and infrastructure that compose the Delta Research Station and the neighboring Army Reserve Center buildings collectively known as the U.S. Engineers Storehouse Historic District (District). The FWS is of the opinion the District is eligible for listing on the NRHP and plans to treat the District as an eligible historic property.

The FWS has considered whether construction and operation of the Delta Research Station will have a direct and indirect effect on historic properties in the APE. With one exception (wood pier S-104), the District will not be impacted. The Pier will be photographed and documented and interpretive signage will be installed. The recordation materials will be provided to the SHPO and the Northwest Information Center.

Having reviewed the FWS latest submittal, SHPO has the following comments:

- 1) The APE appears to account for direct and indirect effects to historic properties;
- 2) The project, as described, will not adversely affect historic properties.

Thank you for considering historic properties as a part of the project planning process. Please be reminded that in the event of an inadvertent discovery or change in the scale or scope of the undertaking, you may have additional consultation responsibilities under 36 CFR Part 800. If you have any questions or concerns, please contact State Historian Tristan Tozer at (916) 445-7027 or by email at Tristan.Tozer@parks.ca.gov.

Sincerely,

A handwritten signature in blue ink, consisting of a stylized 'J' followed by a horizontal line.

Julianne Polanco
State Historic Preservation Officer