

# SAN JOAQUIN RIVER RESTORATION PROGRAM: SALMON CONSERVATION AND RESEARCH FACILITY AND RELATED FISHERIES MANAGEMENT ACTIONS PROJECT

Final Environmental Impact Report

April 2014



# **San Joaquin River Restoration Program: Salmon Conservation and Research Facility and Related Management Actions Project**

## **Final Environmental Impact Report**

**SCH# 2012111083**

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## Acronyms and Abbreviations

APE	area of potential effect
Background Report	San Joaquin River Restoration Study Background Report
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
cfs	cubic feet per second
CSLC	California State Lands Commission
DEIR	Draft Environmental Impact Report
FEIR	Final Environmental Impact Report
FPA	Friant Power Authority
MID	Modesto Irrigation District
MMRP	Mitigation Monitoring and Reporting Plan
NAHC	Native American Heritage Commission
NOA	Notice of Availability
NOD	Notice of Determination
OPR	Office of Planning and Research
PG&E	Pacific Gas and Electric Company

Proposed Project	proposed Salmon Conservation and Research Facility
SCARF	Salmon Conservation and Research Facility
SJFH	San Joaquin Fish Hatchery
SJRRP	San Joaquin River Restoration Program
TAC	(San Joaquin River Restoration Program) Technical Advisory Committee
the Conservancy	San Joaquin River Conservancy

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# Chapter 1

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## Introduction

# Chapter 1

## INTRODUCTION

The California Department of Fish and Wildlife (CDFW) has prepared this Final Environmental Impact Report (FEIR), to provide the public, responsible agencies, and trustee agencies with information about the potential environmental effects of the proposed Salmon Conservation and Research Facility (SCARF) (Proposed Project). This FEIR was prepared in compliance with the California Environmental Quality Act (CEQA) of 1970 (as amended) and the CEQA Guidelines (14 California Code of Regulations [CCR] 15000 et seq.).

### Format and Organization of the FEIR

This FEIR contains the following components:

Chapter 1, *Introduction*. This chapter describes the organization of the FEIR, and its preparation, review, and certification process. CEQA requires that a list of agencies and persons commenting on the Draft Environmental Impact Report (DEIR) be included in the FEIR. In compliance with this requirement, Chapter 1 also presents a list of agencies and persons commenting.

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

Chapter 3, *Revisions to the DEIR*. Chapter 3 presents revisions made to the DEIR 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 DEIR was published.

Chapter 4, *Report Preparation*. Chapter 4 lists the individuals involved in preparing this FEIR and their responsibilities.

Chapter 5, *References*. Chapter 5 provides the references cited in this FEIR.

Appendix A, *DEIR Notices and Mailing List*. This appendix contains the Notice of Availability of the DEIR, the Notice of Completion of the DEIR that was sent to the State Office of Planning and Research (OPR), the newspaper advertisements announcing the availability of the DEIR, details about public meetings for the Proposed Project, and the distribution list for DEIR notices.

Appendix B, *Meeting Transcripts*. This appendix contains transcripts of the public meetings that were held during the public review period of the DEIR.

Appendix C, *Meeting Materials*. This appendix contains the materials and handouts associated with the public meetings that were held during the public review period of the DEIR, including the meeting agenda, sign-in sheets, comment and speaker forms, posters, Microsoft PowerPoint presentation, and meeting flyer.

Appendix D, *Mitigation Monitoring and Reporting Plan*. This appendix contains the Mitigation Monitoring and Reporting Plan (MMRP) required under CEQA Section 21081.6. This plan identifies the mitigation measures that are proposed to be adopted in the approval action, the entity responsible for mitigation implementation, and the implementation timing for each mitigation measure.

## Public Review of the DEIR

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 CDFW's website, and by hard copies made available at the relevant County Clerks' offices. This NOA initiated a 56-day public review period, beginning October 7, 2013 and ending December 2, 2013. During this time, the DEIR was made available for review on CDFW's website, at CDFW's Fresno offices (1130 and 1234 East Shaw Avenue) and Sacramento office (1416 9th Street), at regional libraries and via mail by specific request.

The various DEIR notices and the associated mailing list are provided in Appendix A of this FEIR.

## Public Meetings on the DEIR

CDFW conducted three public meetings on the DEIR in Fresno, Sacramento, and Chico. The Fresno meeting was held on November 4, 2013, at the California Retired Teachers Association Building; the Sacramento meeting was held on November 6, 2013, at the Department of Health Care Services and Department of Public Health Building; and the Chico meeting was held on November 18, 2013, at the Lakeside Pavilion. The meetings were attended by members of the public and other interested parties. Transcripts of the meetings are provided in Appendix B of this FEIR, and meeting materials are provided in Appendix C of this FEIR.

## Preparation of the FEIR

As stated previously, CEQA requires that an FEIR include responses to comments regarding the DEIR. Therefore, this FEIR includes Chapter 2, *Comments and Responses*. In addition, revisions are discussed in Chapter 3, *Revisions to the DEIR* as follows: text that has been deleted is shown in ~~striketrough~~ and text that has been inserted is shown in **bold face**. The FEIR, along with the DEIR, constitute the entire Environmental Impact Report (EIR) for the purposes of CEQA compliance.

The FEIR will be distributed to public agencies that provided comments 10 days before certification of the EIR. At the close of the 10-day public agency review period, CDFW will

review the EIR, consider staff recommendations and public testimony, and decide whether to certify the EIR and approve or deny the Proposed Project.

After certification of the EIR and approval of the Proposed Project, CDFW will file a Notice of Determination (NOD) with OPR and at the offices of the County Clerks in Fresno, Madera, and Merced counties (14 CCR 15093[c]). Because significant impacts are identified in the EIR that cannot be mitigated to a level of insignificance, a statement of overriding considerations will be included in the record of project approval and will be mentioned in the NOD (14 CCR 15093[c]).

## List of Commenters on the DEIR

The following person provided oral comments at the public meeting held by CDFW on November 4, 2013, in Fresno:

- Richard Haas

The following person provided an oral comment at the public meeting held by CDFW on November 6, 2013, in Sacramento:

- Rhonda Reed

No oral comments were received at the public hearing held by CDFW on November 18, 2013, in Chico.

The following persons submitted written comments on the DEIR:

- Dave Singleton, Native American Heritage Commission, letter dated October 15, 2013
- Don Heichel, e-mail dated October 29, 2013
- Dennis Fox, letter dated November 2013
- William D. Phillimore, Paramount Farming Company, letter and e-mail dated November 4, 2013
- Janice Curtin, Stanislaus County Environmental Review Committee, letter dated November 12, 2013
- Bob Van Wyk, Fresno Metropolitan Flood Control District, letter dated November 14, 2013
- Celia Aceves, Modesto Irrigation District, letter dated November 18, 2013
- Briza Sholars, County of Fresno Department of Public Works and Planning, letter dated November 19, 2013
- Matthew S. Scroggins, Central Valley Regional Water Quality Control Board, letter dated November 20, 2013
- Ed Merlic, letter dated November 25, 2013
- Cy R. Oggins, California State Lands Commission, letter dated November 27, 2013
- Bill Carlisle, Friant Power Authority, letter received December 2, 2013

- Steve Chedester, San Joaquin River Exchange Contractors Water Authority, letter received December 2, 2013
- Chandra Ferrari, Trout Unlimited, e-mail dated December 2, 2013
- Daniel G. Nelson, San Luis & Delta–Mendota Water Authority, letter and e-mail dated December 2, 2013
- Dave Warner, San Joaquin Valley Air Pollution Control District, letter dated December 2, 2013
- Pacific Gas and Electric Company, letter dated December 2, 2013
- Melinda S. Marks, San Joaquin River Conservancy, e-mail dated December 3, 2013
- Scott Morgan, State Clearinghouse, letter dated December 6, 2013

## Tribal Correspondence

CDFW provided notice and conducted outreach to potentially interested tribes at several different stages of project development and environmental review. For example, on June 19, 2012, a request was made to the Native American Heritage Commission (NAHC) to review its files for records of sacred sites in the SCARF vicinity. The NAHC's response included a list of individuals who might have additional information about important Native American sites in or near the SCARF site. These individuals were contacted by mail on June 26, 2012, then by phone.

In addition, Pursuant to the California Natural Resources Agency's Tribal Consultation Policy, CDFW has reached out to representatives of Native American tribes whose ancestral tribal territories are found in the vicinity of the Proposed Project's fisheries management activities (e.g., broodstock collection). This outreach involved a letter sent on November 22<sup>nd</sup>, 2013. CDFW had previously sent letters, on June 26, 2012 and on October 3, 2013 as part of the Cultural Resources analysis for the DEIR.

Because this outreach occurred at a similar time period as the public review period for the DEIR, it was not always clear whether communications received from Native American representatives received during the DEIR public review period (October 7, 2013 through December 4, 2013) were intended to be in response to the aforementioned letters, or whether they were in response to the October 7<sup>th</sup>, 2013 Notice of Availability of the DEIR or the October 31<sup>st</sup>, 2013 letter extending the comment period on the DEIR. To ensure the most inclusive conversation, CDFW is noting letters and e-mails received during the DEIR public review period as potential comments on the DEIR and has included them, along with CDFW's responses, in this FEIR in Chapter 2, Comments and Responses. Chapter 2 also includes a table summarizing and responding to other Native American correspondence; this includes phone calls received during the public review period of the DEIR as well as correspondence received outside of the public review period.

In addition, separate from the CEQA process, CDFW will also consider these communications received from Native American representatives in the context of the CDFW's implementation of the California Natural Resources Agency's Tribal Consultation Policy, CDFW's implementation of which is ongoing. The Cultural Resources chapter of the DEIR has been

updated to include a full description of this consultation process to date; the updates to that chapter of the DEIR are provided in this FEIR in Chapter 3, Revisions to the DEIR.

Below is a list of Native American representatives who commented on the Proposed Project:

- Art Angle, Enterprise Rancheria of Maidu Indians, phone call on November 15, 2013
- Miles Baty, Big Sandy Rancheria of Mono Indians, phone call on November 18, 2013
- Lawrence Bill, Sierra Nevada Native American Coalition, phone call on November 15, 2013
- Robert Burns, Wintu Educational and Cultural Council, phone call on November 15, 2013
- Anthony Burris, Ione Band of Miwok Indians Cultural Committee, email dated October 25, 2013
- Stanley Cox, Tuolumne Band of Mi-Wuk, phone call on November 15, 2013
- Mike DeSpain, Mechoopda Indian Tribe of Chico Rancheria, phone call on November 18, 2013
- Samuel Elizondo, Picayune Rancheria of Chuckchansi, phone call on November 18, 2013
- Rose Enos, phone call on November 18, 2013
- Elaine (Judy) Fink, North Fork Rancheria, letter dated December 15, 2013
- Daniel Fonseca, Shingle Springs Band of Miwok Indians, letter dated December 11, 2013
- Gloria Gomes, United Tribe of Northern California, Inc., (Wintu, Wintun, Winton), phone call December 2, 2013
- Daniel Gomez, Cachil DeHe Band of Wintun Indians, phone call November 18, 2013
- Marcus Guerrero, United Auburn Indian Community of the Auburn Rancheria, email dated October 24, 2013
- Liz Hutchins Kipp (via Judith Redtomahawk), Big Sandy Rancheria of Mono Indians, phone call dated November 19, 2013
- Les James, Southern Sierra Miwuk Nation, phone call dated November 18, 2013
- Gaylen Lee, North Fork Rancheria, letter dated November 15, 2013
- Adam Lewis, Calaveras band of Mi-Wuk Indians, phone call November 18, 2013
- Daniel McCarthy, San Manuel Band of Mission Indians, email dated December 13, 2013
- Marshall McKay, Yocha Dehe Wintun Nation, letter dated December 16, 2013
- Kathryn Montes Morgan, Tejon Indian Tribe, letter dated December 12, 2013
- Beverly Ogle, phone call November 19, 2013

- Dolores Raglin, Pit River Tribe of California, phone call November 19, 2013
- Robert Robinson, Kern Valley Indian Council, phone call November 19, 2013
- Ray Rouse, Yocha Dehe Wintun Nation, phone call November 19, 2013
- Caleen Sisk, Winnemen Wintu Tribe, email dated November 4, 2013
- Cosme Valdez, Nashville-El Dorado Miwok, email dated November 21, 2013
- Gene Whitehouse, United Auburn Indian Community of the Auburn Rancheria, letter dated November 20, 2013
- Lois Williams, Calaveras Band of Mi-Wuk Indians, phone call November 19, 2013
- Charles Wilson, Calaveras Band of Mi-Wuk Indians, phone call November 19, 2013
- Randy Yonemura, Ione Band of Miwok Indians Cultural Committee, phone call November 6, 2013
- Goodie Mixx, Berry Creek Rancheria of Maidu Indians, phone call November 19, 2013
- Dave Singleton, Native American Heritage Commission, letter dated October 15, 2013
- Theresa McGinnis, Bear River Rancheria, phone call December 2, 2013
- Matt Root, Winnemen Wintu Tribe, phone call December 6, 2013

## Chapter 2

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### Comments and Responses

## Chapter 2

# COMMENTS AND RESPONSES

### Introduction

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

Note that as described in Chapter 1 of this FEIR, this chapter includes Native American communications received during the DEIR's public review period. Four e-mails and letters are included as comment letters V through Y; the remaining communications are summarized and responded to in a table at the end of this chapter.

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Public Comment A: Richard Haas

1 [ RICHARD HAAS: Name's Richard Haas. You  
go -- I read in the book there you're going to put that  
hatchery on a hundred-year flood plain. Go higher.  
I've seen that hundred -- hundred-year flood plain not  
work on handicap fishing ramps up at -- on the  
San Joaquin River. They wash away.

2 [ That hatchery, after all the input's in,  
start building it in '15?

GERALD HATLER: Well, that depends. We've  
got a current construction schedule -- we would hope  
that we could begin constructing the hatchery, well,  
2014, I think. We hope to have it done by 2015.

RICHARD HAAS: Okay. Another question.  
After this gets going, all those old gravel pits, are you going  
to plug them up or leave them open? Down around 41.

3 [ GERALD HATLER: Well, one of the  
settlement goals is to identify the highest priority  
mining pits for potential isolation from the San Joaquin  
River. So that is one of the major projects that's been  
identified in the settlement.

RICHARD HAAS: I know a lot of people that  
fish, and they're worried about they're going to dry  
them up and everything. Up in the Merced River, they're  
open up there.

That's all I got. Thank you.

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## **Public Comment A: Oral Comment from Richard Haas (Public Meeting, November 4, 2013)**

### **Response to Comment A-1**

CDFW appreciates your concern regarding the location for the proposed SCARF. CDFW addresses this issue in Section 19.3.4 of the DEIR, and has determined the planned location is preferable to upland locations because upland locations would complicate discharge of hatchery return flows and would not allow for volitional fish release, and potentially would not be able to take advantage of gravity-fed water deliveries from the reservoir (pages 19-7 and 19-8 of the DEIR). Additionally, Section 12.4.3 Impact HYD-CONSTRUCT-6, of the DEIR states that the proposed SCARF structures would be designed to flood and would allow flood flows to pass through them (page 12-19 of the DEIR).

### **Response to Comment A-2**

Construction of the proposed SCARF is expected to begin in 2015. Please refer to Table 2-1 of the DEIR (page 2-24), which provide an estimated construction schedule.

### **Response to Comment A-3**

The Proposed Project would include possible enhancement of off-channel mining pits to provide additional recreational fishing opportunities, as described in Section 2.4.7 of the DEIR (pages 2-50 and 2-51).

Other activities related to gravel pits may occur as part of the larger San Joaquin River Restoration Program (SJRRP), including potential isolation of the pits from the San Joaquin River. However, such actions are not part of the Proposed Project.

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## Public Comment B: Rhonda Reed

Could I have a show of hands who wants to give public comments today?

We've got one. All right.

Did you happen to fill out a comment card?

1 [ MS. REED: I didn't, but -- Rhonda Reed, R-H-O-N-D-A, R-E-E-D, and I just wanted to say thank you for extending the comment period. I know it was because of a glitch, but because we had a furlough, we appreciate having the extra time.

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## **Public Comment B: Oral Comment from Rhonda Reed (Public Meeting, November 6, 2013)**

### **Response to Comment B-1**

Thank you for your comment. CDFW is glad that the extended public review period was appreciated.

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STATE OF CALIFORNIA

Edmund G. Brown, Jr. Governor

**NATIVE AMERICAN HERITAGE COMMISSION**

1550 Harbor Boulevard, Suite 100  
West Sacramento, CA 95691  
(916) 373-3715  
Fax (916) 373-5471  
Web Site [www.nahc.ca.gov](http://www.nahc.ca.gov)  
Ds\_nahc@pacbell.net  
e-mail: ds\_nahc@pacbell.net



October 15,, 2013

Mr. Gerald Hatler, SCARF Project Coordinator

**California Department of Fish and Wildlife**

1234 East Shaw Avenue  
Fresno, CA 93710

RE: SCH#2012111083 CEQA Notice of Completion; draft Environmental Impact Report (DEIR) for the **“San Joaquin River Restoration Project; Slamon Conservation and Research Facility and Related Management Actions Project; ”** located at 17372 Brook Trout Drive in the Community of Friant; Fresno County, California – the project site is adjacent to the San Joaquin River approximately 1.1 miles downstream of Friant Dam, immediately west of CDFW's existing San Joaquin Fish Hatchery (SJFH)

Dear Mr. Hatler:

The Native American Heritage Commission (NAHC) has reviewed the Court decision (170 Cal App 3<sup>rd</sup> 604), the court held that the NAHC has jurisdiction and special expertise, as a state agency, over affected Native American resources impacted by proposed projects, including archaeological places of religious significance to Native Americans, and to Native American burial sites.

The California Environmental Quality Act (CEQA) states that any project which includes archeological resources, is a significant effect requiring the preparation of an EIR (CEQA guidelines 15064.5(b). To adequately comply with this provision and mitigate project-related impacts on archaeological resources, the Commission recommends the following actions be required:

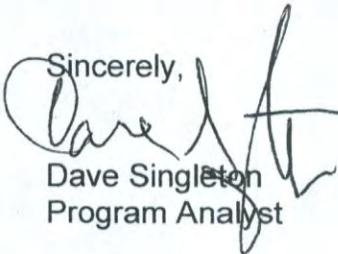
1 | Contact the appropriate Information Center for a record search to determine :If a part or all of the area of project effect (APE) has been previously surveyed for cultural places(s), The NAHC recommends that known traditional cultural resources recorded on or adjacent to the APE be listed in the draft Environmental Impact Report (DEIR).

2 | If an additional archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey. We suggest that this be coordinated with the NAHC, if possible. The final report containing site forms,

2 ↑ site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure pursuant to California Government Code Section 6254.10.

3 | A list of appropriate Native American Contacts for consultation concerning the project site has been provided and is attached to this letter to determine if the proposed active might impinge on any cultural resources. Lack of surface evidence of archeological resources does not preclude their subsurface existence.

4 | Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, pursuant to California Health & Safety Code Section 7050.5 and California Environmental Quality Act (CEQA) §15064.5(f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities. Also, California Public Resources Code Section 21083.2 require documentation and analysis of archaeological items that meet the standard in Section 15064.5 (a)(b)(f). Lead agencies should include in their mitigation plan provisions for the analysis and disposition of recovered artifacts, in consultation with culturally affiliated Native Americans. Lead agencies should include provisions for discovery of Native American human remains in their mitigation plan. Health and Safety Code §7050.5, CEQA §15064.5(e), and Public Resources Code §5097.98 mandates the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery.

Sincerely,  
  
Dave Singleton  
Program Analyst

CC: State Clearinghouse

Attachment: Native American Contacts list

**Native American Contacts  
Fresno County  
October 15, 2013**

Big Sandy Rancheria of Mono Indians  
Elizabeth Hutchins Kipp, Chairperson  
P.O. Box 337 / 37302 Western Mono  
Auberry , CA 93602  
ck@bigsandyrancheria.com  
(559) 855-4003  
(559) 855-4129 Fax

Sierra Nevada Native American Coalition  
Lawrence Bill, Interim Chairperson  
P.O. 125 Mono  
Dunlap , CA 93621 Foothill Yokuts  
(559) 338-2354 Choinumni

Cold Springs Rancheria of Mono Indians  
Robert Marquez, Chairperson  
P.O. Box 209 Mono  
Tollhouse , CA 93667  
(559) 855-5043  
559-855-4445 - FAX

Choinumni Tribe; Choinumni/Mono  
Lorrie Planas  
2736 Palo Alto Choinumni  
Clovis , CA 93611 Mono

North Fork Mono Tribe  
Ron Goode, Chairperson  
13396 Tollhouse Road Mono  
Clovis , CA 93619  
rwgoode911@hotmail.com  
(559) 299-3729 Home  
(559) 355-1774 - cell

Table Mountain Rancheria  
Bob Pennell, Cultural Resources Director  
P.O. Box 410 Yokuts  
Friant , CA 93626-0177  
(559) 325-0351  
(559) 217-9718 - cell  
(559) 325-0394 FAX

Dumna Wo-Wah Tribal Government  
Robert Ledger SR., Tribal Chairperson  
2216 East Hammond Street Dumna/Foothill  
Fresno , CA 93702 Mono  
ledgerrobert@ymail.com  
559-519-1742 - office

Kings River Choinumni Farm Tribe  
John Davis, Chairman  
1064 Oxford Avenue Foothill Yokuts  
Clovis , CA 93612-2211 Choinumni  
(559) 307-6430

**This list is current only as of the date of this document.**

**Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.**

his list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2012111083; CEQA Notice of Completion; draft Environmental Impact Report (DEIR for the San Joaquin River Restoration Program, Salmon Enhancement....; located in the Friant area; Fresno County, California.

**Native American Contacts  
Fresno County  
October 15, 2013**

Dunlap Band of Mono Historical Preservation Soc  
Mandy Marine, Board Chairperson  
P.O. Box 18 Mono  
Dunlap , CA 93621  
mandy\_marine@hotmail.  
com  
559-274-1705

Santa Rosa Tachi Rancheria  
Lalo Franco, Cultural Coordinator  
P.O. Box 8 Tachi  
Lemoore , CA 93245 Tache  
(559) 924-1278 - Ext. 5 Yokut  
(559) 924-3583 - FAX

Chowchilla Tribe of Yokuts  
Jerry Brown  
10553 N. Rice Road North Valley Yokuts  
Fresno , CA 93720  
559-434-3160

Kings River Choinumni Farm Tribe  
Stan Alec  
642 West Barstow Ave. #E Foothill Yokuts  
Clovis , CA 93612 Choinumni  
559-647-3227 - cell

Frank Marquez  
P.O. Box 565 Mono  
Friant , CA 93626 Foothill Yokut  
francomarquez@pmr.org  
559-213-6543 - cell  
559-822-3785

**This list is current only as of the date of this document.**

**Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.**

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2012111083; CEQA Notice of Completion; draft Environmental Impact Report (DEIR for the San Joaquin River Restoration Program, Salmon Enhancement...; located in the Friant area; Fresno County, California.

## **Public Comment C: Letter from Dave Singleton, Native American Heritage Commission (October 15, 2013)**

### **Response to Comment C-1**

As described in Section 8.4.1 of the DEIR (pages 8-10 through 8-16), a record search was conducted by the Southern San Joaquin Valley Information Center of the California Historical Resources Information System at California State University, Stanislaus, in the proposed SCARF vicinity. In addition, a request was made to the Native American Heritage Commission (NAHC) to review its files for records of sacred sites in the proposed SCARF vicinity. Outreach also was conducted to the Native Americans identified by the NAHC. No known traditional cultural resources have been recorded in or adjacent to the area of potential effect (APE), although members of the Dumna Wo-Wah and North Fork Mono tribes expressed concern about the potential presence of traditional use areas in the proposed SCARF vicinity. See Section 8.4.1 of the DEIR for a detailed description of the outreach process that was conducted.

For other new facilities (e.g., fish weirs), records searches and outreach to the NAHC and Native Americans would be conducted as the plans for these facilities are further developed and an APE can be identified.

### **Response to Comment C-2**

A professional report detailing the findings and recommendations of the records search and field surveys has been completed and submitted to the Planning Department. No resources (e.g., sacred sites, Native American human remains, or associated funerary objects) were identified that required a separate, confidential addendum.

### **Response to Comment C-3**

As described in the Response to Comment C-1, the NAHC previously provided a list of Native American contacts, and the results of the outreach that was conducted as part of DEIR preparation is summarized in Section 8.4.1 of the DEIR (pages 8-10 through 8-16). CDFW recognizes that lack of surface evidence of archeological resources does not preclude their subsurface existence, and the DEIR includes mitigation measures in Section 8.4.3 to be implemented in the event that a previously undiscovered, buried archeological resource is discovered as part of construction or operation of the Proposed Project.

### **Response to Comment C-4**

CDFW is aware of the various regulatory requirements cited in this comment, and has included mitigation measures in the DEIR to address the potential discovery of resources in compliance with these regulations. Specifically, Mitigation Measures CR-CONSTRUCT-1a and CR-CONSTRUCT-1b in the DEIR (pages 8-19 through 8-20) contain provisions for the identification and evaluation of accidentally discovered archeological resources, including provisions for the analysis and disposition of recovered artifacts, in consultation with cultural affiliated Native Americans. Similarly, Mitigation Measure CR-CONSTRUCT-3 contains provisions in the event of discovery of Native American human remains.

CDFW notes the NAHC's suggestion that ground-disturbing activities in locations of archeological sensitivity be monitored by a certified archaeologist or culturally affiliated Native American.

Public Comment D: Don Heichel

Dear Mr. Hatler,

1 | What detail has been given to thoughts of how the young Salmon will  
navigate the Delta, where the Aqueduct Pumps in the SouthEast corner of the  
Delta create a false current that does not lead to the Ocean.

The video on YouTube ([http://www.youtube.com/watch?v=\\_v7K0gMjhcY](http://www.youtube.com/watch?v=_v7K0gMjhcY))

titled "Delta Blues, Trucking Salmon around the California Delta" shows

Feather River Hatchery Salmon being transferred to a netted pen to

allow them to acclimate to changes in salinity & temperature in their out-  
migration.

Is this (or barge) transport beyond the Delta's false current to the export

pumps budgeted & planned for in detail?

Sincerely, Don Heichel

Soquel, Ca.

831 239 0419

2 | P.S. Please give a comparison of what historical Chinook Salmon runs

on the San Joaquin River were compared to Project target populations?

3 | P.P.S. The health of the Delta's environment should be the prime

concern in decisions. Taking water prior to its entering the Delta will

spike salinity & deprive in-migration Salmon of scented water to follow

home to their spawning place.

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## Public Comment D: E-mail from Don Heichel (October 29, 2013)

### Response to Comment D-1

The baseline condition for the CEQA analysis of the Proposed Project is that the spring-run Chinook salmon which would be released as part of the Proposed Project currently are not present in the Delta or the San Joaquin River. Therefore, no impacts on these fish would occur from a CEQA perspective; accordingly, no impacts on these fish were identified or evaluated in the DEIR. Rather, the issues raised in the comment are planning issues related to the ability of the Proposed Project to achieve its objectives. CDFW is aware of the effects that water diversion within the Delta and San Joaquin River may have on the survival of out-migrating Chinook salmon smolts. The Proposed Project does not propose releasing Chinook salmon downstream from the Restoration Area (i.e., downstream of the confluence of the Merced and San Joaquin rivers). Thus, Chinook salmon that are released as part of the Proposed Project would be subject to flow conditions in the Delta, including currents created by water diversions. The Proposed Project would include extensive monitoring (see Section 2.4.6 of the DEIR) and mechanisms to track fish (e.g., coded-wire tags) that are released in the Restoration Area. Monitoring of fish that are released under the Proposed Project is expected to guide adaptive management measures, which may include modifications of reintroduction strategies.

### Response to Comment D-2

The San Joaquin River Restoration Study Background Report (Background Report) (FWUA and NRDC 2002) provides a synopsis of the historical distribution and abundance of Chinook salmon in the San Joaquin River. The Background Report states:

The San Joaquin River historically supported large runs of spring-run Chinook salmon; CDFG (1990, as cited in Yoshiyama et al. 1996) suggested that this run was one of the largest Chinook salmon runs on any river on the Pacific Coast, with an annual escapement averaging 200,000 to 500,000 adult spawners (CDFG 1990, as cited Yoshiyama et al. 1996). Construction of Friant Dam began in 1939 and was completed in 1942, which blocked access to upstream habitat. Nevertheless, runs of 30,000 to 56,000 spring-run Chinook salmon were reported in the years after Friant Dam was constructed, with salmon holding in the pools and spawning in riffles downstream of the dam. Friant Dam began filling in 1944, and in the late 1940s began to divert increasing amounts of water into canals to support agriculture. Flows into the mainstem San Joaquin River were reduced to a point that river ran dry in the vicinity of Gravelly Ford. By 1950, the entire run of spring-run Chinook salmon was extirpated from the San Joaquin River (Fry 1961).

Although the San Joaquin River also supported a fall-run Chinook salmon run, they historically composed a smaller portion of the river's salmon runs (Moyle 2002). By the 1920s, reduced autumn flows in the mainstem San Joaquin River nearly eliminated the fall-run, although a small run did persist.

The Settlement Agreement established a restoration goal that provides qualitative objectives for restoring Chinook salmon populations in the San Joaquin River. The SJRRP's Technical Advisory Committee (TAC) has set the targets or recommendations for restoration of spring-

run Chinook salmon. The TAC's recommendations are shown in Table 2-3 of the DEIR and are listed below:

Technical Advisory Committee's Spring-Run Recommendations

<b>Milestone Year</b>	<b>Milestone Name</b>	<b>Period</b>	<b>Minimum Threshold</b>	<b>5-year Running Average Target Adult Returns</b>
2019	Reintroduction	Jan 2012 – Dec 2019	variable	variable
2024	Interim Population	Jan 2020 – Dec 2024	500	2,500
2040	Growth Population	Jan 2025 – Dec 2040	500	2,500 – 30,000+

### Response to Comment D-3

CDFW appreciates the comment regarding the health of the Delta's environment and its importance in the decision-making process, as well as issues related to water management and effects on salmon migration patterns. Water diverted for use under the Proposed Project would be returned to the San Joaquin River within 2 miles downstream of Friant Dam. Please see Response to Comment D-1 for more information. Also note that flows associated with the SJRRP are not a part of the Proposed Project and have been discussed in the SJRRP's Program Environmental Impact Report/Statement (Reclamation and DWR 2012).

Public Comment E: Dennis Fox

Gerald Hatler, Scarf Commentary  
California Dept. of F&W  
1234 E Shaw AVE.  
Fresno, Ca 93719



Subject: SCARF Commentary:

Dear Sir:

My concerns with the SCARF program boil down to putting the cart before the horse and losing public support by giving the appearance of the program being a biodgeggle:

1 | I received some fundamental training from Dave Rosgen on river restoration and classification and suggest that there may be a use for him in this program. He may be able to return the river to a viable stream with a pool-riffle design and some sediment transport regardless of subsidence. Sometimes his methods are cost effective, but you should see if they are adaptable to the river's situation. Maybe not, but it would seem worth investigating and put any in house syndrome on hold.

2 | Also, consider the greater need for riparian shading in light of climate change.  
3 | The river should be cleaned of exotics which will migrate downstream when water is applied.

4 | Once habitat has been provided, then is the time to do the hard structures. The hatcheries should be separated. No Admittance signs will not work with all people, when in need of something from the other hatchery, and fish are not that literate as to which hatchery they are to occupy.

5 | It does not look all that appropriate to first start off with employee housing. The left over trailers at some of the refuges, such as San Luis, should be used on an interim basis; though not palaces, they will favorably impress the public more than good housing until they completely collapse-which should not be too long.

6 | An aeration system should be constructed at Friant. Also some raising of the dam height may be done to increase aeration as well as capacity and, perhaps, some temperature control.

7 | While some of these suggestions regarding the facility will do no harm but are incrementally fairly small as contrasted to dam removal etc, you will need public support for funding which is why I stress them for continued operation.

Sincerely,

Dennis Fox  
918 Blossom St.  
Bakersfield, CA 93306

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## **Public Comment E: Letter from Dennis Fox (November 2013)**

### **Response to Comment E-1**

CDFW appreciates this comment related to planning of channel improvement activities on the San Joaquin River. Such restoration activities, although part of the SJRRP, are outside the scope of the Proposed Project. The Proposed Project would include construction and operation of the proposed SCARF and associated improvements. See Chapter 2, *Project Description* of the DEIR.

### **Response to Comment E-2**

CDFW appreciates this comment related to the need for riparian shading in light of climate change. Similar to Comment E-1, this comment is related to activities that are outside the scope of the Proposed Project. See Response to Comment E-1.

### **Response to Comment E-3**

CDFW appreciates this comment related to exotic species. Similar to Comment E-1, this comment is related to activities that are outside the scope of the Proposed Project. See Response to Comment E-1.

### **Response to Comment E-4**

CDFW appreciates the comment related to the timing of construction of hard structures relative to provision of habitat, and separation of the San Joaquin Fish Hatchery (SJFH) and the proposed SCARF. The SJFH and the proposed SCARF would be separate facilities with separate staff, equipment, and operations. See Chapter 2, *Project Description* of the DEIR for more details.

### **Response to Comment E-5**

Section 2.4.3 of the DEIR (page 2-21) describes the various options being considered for staff residences and states that CDFW “may elect to provide mobile housing (e.g., trailers or modular homes) on the proposed SCARF site.” CDFW has not yet determined the source for mobile housing, if it is used for employee housing. Although reuse of existing trailers from other locations would be considered, CDFW would not use any structures that may collapse in the near future, as this would pose an unacceptable risk to the residents of those structures.

### **Response to Comment E-6**

The Proposed Project includes construction of an aeration tower at the proposed SCARF facility to oxygenate water and remove undesirable dissolved gasses that may be present in the water supply before it is used at the SCARF (see Chapter 2, *Project Description* of the DEIR, page 2-19). Activities at Friant Dam, such as construction of the aeration facilities and raising of the dam are beyond the scope of the Proposed Project.

## **Response to Comment E-7**

CDFW values this input and is grateful for the time taken to comment on the proposed SCARF.



# PARAMOUNT FARMING

November 4, 2013

**VIA MAIL AND E-MAIL**

California Department of Fish & Wildlife  
ATTN: Gerald Hatler  
1234 E. Shaw Ave.  
Fresno, CA 93710  
REG4SCARFCEQA@wildlife.ca.gov

Re: Comments on the Draft Environmental Impact Report on Salmon Conservation and Research Facility and Related Fisheries Management Actions Project

Dear Mr. Hatler:

Paramount Farming Company, as agent for Paramount Land Company LLC and Paramount Pomegranate Orchards LLC (Paramount), submits the following comments on the Department of Fish & Wildlife's (DFW) Draft Environmental Impact Report (Draft EIR) for the Salmon Conservation and Research Facility and Related Fisheries Management Actions Project (Project). The Project is intended to support the implementation of the San Joaquin River Restoration Program (SJRRP) Restoration Goal, "to restore and maintain fish populations in 'good condition' in the main stem of the San Joaquin River below Friant Dam to the confluence of the Merced River..."

Paramount owns New Columbia Ranch, located on the east side of Reach 2B of the San Joaquin River, just upstream from the Mendota Pool and downstream from the historic Whitehouse Gauging Station near the head of Lone Willow Slough. Paramount also holds rights to the water of the San Joaquin River and its sloughs and exercises those rights to divert flows. Paramount will be directly affected by the SJRRP in a number of ways and has previously submitted comment letters on documents related to the Program. Paramount recognizes its ongoing relationship with the Bureau of Reclamation and is committed to the continued collaboration and open communication of this relationship. Please accept the following comments on the Draft EIR.

## 1. Water Supply

1 Section 2.4.3 of the Project Description explains that the Project will require a permanent flow of up to 20 cfs from the San Joaquin River. *See* Draft EIR, p. 2-26. This water is a portion of the water set aside for the SJRRP and a majority of the water would return to the River or percolate as shallow groundwater flow. *Id.* at p. 12-22. The Draft EIR therefore concludes that the impact on surface water supply and ground water supply is less than significant. *Id.* at pp. 12-21 – 12-22.

1 ↑ Paramount interprets this to mean that the water supply for the Project will be appropriated under License 1986 (Application 23) or Permits 11885, 11886 and 11887 (Applications 234, 1465 and 5638) and subject to the conditions of those water rights as amended on October 21, 2013. If this is not correct, Paramount requests that DFW clarify the source of the right to the water supply for the Project and ensure that the supply will not injure other legal users of water from the San Joaquin River below Friant Dam.

2 | 2. Endangered Species Act

To the extent that operation of the Project contributes to a nonessential experimental population of Central Valley spring-run Chinook salmon in the San Joaquin River, Paramount maintains that any diversions it makes from the River are exempt from direct take prohibitions under the proposed rule in amendments to 50 C.F.R. § 223.301(b)(3)(i) published at 78 Fed. Reg. 3381, 3388. In addition, Paramount is exempt from direct take prohibitions for the progeny of spring-run Chinook salmon resulting from the SJRRP and the Project. Indeed, Section 10011 of the San Joaquin River Restoration Settlement Act, Pub. L. 111-11, 123 Stat 1349 (2009), requires that reintroduction of salmon in the San Joaquin River will not impose more than a “de minimus” impact on third parties. Nothing in the Project will affect Paramount’s status under the Endangered Species Act or the proposed experimental population designation.

Thank you for considering and responding to the above comments. Should you have questions, please contact myself or Kimberly Brown.

Sincerely,



William D. Phillimore  
Executive Vice President

## **Public Comment F: Letter and E-mail from William D. Phillimore, Paramount Farming Company (November 4, 2013)**

### **Response to Comment F-1**

The comment is correct that the water supply for the Proposed Project would be appropriated under License 1986 (Application 23) or Permits 11885, 11886, and 11887 (Applications 234, 1465, and 5638) and would be subject to the conditions of those water rights as amended on October 21, 2013.

### **Response to Comment F-2**

CDFW appreciates this comment; however, it is beyond the scope of the Proposed Project to evaluate the accuracy of the assertions made in the comment related to the applicability of take prohibitions and Paramount's status under the Endangered Species Act or the proposed experimental population designation. Please refer to the final 10(J) Rule establishing a Nonessential Experimental Population of Central Valley spring-run Chinook salmon and associated take provisions under section 4(d) of the Endangered Species Act published by NOAA Fisheries (78 Fed. Reg. 79622), and the discussion regarding California Fish and Game Code Sections 2080.2 through 2080.4 beginning on page 6-8 (Chapter 6, page 8) of the DEIR.

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*Stan Risen*  
Interim Chief Executive Officer

*Patricia Hill Thomas*  
Chief Operations Officer/  
Assistant Executive Officer

*Keith D. Boggs*  
Assistant Executive Officer

1010 10<sup>th</sup> Street, Suite 6800, Modesto, CA 95354  
Post Office Box 3404, Modesto, CA 95353-3404

Phone: 209.525.6333 Fax 209.544.6226

**STANISLAUS COUNTY ENVIRONMENTAL REVIEW COMMITTEE**

November 12, 2013

Gerald Hatler, SCARF Draft EIR Comments  
California Department of Fish and Wildlife  
1234 E. Shaw Avenue  
Fresno, CA 93710

**SUBJECT: ENVIRONMENTAL REFERRAL – NOTICE OF AVAILABILITY OF A  
DRAFT ENVIRONMENTAL IMPACT REPORT REGARDING THE  
PROPOSED SALMON CONSERVATION AND RESEARCH FACILITY  
AND RELATED MANAGEMENT ACTIONS PROJECT**

Mr. Hatler:

1 [ The Stanislaus County Environmental Review Committee (ERC) has reviewed the  
subject project and has no comments at this time.

The ERC appreciates the opportunity to comment on this project.

Sincerely,

Janice Curtin  
Management Consultant  
Environmental Review Committee

JC:ss

cc: ERC Members



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## **Public Comment G: Letter from Janice Curtin, Stanislaus County Environmental Review Committee (November 12, 2013)**

### **Response to Comment G-1**

CDFW thanks the Stanislaus County Environmental Review Committee for its review of the DEIR.

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FRESNO METROPOLITAN FLOOD CONTROL DISTRICT

File 550.30 "CA-DFW"

November 14, 2013



California Department of Fish and Wildlife  
ATTN: Gerald Hatler, SCARF Draft EIR Comments  
1234 Shaw Avenue  
Fresno, CA 93710

Dear Mr. Hatler,

**Comments on the Draft Environmental Impact Report Regarding the Proposed Salmon Conservation and Research Facility and Related Management Actions Project**

1 [ After thorough review of the Draft Environmental Impact Report Regarding the Proposed Salmon Conservation and Research Facility and Related Management Actions Project, the Fresno Metropolitan Flood Control District concurs with the findings of the draft EIR and the implementation of the mitigation measures listed in the Executive Summary Table ES-1.

If you have any questions, please contact Kristine Johnson here at the District at 456-3292.

Sincerely,

Bob Van Wyk  
General Manager – Secretary

BVW/DP/sy

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## **Public Comment H: Letter from Bob Van Wyk, Fresno Metropolitan Flood Control District (November 14, 2013)**

### **Response to Comment H-1**

CDFW thanks the Fresno Metropolitan Flood Control District for its consideration of and concurrence with the findings of the DEIR.

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November 18, 2013



Department of Fish and Wildlife  
ATTN: Gerald Hatler, SCARF Draft EIR Comments  
1234 E. Shaw Ave.  
Fresno, CA 93710-7841

**RE: Draft Environmental Impact**  
**Location: 17372 Brook Trout Drive in Friant & Various Locations**

Dear Mr. Hatler,

Thank you for the opportunity to comment on this project.

The San Joaquin Tributaries Association, of which the Modesto Irrigation District is a member, will submit comments related to this project.

1 [ **The Modesto Irrigation District reserves its future rights to utilize its property, including its canal and electrical easements and rights-of-way, in a manner it deems necessary for the installation and maintenance of electric, irrigation, agricultural and urban drainage, domestic water and telecommunication facilities. These needs, which have not yet been determined, may consist of poles, crossarms, wires, cables, braces, insulators, transformers, service lines, open channels, pipelines, control structures and any necessary appurtenances, as may, in District's opinion, be necessary or desirable.** ]

If you have any questions, please contact me at 526-7433.

Sincerely,

Celia Aceves  
Risk & Property Analyst

Copy: Jeffrey R. Single, Regional Manager, State of California – Natural Resources Agency  
Dept. of Fish and Wildlife

File

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## **Public Comment I: Letter from Celia Aceves, Modesto Irrigation District (November 18, 2013)**

### **Response to Comment I-1**

CDFW appreciates this comment from the Modesto Irrigation District (MID), and will coordinate with MID regarding activities that could affect MID's utilization of its property.

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# County of Fresno

DEPARTMENT OF PUBLIC WORKS AND PLANNING  
ALAN WEAVER, DIRECTOR

November 19, 2013

California Department of Fish and Wildlife  
Gerald Hatler, SCARF Draft EIR Comments  
1234 E. Shaw Avenue  
Fresno, CA 93710



Subject: Draft Environmental Impact Report Regarding the Salmon Conservation and Research Facility (SCARF) and Related Management Actions Project

Dear Mr. Hatler:

The County of Fresno appreciates the opportunity to review and comment on the project noted above. Based on the County's review of this project, the following comments are offered for your consideration and inclusion in the Final Environmental Impact Report (FEIR):

The Department of Public Health, Environmental Health Division has reviewed the CA Department of Fish and Wildlife Salmon Conservation and Research Facility EIR and has the following comments to offer:

1 | • If construction activities in the new areas and/or soil borrow area uncovers evidence of landfill debris and/or contaminated soils; construction activities in that area shall cease and the Department of Public Health, Environmental Health Division shall be notified immediately. Please contact the Solid Waste Program at (559) 600-3271 for more information.

2 | • All wells and septic systems that exist or that have been abandoned within the project area (and are not intended for use) shall be properly destroyed by an appropriately licensed contractor.

2 | Prior to destruction of agricultural wells, a sample of the upper most fluid in the well column should be sampled for lubricating oil. The presence of oil staining around the well may indicate the use of lubricating oil to maintain the well pump. Should lubricating oil be found in the well, the oil should be removed from the well prior to placement of fill material for destruction. The "oily water" removed from the well must be handled in accordance with federal, state and local government requirements. Transportation of these materials on public roadways may require special permits and licensure.

3 | • Every effort should be made to connect the new facilities to community water and sewer systems.

**DEVELOPMENT SERVICES DIVISION**

- 4 [
- Prior to operations, the applicant shall complete the online Hazardous Materials Business Plan submittal (<https://www.fresnocupa.com/> or <http://cers.calepa.ca.gov/>). Contact the Certified Unified Program Agency at (559) 600-3271 for more information.
- 5 [
- Operations of the facility shall comply with the Noise Element of the Fresno County General Plan and Fresno County Noise Ordinance.

If you have any questions, please contact me at (559) 600-4207, or e-mail: [bsholars@co.fresno.ca.us](mailto:bsholars@co.fresno.ca.us)

Sincerely,



Briza Sholars, Planner  
Development Services Division

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c: Chris Motta, Principal Planner  
Janet Gardner, Environmental Health

## **Public Comment J: Letter from Briza Sholars, County of Fresno Department of Public Works and Planning (November 19, 2013)**

### **Response to Comment J-1**

CDFW appreciates this comment from the County of Fresno Public Works and Planning Department. CDFW would notify the Environmental Health Division of the Department of Public Health if evidence of landfill debris and/or contaminated soils are discovered at the proposed SCARF site during construction.

### **Response to Comment J-2**

CDFW appreciates the comments from the County of Fresno Public Works and Planning Department. All wells that exist or that have been within the project area (and are not intended for use) will be properly destroyed by a licensed contractor and in accordance with the California Department of Water Resources California Well Standards, Bulletin 74-90 (DWR 1990) as a supplement to Bulletin 74-81, Water Well Standards: State of California, December 1981 (DWR 1981). Similarly, any septic system improvements or abandonment will be conducted by a licensed contractor.

### **Response to Comment J-3**

CDFW understands the County's desire to have the new facilities connect to the community water and sewer systems. Chapter 2, *Project Description* of the DEIR (pages 2-14 through 2-20) describes CDFW's plans related to water supply and wastewater. In summary, the process to obtain a domestic water supply for the proposed SCARF (and associated residences) would be achieved from releases from Millerton Reservoir. Domestic wastewater would be treated through a connection to the existing septic system for the SJFH; this septic system recently was expanded to accommodate the volume of wastewater anticipated to be generated by the Proposed Project. These methods were selected because they have the lowest cost. In addition, no community sewer system exists at this time in Friant to which the proposed SCARF could connect. However, in the future event there is the availability of community water and sewer system, CDFW will examine the feasibility of connection to these services for the SCARF and the associated residences.

### **Response to Comment J-4**

The comment is appreciated. CDFW would comply with Certified Unified Program Agency requirements.

### **Response to Comment J-5**

The comment is appreciated. Although local requirements, such as those in the Fresno County General Plan and Noise Ordinance, do not apply to the State, CDFW would make every effort to comply with these requirements. CDFW anticipates that compliance with these requirements would be achievable.

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Central Valley Regional Water Quality Control Board

20 November 2013



Gerald Hatler  
California Department of Fish and Wildlife  
1234 E. Shaw Avenue  
Fresno, CA 93710

**REQUEST FOR COMMENTS, DRAFT ENVIRONMENTAL IMPACT REPORT FOR SAN JOAQUIN RIVER RESTORATION PROGRAM: SALMON CONSERVATION AND RESEARCH FACILITY (SCARF) AND RELATED MANAGEMENT ACTIONS PROJECT, SCH#2012111083, FRESNO COUNTY**

On 21 October 2013, we received the request for comments regarding a draft environmental impact report for the SCARF and Related Fisheries Management Actions Project (Project) from California Department of Fish and Wildlife. The purpose of the Project is to reintroduce Chinook salmon into the San Joaquin River. Our comments and concerns are presented below.

According to the draft environmental impact report, copper sulfate will potentially be used at the SCARF. The draft environmental impact report states that the wastewater discharged from the SCARF to the San Joaquin River will be regulated by the NPDES General Permit for Cold Water Concentrated Aquatic Animal Production Facility Discharges to Surface Waters (Order R5-2010-0018-01) (CAAP General Order). As mentioned in the draft environmental impact report, the CAAP General Order includes screening levels based on the most restrictive water quality objectives/criteria for priority pollutant metals, including copper. To be eligible for coverage under the CAAP General Order, the screening levels must be met.

1 Monitoring for the San Joaquin Fish Hatchery, which does not use copper sulfate, has shown that both the influent and effluent copper concentrations exceed the screening levels specified in Attachment H of the CAAP General Order due to the low hardness of the San Joaquin River. Since the proposed SCARF will have the same source water (San Joaquin River) as the San Joaquin Fish Hatchery, it is expected that the SCARF will have similar copper concentrations.

Wastewater discharges from the SCARF may only be eligible for coverage under the CAAP General Order if intake water credits are granted in accordance with Section 1.4.4. of the *Policy for Implementation of the Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries in California* (SIP).

1

If intake water credits are granted, a facility is only allowed to discharge a mass and concentration of the intake water pollutant that is no greater than the mass and concentration found in the facility's intake water. A discharger can only add a mass of a pollutant to its waste stream if an equal or greater mass is removed prior to discharge, so there is no net addition of the pollutant in the discharge compared to the intake water. If copper sulfate is utilized at the SCARF and the SCARF does not provide sufficient removal of copper from the waste stream to ensure there is no net addition of copper in the SCARF's discharge compared to the intake water, the Facility would not be eligible for intake water credits in the CAAP General Order.

If you have any questions regarding this matter, please contact Alex Mushegan at (559) 488-4397 or at [amushegan@waterboards.ca.gov](mailto:amushegan@waterboards.ca.gov).



MATTHEW S. SCROGGINS  
Senior Engineer

cc: Office of Planning and Research, State Clearing House, Sacramento

## **Public Comment K: Letter from Matthew S. Scroggins, Central Valley Regional Water Quality Control Board (November 20, 2013)**

### **Response to Comment K-1**

CDFW would not use copper sulfate at the proposed SCARF; the reference to copper sulfate has been removed from the DEIR (see Chapter 3 of this FEIR). If necessary, CDFW would use other chemicals as approved for use under the National Pollutant Discharge Elimination System General Permit for Cold Water Concentrated Aquatic Animal Production Facility Discharges to Surface Waters (Order R5-2010-0018-01).

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Dept of Fish and Wildlife  
1234 Shaw Ave.  
Fresno, CA 93710

Roseville California

November 25, 2013

Dear SCARF,

Sorry, I have been absent from CA from late October through November on business and pleasure in Maui. This did not allow me the luxury of attending the public meetings which you have held re the DEIR on SCARF. Yesterday, I attempted pulling up selected DEIR appendices from your website, but I had limited success. I was able to read Appendix A, but when I next tried to load Appendix E, my computer spent 3 hours reading without completing the access. I finally stopped the process and gave up in any more access from your site. I have some questions regarding both the journey of your hatchery-raised fry, and the successful return to your hatchery of the adult Salmon you have raised. The problems need attention, and I hope you agree:

1. For the adult Salmon, their managing to escape CVP and the Delta Mendota operations are one critical problem in the river return journey.  
I visited both the CVP and Delta Mendota pumping stations a few years ago and the 'screens' at either operation are deplorably inadequate. Years ago, a friend had told me about walking one of the Mendota canals during their inactive period and discovering a large (dead) Chinook in the empty canal.
2. After successfully escaping Clifton Court, the next challenge appears a short distance upstream of the Merced River entry to the San Joaquin where the San Luis Drain dumps agricultural wastes from Westlands farms at Mud Slough. Will your adult Chinook make it past the Drain, or will they succumb in its waters upstream of Mud Slough?
3. For the fry you release, how will they manage to escape the CVP and The Delta Mendota pumps? My reading of the F&G section in a 1978 CVP progress report explained that the fry hatched in the N. CA hatcheries disappeared at a 78% rate at or near Clifton Court. I realize that the pumps as well as the hungry striped bass in the reservoir both contributed to that count, and unless there are screens installed in both places, you may need to plan at least a tanking ops for the fry like you are doing for the N. CA hatcheries. The RR rail structure(screen????)at Delta Mendota successfully keeps driftwood out of their pumps, but neither fry, nor all adult Salmon may escape. In duck season, a friend saw a dead adult Chinook in a then dry Mendota canal, and that Chinook was not an escapee of a fishing bag!

I am pleased that you have gone to a hatchery solution rather than depending on gravel bed reproduction. The gravel beds in Red Bluff were still there when I visited in the late 80's, but the site was dry and desolate. I am not familiar with the actions there nor the date of action, but that site seemed a total loss.

Sorry to have been away when your presentations occurred and even more sorry to have had a miserable result in pulling up your DEIR from your website. I hope this small effort on my part might help your thinking on transport of fry and the return of adult Salmon if those conditions are not already laid out in your plan.

Ed Merlic 6232 Buckskin Lane Roseville CA 95747 (916) 771-0410

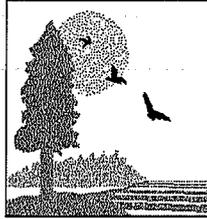
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## **Public Comment L: Letter from Ed Merlic (November 25, 2013)**

### **Response to Comment L-1**

CDFW understands the concern expressed in the comment regarding the navigability of the San Joaquin River for returning adult salmon as well as for juvenile salmon outmigration. Moreover, CDFW appreciates the migratory nature of salmon where adult salmon will face numerous obstacles beyond the scope of the Proposed Project. While operations of water pumping facilities are outside of the scope of the Proposed Project, seasonal barriers intended to direct upmigrating adult salmon away from false migration pathways are discussed in Section 2.4.5 of the DEIR. The need, location, and operation of seasonal barriers would be a decision made in coordination with the SJRRP and therefore have been analyzed at a program level within the DEIR.

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1938 - 2013

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

Contact Phone: (916) 574-1900  
Contact Fax: (916) 574-1885

November 27, 2013

File Ref: SCH #2012111083

California Department of Fish and Wildlife  
Attn.: Gerald Hatler, SCARF Draft EIR Comments  
1234 E. Shaw Avenue  
Fresno, CA 93710

**Subject: Draft Environmental Impact Report (DEIR) for the Salmon Conservation and Research Facility (SCARF) and Related Management Actions Project, Fresno County**

Dear Mr. Hatler:

1 The California State Lands Commission (CSLC) staff has reviewed the subject DEIR for the SCARF and Related Management Actions Project (Project), which is being prepared by the California Department of Fish and Wildlife (CDFW). CDFW, as a public agency proposing to carry out a project, is the lead agency under the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.). [The CSLC is a trustee agency because of its trust responsibility for projects that could directly or indirectly affect sovereign lands, their accompanying Public Trust resources or uses, and the public easement in navigable waters. Additionally, because the Project involves work on sovereign lands, the CSLC will act as a responsible agency.]

**CSLC Jurisdiction and Public Trust Lands**

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

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

↑ preservation, and open space. On navigable non-tidal waterways, including the San Joaquin River, the State holds fee ownership of the bed of the waterway landward to the ordinary low water mark and a Public Trust easement landward to the ordinary high water mark, except where the boundary has been fixed by agreement or court decision. Such boundaries may not be readily apparent from present day site inspections.

The proposed Project appears to extend onto the bed of the San Joaquin River which at this location is natural, subject to artificial conditions (Friant Dam), navigable, non-tidal, and meandered on both banks on the United States Township Plat. CSLC staff is currently investigating historic positions of the River, and the original United States meander lines in relation to the present location of the River.

2 A lease will be required for the portion of the Project that is within the River, including the volitional release channel and the effluent outfall. CSLC staff will need further information to determine if a lease is required for the fish barrier at Reach 1A Separation Weir. As the EIR mentions, other activities associated with the Project, such as the removal of other barriers to fish passage in the San Joaquin River and the possible construction of seasonal barriers to prevent salmon entrainment in Salt and Mud Sloughs, may also require a lease from the CSLC. Once the locations of these future activities are known, please contact CSLC staff to determine whether a lease is required. A lease application may be found on our website at [www.slc.ca.gov](http://www.slc.ca.gov). Please contact Randy Collins, Public Land Management Specialist (see contact information below), for leasing questions.

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

### **Project Description**

CDFW proposes to construct the SCARF and engage in other management activities to meet the agency's objectives and needs as follows:

- Manage and conserve native salmon and their San Joaquin River habitats for their ecological significance and to enhance public recreation;
- Produce a spring-run Chinook salmon stock on the San Joaquin River that is genetically diverse, while minimizing impacts to source populations;
- Provide a controlled laboratory environment for conducting fish research;
- Manage Chinook salmon runs in the restoration area, specifically the potential for hybridization between runs; and
- Monitor and conduct research that will direct Chinook salmon management within the Restoration Area.

From the Project Description, CSLC staff understands that the Project would include the following components:

- Construct and operate the SCARF – including the SCARF buildings, water supply lines, water outfall pipes and wastewater treatment, utility lines, an access road, staff housing, and a parking area;
- Reintroduce Chinook salmon to the restoration area – Spring-run Chinook salmon from the SCARF's broodstock would be released into the Restoration Area no earlier than 2015;
- Manage Chinook salmon in the restoration area – this may include setting up barriers to prevent fall-run salmon from hybridizing with spring-run salmon, removing fish passage barriers downstream, and blocking false migration pathways;
- Conduct fisheries research and monitoring – including habitat studies, predator assessments, fish community assessments, and Chinook salmon egg survival assessments;
- Enhance recreational opportunities – including enhancing and stocking off-channel ponds with rainbow trout for recreational fishing, and providing access and facilities for additional fishing opportunities in or near the restoration area.

The DEIR identifies the SCARF Siting Alternative, in which the SCARF is constructed at an alternative site, as the Environmentally Superior Alternative. While the proposed Project is not an "alternative" and as such cannot be selected as the environmentally superior alternative, it would have the same benefits of the SCARF Siting Alternative, without some of the adverse impacts. As such, the Proposed Project is considered environmentally superior to the SCARF Siting Alternative.

### **Environmental Review**

CSLC staff requests that CDFW consider the following comments on the Project DEIR.

#### **Biological Resources**

1. Invasive Species: The DEIR provides an analysis of the potential for Project operations to result in the propagation or spread of invasive species in the environment. In addition to the existing analysis, please consider the potential for Project construction to propagate or spread invasive species. Land-based construction equipment may carry seeds of invasive plants, and in-water construction equipment, if used, may carry invasive fouling organisms or aquatic invasive plants. Please determine the potential impacts of construction activities on the propagation or spread of invasive species and whether these impacts are significant. If construction impacts are found to be significant, prepare mitigation measures to reduce the impacts. Potential options for include:
  - Contracting construction vessels from nearby, or requiring a certain degree of hull-cleaning from contractors;
  - Requiring land-based equipment to be cleaned prior to entering the construction site to ensure that seeds of plants elsewhere are not entering the site; and

- 3
- Developing and implementing an Invasive Species Control Plan (ISCP) prior to the commencement of construction work. The ISCP may include measures to inform construction personnel about invasive species, actions to prevent the release and spread of invasive species, and procedures for safe removal and disposal of any invasive species observed.

4

### Cultural Resources

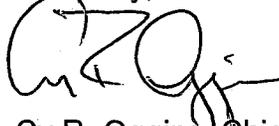
- 4
2. Submerged Resources: The DEIR mentions a number of future activities that involve in-water construction or demolition of structures. These activities are analyzed on a program level in the DEIR, since the exact sites of these activities are not currently known. The CSLC maintains a shipwrecks database that can assist with future analyses of impacts to cultural resources, once the sites are known. As additional CEQA review occurs for these future activities, please consult with CSLC staff to obtain shipwrecks data from the database and CSLC records. The database includes known and potential vessels located on the State's submerged lands; however, the locations of many shipwrecks remain unknown. Please note that any submerged archaeological site or submerged historic resource that has remained in State waters for more than 50 years is presumed to be significant.

5

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

Please send copies of future Project-related documents, including electronic copies of the Final EIR, Mitigation Monitoring and Reporting Program (MMRP), Notice of Determination (NOD), CEQA Findings and Statement of Overriding Considerations when they become available, and refer questions concerning environmental review to Holly Wyer, Environmental Scientist, at (916) 574-2399 or via e-mail at [Holly.Wyer@slc.ca.gov](mailto:Holly.Wyer@slc.ca.gov). For questions concerning CSLC leasing jurisdiction, please contact Randy Collins, Public Land Management Specialist, at (916) 574-0900, or via email at [Randy.Collins@slc.ca.gov](mailto:Randy.Collins@slc.ca.gov).

Sincerely,



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

cc: Office of Planning and Research  
Randy Collins, LMD, CSLC  
Holly Wyer, DEPM, CSLC  
Shelli Haaf, Legal, CSLC

## **Public Comment M: Letter from Cy R. Oggins, California State Lands Commission (November 27, 2013)**

### **Response to Comment M-1**

CDFW appreciates the California State Lands Commission's (CSLC) comment regarding CSLC's authority as both a trustee agency and a responsible agency.

### **Response to Comment M-2**

CDFW would coordinate with CSLC to confirm the extent of CSLC's jurisdiction relative to the various Proposed Project components, and would apply for leases as needed from the CSLC for activities on lands subject to CSLC's jurisdiction.

### **Response to Comment M-3**

CDFW appreciates CSLC's concerns regarding the potential for the Proposed Project's construction activities to propagate or spread invasive species. Construction activities to be undertaken as part of the Proposed Project would be subject to review under Fish and Game Code Section 1602. Under its Section 1602 authority, CDFW promulgates standard measures to minimize the potential for spread of invasive species, so that significant impacts would not occur. Standard measures to minimize the potential for spread of invasive species include the following:

- Heavy equipment and other machinery will be inspected for the presence of undesirable species before on-site use and will be cleaned to reduce the risk of introducing exotic plant species into a project site.
- Invasive exotic plant species will be removed from a project site to the extent feasible and will be disposed at an appropriate and legal off-site location where the material cannot enter a stream channel, such as through bagging and appropriate disposal in a landfill. Exotic species will not be allowed for use in mulching, composting, or otherwise placed in or around a project site (subject to the requirements below). In addition, cut invasive plant material will not be allowed to be stockpiled within a streambed or channel at any time without measures for its stability, preventing accidental discharge into the stream.
- All invasive plant material remaining on a site will be treated in one of the following ways:
  - Herbicide will be applied to plant material, then the material will be chipped into pieces smaller than 1-inch in size. The material may be placed as mulch to suppress invasive plant growth, in dry areas where the material cannot enter the stream channel. Typically, this is outside of the floodplain.
  - Invasive plants will be treated with herbicide and left in place to prevent erosion that can occur by clearing areas that are subject to flows (plants not

cut or removed, still attached to their roots), and after plants appear dead, they will be re-treated with herbicide.

- Riparian areas that are cleared of vegetation will be revegetated using native species.

In addition, CDFW appreciates the three potential options provided by the CSLC, and although not necessary to reduce an otherwise potentially significant impact to a less than significant level, CDFW will incorporate the following as an additional standard measure to address invasive species:

- An Invasive Species Control Plan will be developed and implemented prior to the commencement of construction work. The Invasive Species Control Plan may include, but not be limited to, measures to inform construction personnel about invasive species, actions to prevent the release and spread of invasive species, and procedures for safe removal and disposal of any invasive species observed.

### **Response to Comment M-4**

CDFW appreciates this information regarding submerged resources and would coordinate with CSLC for proper treatment of submerged archaeological resources, per CSLC requirements.

### **Response to Comment M-5**

CDFW appreciates the comments submitted by the CSLC and would keep the CSLC informed of future activities related to the proposed SCARF.

## Public Comment N: Friant Power Authority

SCARF Draft EIR Comments  
 1234 E. Shaw Ave.  
 Fresno, CA 93710  
[REG4SCARFCEQA@wildlife.ca.gov](mailto:REG4SCARFCEQA@wildlife.ca.gov)

*Recvd  
 12/2/2013*

Dear Mr. Hatler,

The Friant Power Authority wishes to submit the following comments on the Draft EIR for expansion of the fish hatchery located downstream of Friant Dam.

Yours truly,

Bill Carlisle, General Manager  
 Friant Power Authority

Friant Power Authority (FPA) generates clean renewable power from releases at Friant Dam to the San Joaquin River. FPA submits the following comments on the SCARF Draft EIR:

- 1
- (1) The average monthly flow rates to SCARF are reported in the Draft EIR as ranging from 2.2 to 14.9 cfs, with an average annual flow rate of 4.9 cfs (see Table 2-2). These values are less than estimates of SCARF water demand previously provided to FPA during engineering design in December 2011. (Previous estimates for average monthly flow ranged from 12 to 20 cfs, with an annual average of 16 cfs.) Please provide a reference for the flow rates used in the EIR and provide the supporting information as part of the administrative record.
  - (2) The Draft EIR indicates that the list approach was used for the cumulative impact analysis, however a list of reasonably foreseeable future projects was not provided in the Draft EIR. Therefore, it is not clear if Impact CUM-8 considered effects to hydropower operations at the future Quinten Luallen Hydroelectric Powerplant (i.e., New Friant River Outlet Powerhouse). Specifically, the Draft EIR states:

“Comment letters received during the EIR scoping period suggested that the 20 cfs to be used by the SCARF could be used for future hydropower generation as it is released from the reservoir. However, no specific plans are in place to expand the hydropower facility, and so this is not a reasonably foreseeable future action.”

2

If SCARF was not sited at the CDFW Interim Conservation Facility, the 20 cfs that may be used at SCARF would instead be used to generate power at the future Quinten Luallen Hydroelectric Powerplant. The Quinten Luallen Hydroelectric Powerplant will be located at the base of Friant Dam adjacent to, and within the vicinity of, the other small hydroelectric powerplants in that area. This new facility would use the increased flow releases made to the San Joaquin River required by the SJRRP. Therefore, water bypassed around the Fishwater Release Powerplant when the Quinten Luallen Hydroelectric Powerplant is not at full capacity represents directly lost hydroelectric generation. Based on the release schedule provided to FPA in December 2011, 77% of the time the quantity of energy generated by the new facility would be reduced, with a total loss of about 1,430,000 kWh/year. This would supply the average electricity needs of over 200 California residents. This lost hydroelectric generation is not reflected in the analysis of Impact CUM-8.

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## **Public Comment N: Letter from Bill Carlisle, Friant Power Authority (December 2, 2013)**

### **Response to Comment N-1**

The inflow estimates in the DEIR are based on the current engineering design which has occurred since CDFW provided the estimate of 20 cubic feet per second (cfs) to the Friant Power Authority (FPA) in December 2011.

### **Response to Comment N-2**

CDFW appreciates this additional information regarding the future Quinten Luallen Hydroelectric Power Plant. The baseline condition on which CEQA analysis for the Proposed Project relied did not include the power plant, because the power plant currently does not exist. Accordingly, no impacts on the power plant would be possible on a project level.

From a cumulative impact standpoint, the Proposed Project would not have the potential to make a considerable contribution to a cumulative impact related to the power plant, for the following reasons:

1. Reduced energy generation and related economic effects are not considered impacts under CEQA, and therefore are not considered as cumulative impacts.
2. Secondary effects associated with changed energy generation that could have physical effects on the environment (e.g., changes in the quantity of greenhouse gas emissions) could be considered cumulative impacts, but these effects cannot be determined at this time. Specifically, the source(s) of energy that would be used to offset any hypothetical decrease in hydroelectric energy generation at the future power plant is unknown. If the alternative source(s) of energy were from an existing renewable source, no new emissions would be generated. Therefore, an evaluation of the Proposed Project's potential to contribute to any secondary cumulative impacts would be speculative.

CDFW appreciates the comments and looks forward to coordinating with FPA as appropriate, as planning continues for the proposed SCARF water supply.

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Public Comment O: San Joaquin River  
Exchange Contractors Water Authority

California Department of Fish and wildlife  
Attention: Mr. Gerald Hatler  
[REG4SCARFCEQA@wildlife.ca.gov](mailto:REG4SCARFCEQA@wildlife.ca.gov).

**Regarding: Salmon conservation hatchery - Comments to Draft Environmental Impact Report**

Dear Mr. Hatler:

The following comments are submitted on behalf of the San Joaquin River Exchange Contractors Water Authority and the San Joaquin River Resource Management Coalition (hereafter referred to for convenience as "Exchange Contractors"). Thank you for the opportunity to submit these comments.

The Exchange Contractors have three comments on the environmental document:

1. The draft EIR fails to assess the impact of reintroduction on the spring run chinook salmon that are actually reintroduced into the river without the benefit of any river improvements. In the past, the Exchange Contractors have submitted this same comment to the SJRRP programmatic EIS/EIR. This is a major omission in the analysis of impacts of the SJRRP. The draft EIR must analyze the impact of reintroduction, trap and haul and the likely survival of the reintroduced fish to a river that does not have passage improvements, has temperatures which exceed the survivability of the reintroduced fish, heavy predation by the existing bass population, and other impacts that will affect the life stages of the reintroduced fish.
2. The project description and the existing environment are inadequately described. The SJRRP is underfunded. There are no funds available to construct any of the improvements called for by paragraph 11 of the Settlement. The draft EIR fails to analyze the lack of an improved river and its impacts on the reintroduced salmon.
3. The description of the baseline is defective in that it fails to account for the subsidence that has occurred and is still occurring in the Red Top area. If unchecked, the subsidence will cause the creation of a lake on the San Joaquin River and the flood bypass system. The draft EIR contains no analysis of this existing condition.

If you have any questions regarding these comments please contact Mr. Steve Chedester at 209-827-8616.

Very truly yours,

Steve Chedester  
Executive Director- San Joaquin River Exchange Contractors Water Authority

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## **Public Comment O: Letter from Steve Chedester, San Joaquin River Exchange Contractors Water Authority (December 2, 2013)**

### **Response to Comment O-1**

The baseline condition for the CEQA analysis that is discussed in the DEIR is that spring-run Chinook salmon that would be released as part of the Proposed Project currently are not present in the San Joaquin River. Therefore, no impacts on these fish would be possible from a CEQA perspective; accordingly, no impacts on these fish were identified or evaluated in the DEIR. Rather, the issues raised in the comment are planning issues related to the ability of the Proposed Project to achieve its objectives. CDFW is aware of passage conditions in the San Joaquin River and the need for channel improvements. In the absence of channel improvements, the establishment of a self-sustaining population of spring-run Chinook salmon would be unlikely. However, this is a management concern of CDFW and the SJRRP, not an impact to be considered under CEQA. Furthermore, the No Project Alternative would not achieve the goals of the Settlement Agreement or the objectives of the Proposed Project.

### **Response to Comment O-2**

The project description and existing environment are thoroughly described in the DEIR, and this comment provides no evidence to support an assertion to the contrary. Funding issues are outside the scope of a CEQA analysis. With respect to the condition of the river, see Response to Comment O-1.

### **Response to Comment O-3**

The concerns expressed in this comment regarding the subsidence in the Red Top area relate to larger planning issues for the SJRRP that are outside the scope of the Proposed Project. The Proposed Project would not include any activities that could affect this subsidence, nor would the Proposed Project be affected by the subsidence in a way that could result in adverse environmental impacts, therefore, the baseline in the DEIR is not defective.

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**Chandra Ferrari**  
California Water Policy Director

December 2, 2013

*VIA ELECTRONIC MAIL*

California Department of Fish and Game  
Attn: Gerald Hatler  
1234 E. Shaw Avenue  
Fresno, CA 93710  
[SCARF@horizonh2o.com](mailto:SCARF@horizonh2o.com)

**Re: Draft Environmental Impact Report for the San Joaquin River Restoration Program-Salmon Conservation and Research Facility (SCARF) and Related Management Actions Project**

Trout Unlimited (TU) provides these comments in response to the Draft Environmental Impact Report (DEIR) for the proposed San Joaquin River Restoration Program-Salmon Conservation and Research Facility and Related Management Actions Project (Project). TU is a non-profit organization with a mission to conserve, protect and restore North America’s coldwater fisheries and their watersheds. TU supports the effort to restore populations of fall and spring-run Chinook salmon to the San Joaquin River Restoration Program (SJRRP) Restoration Area, and believes that such an effort is more likely to be successful if foreseeable technical and management issues are identified and evaluated as early in the process as possible. To that end, on December 26, 2012, TU provided a letter in response to the Notice of Preparation (NOP) for the Project that urged the Department of Fish and Wildlife (Department) to include a more comprehensive description and analysis of the fall-run reintroduction strategy component of the Project. The letter, while responsive to the NOP, also highlighted a broader concern with the SJRRP; mainly the less fastidious consideration of the fall-run reintroduction strategy as compared to spring-run despite the fact that reintroduction of both runs is an explicit goal of the Settlement.

TU appreciates the Department’s clear effort to address these concerns in the DEIR. The DEIR highlights several important issues that will need to be considered by SJRRP program participants as reintroduction activities are considered and implemented. However, to ensure the DEIR’s full utility as a public disclosure document, TU recommends that the Department’s final EIR include additional detail and clarification as described below.

**1. The EIR should include additional information in the project description regarding potential fall-run broodstock collection and translocation activities**

In its NOP letter, TU noted that the Department’s project description should include its strategy for fall-run reintroduction, including actions that may be taken if the natural recolonization approach to fall-run recovery is abandoned or modified. In response, the DEIR identifies several reintroduction possibilities, including the use of strays from other fall-run populations to develop a fall-run broodstock program. (DEIR, p.2-38.) The DEIR should identify whether or not it intends to prioritize in-basin populations for a fall-run broodstock program and the

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1 potential complications associated with using out-of-basin fall-run for this purpose. In addition, the Feather River hatchery should be discussed as a potential source of broodstock for fall-run given its use for providing spring-run broodstock and the strong genetic mixing between the runs that already occurs in the Feather River system. The DEIR should also include additional detail regarding the potential need to source eggs or adults from the Merced hatchery and how such activities could be impacted by hatchery production targets. Finally, TU recommends that the Department's fall-run strategy include the establishment of specific, transparent, return based thresholds on the Merced River (and other SJR tributaries) as the basis for development of a management approach to consistently and scientifically plan and carry out: (1) the diversion of adult males, adult females, eggs, and juvenile salmon for use in ongoing research and reintroduction efforts on the San Joaquin without negative impacts to viability of the greater population, and (2) trapping and relocation determination (e.g. Merced, Tuolumne, lower San Joaquin, upper San Joaquin, etc.) for adult salmon in false pathways.

**2. The EIR should provide additional detail regarding the potential impacts associated with the use of Feather River hatchery populations for spring-run broodstock development**

2 TU recommends that the DEIR provide information regarding the current genetic make-up of Feather River Chinook salmon; specifically, that in the Feather River system, where fall and spring run genetics were historically intermingled, Chinook salmon commonly exhibit spring and fall run timing independent of their genetics or of the run timing of their parents. With this in mind, the introduction of Feather River spring-run is effectively an introduction of Feather River fall-run as well. TU appreciates that the document recognizes that genetic introgression is a potential impact of the reintroduction efforts however it does not analyze whether the potential for translocated fish to reduce the genetic fitness of existing Chinook runs is increased due to the use of Feather River hatchery stock. The DEIR should include information regarding whether the expected level of introgression increases given the compromised nature of the genetics being used for the spring-run source population. Additionally, the DEIR should more completely address how the compromised genetics of Feather River stocks may impact the existing fall and spring running stocks on the Stanislaus and other San Joaquin River tributaries.

Thank you for the opportunity to comment on the DEIR for the proposed San Joaquin River Restoration Program-Salmon Conservation and Research Facility and Related Management Actions Project. TU is looking forward to continued collaboration with the Department as it further refines and implements the fall-run reintroduction strategy. Please contact me with any questions.

Sincerely,

Chandra Ferrari  
California Water Policy Director  
Trout Unlimited



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## **Public Comment P: E-mail from Chandra Ferrari, Trout Unlimited (December 2, 2013)**

### **Response to Comment P-1**

The commenter suggests the DEIR discuss certain potential fall-run Chinook salmon reintroduction strategies. CDFW appreciates the commenter's suggestions and recognizes, as CDFW disclosed in the DEIR, that any reintroduction strategy brings its advantages and disadvantages with varying degree of uncertainty regarding the outcomes. Responses to commenter's specific remarks follow.

The commenter first states that:

The DEIR should identify whether or not it intends to prioritize in-basin populations for a fall-run broodstock program and the potential complications associated with using out-of-basin fall-run for this purpose. In addition, the Feather River hatchery should be discussed as a potential source of broodstock for fall-run given its use for providing spring-run broodstock and the strong genetic mixing between the runs that already occurs in the Feather River system.

Pages 2-37 through 2-41 of the DEIR describe the Proposed Project's fall-run reintroduction strategy. Consistent with the SJRRP TAC recommendations and as adopted in the SJRRP Fisheries Management Plan (SJRRP 2010), which in turn is incorporated into the SJRRP Program Environmental Impact Statement/Report (Reclamation and DWR 2012), the Proposed Project focuses on management of volitional fall-run reintroduction. However, if volitional reintroduction of fall-run Chinook salmon is deemed unlikely without the aid of artificial propagation, CDFW will consider initiating a translocation and/or broodstock program for the fall-run Chinook salmon (as described in pages 2-37 to 2-41 of the DEIR). Although the details of more active strategies are not known at this time, to ensure the greatest possible public disclosure, the DEIR describes some of the possible strategies that the Department might consider utilizing. However, because the details of more active recolonization strategies are speculative, and because CDFW is not considering any approval of more active fall-run recolonization strategies at this time, the DEIR discusses those strategies at a program level.

The commenter next states:

The DEIR should also include additional detail regarding the potential need to source eggs or adults from the Merced hatchery and how such activities could be impacted by hatchery production targets.

If volitional recolonization is unsuccessful, CDFW will further develop and analyze other options for fall-run reintroduction in coordination with the SJRRP TAC. In doing so, CDFW will follow TAC (2008) recommendations in selecting source populations, which recommended that stock should be of local or regional origin. Thus, pursuant to the TAC (2008) recommendations, preference would be given to the Merced River Hatchery over the Feather River Hatchery for fall-run broodstock.

Finally, the commenter states:

...TU recommends that the Department's fall-run strategy include the establishment of specific, transparent, return based thresholds on the Merced River (and other SJR tributaries) as the basis for development of a management approach to consistently and scientifically plan and carry out: (1) the diversion of adult males, adult females, eggs, and juvenile salmon for use in ongoing research and reintroduction efforts on the San Joaquin without negative impacts to viability of the greater population, and (2) trapping and relocation determination (e.g., Merced, Tuolumne, lower San Joaquin, upper San Joaquin, etc.) for adult salmon in false pathways.

Should CDFW consider initiating a translocation and/or broodstock program for the fall-run Chinook salmon, such a strategy will be consistent with multiple coordinated efforts separate from the SJRRP. For example, the fall-run population goal is to double the natural production of adult fall-run originating in the Merced River per the U.S. Fish and Wildlife Services' Anadromous Fisheries Restoration Program goal of achieving an average adult population level of 18,000 spawners. Similarly, fall-run goals for the other San Joaquin River tributaries are guided by the Central Valley Project Improvement Act doubling goal. The San Joaquin tributary populations are well below production targets as set forth by the Central Valley Project Improvement Act. Transparent processes guiding production are further set forth by Federal Energy Regulatory Commission relicensing which directs Merced Hatchery targets and coordination planning per the U.S. Fish and Wildlife Services' Hatchery Scientific Review Group Report (HSRG 2012) as described on page 2-40 of the DEIR. Per TAC (2008) recommendations, other factors such as genetic and demographic diversity would also be considered and reviewed through an adaptive management approach. CDFW appreciates the suggestion of considering return number-based thresholds as the basis for developing future management approaches.

## Response to Comment P-2

The commenter states that:

...[T]he DEIR [should] provide information regarding the current genetic make-up of Feather River Chinook salmon; specifically, that in the Feather River system, where fall and spring run genetics were historically intermingled, Chinook salmon commonly exhibit spring and fall run timing independent of their genetics or of the run timing of their parents.

The DEIR includes information in Section 6.5.3 under Impacts FISH-REINTRO-3 and FISH-REINTRO-4 regarding Chinook salmon exhibiting spring and fall run timing independent of their genetics or of the run timing of their parents and proposes measures to reduce this impact to less than significant under FISH-REINTRO-4.

The commenter also states that:

The DIER should include information regarding whether the expected level of introgression increases given the compromised nature of the genetics being used for the spring-run source population.

CDFW understands Trout Unlimited's concern regarding the risk of outbreeding depression involved with the use of Feather River spring-run as broodstock or source for translocation. Such potential impact and its preventative measures are discussed in Section 6.5.3 of the DEIR under Impacts FISH-REINTRO-3 and FISH-REINTRO-4.

Finally, the commenter states that the:

...[T]he DEIR should more completely address how the compromised genetics of Feather River stocks may impact the existing fall and spring running stocks on the Stanislaus and other San Joaquin River Tributaries.

CDFW appreciates Trout Unlimited's concern regarding the impacts of genetics of Feather River stocks on the Stanislaus and other San Joaquin River Tributaries. Potential genetic impacts and preventative measures are discussed in Section 6.5.3 of the DEIR under Impacts FISH-REINTRO-3 and FISH-REINTRO-4. The analysis did not identify any significant impact, and Trout Unlimited has not identified any aspect of this analysis that is insufficient.

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Public Comment Q: San Luis & Delta-Mendota  
Water Authority ty



P.O. Box 2157  
Los Banos, CA93635  
Phone: (209) 826-9696  
Fax: (209) 826-9698

December 2, 2013

**VIA E-MAIL AND U.S. MAIL**

California Department of Fish and Wildlife  
Attn: Gerald Hatler  
SCARF Draft EIR Comments  
1234 E. Shaw Ave.  
Fresno, CA 93710  
E-Mail: REG4SCARFCEQA@wildlife.ca.gov

Re: Draft Environmental Impact Report for San Joaquin River Restoration Program  
Salmon Conservation and Research Facility and Related Management Actions  
Project

Dear Mr. Hatler:

The San Luis & Delta-Mendota Water Authority ("Water Authority") appreciates this opportunity to comment on the Draft Environmental Impact Report ("DEIR"). The DEIR represents significant work by the California Department of Fish and Wildlife ("CDFW"). However, CDFW must revise and recirculate the DEIR before CDFW can approve the Salmon Conservation and Research Facility and Related Fisheries Management Actions Project ("Proposed Project").

The Proposed Project is one step in the process of reintroducing California Central Valley spring-run Chinook salmon in the San Joaquin River. The San Joaquin River Restoration Settlement Act, Pub. L. No. 111-11, 123 Stat. 1349 ("Settlement Act") is clear – the reintroduction of spring-run, including through the Proposed Project, cannot reduce water allocations or result in more than *de minimus* water supply impacts to the Water Authority's member agencies, among others. These protections are provided in section 10004, which states that the reintroduction of California Central Valley spring-run Chinook salmon "shall not result in the involuntary reduction in contract water allocations to Central Valley Project long-term contractors, other than Friant Division long-term contractors," and section 10011, which directs the Secretary of Commerce to issue a rule under section 4(d) of the federal Endangered Species Act that provides "the reintroduction will not impose more than *de minimus* water supply reductions, additional storage releases, or bypass flows on unwilling third parties due to such reintroduction."

The Water Authority appreciates the effort by CDFW to develop the Proposed Project consistent with the Settlement Act and to analyze the environmental effects of the Proposed

Project consistent with the California Environmental Quality Act. However, there are five changes that must be made to the Proposed Project and DEIR to ensure those efforts are successful.

**I. CDFW Must Acknowledge The Protections Accorded By The Settlement Act And Analyze The Effects Of The Proposed Project To Ensure It Will Adhere To Those Protections**

1 The DEIR does not adequately analyze the effects of the Proposed Project on the water supply of the Water Authority's member agencies. That failure is problematic. The DEIR should acknowledge the protections mandated by Congress; that the Proposed Project shall not adversely impact allocations or result in more than de minimus water supply impacts to the Water Authority member agencies. (See SJRRSA §§ 10004(f), 10011(c)(2).) Also, the DEIR should analyze the effect of the Proposed Project on water supply of the Water Authority's member agencies to ensure that the Proposed Project adheres to the Congressionally-mandated protections.<sup>1</sup>

**II. Any Reduction In Water Allocation Or Any Water Supply Impact Greater Than De Minimus Must Be Considered Significant**

2 The DEIR identifies the following criteria to analyze whether the Proposed Project would result in significant impact on hydrologic resources: "Substantially deplete groundwater supplies or interfere with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level;" and "Substantially deplete surface water supplies." (DEIR at 12-15 – 12-16.) CDFW must modify the criteria above to include criteria or criterion that reflects the Congressionally-mandated protections – that any reduction in CVP contract water allocations or more than a de minimus reduction in water supply is a significant impact under CEQA.

**III. The DEIR Must Address The Potential Impacts Of Straying**

3 The DEIR fails to adequately analyze the effect of straying. In Chapter 6, Biological Resources – Fisheries, the DEIR acknowledges that up to 20% of reintroduced spring-run may stray from natal streams. (SCARF DEIR at 6-55.) It concludes that such straying may result in "[r]eductions in fitness or population viability of naturally spawning chinook salmon" and may impair "the genetic integrity of the naturally spawning spring-run populations." (*Id.* at 6-54, 6-55.) That impact is significant and should be of great concern to CDFW. That level of straying also suggests that absent protections, the Proposed Project could harm water users in areas where

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<sup>1</sup> A critical component of the reintroduction is the federal Endangered Species Act section 10(j) experimental population designation and associated section 4(d) rule. The DEIR was prepared and the public was provided an opportunity to comment without the benefit of a final 10(j) designation and 4(d) rule. Until the designation and rule are finalized, neither CDFW, the Water Authority, nor other members of the public can assess fully the potential environmental impacts of the Proposed Project.

3 ↑ the spring-run stray, including in the Sacramento River watershed. The potential for such impacts is not considered in the DEIR.

4 V. **CDFW Must Analyze The Effect of the Proposed Project on the Reintroduced Spring-Run**

A key feature of the Proposed Project is the reintroduction of spring-run into the San Joaquin River, a river that has been unable to support that run. The DEIR recognizes the importance of monitoring and the threat of predation to the reintroduced spring-run. However, the DEIR does not assess the survivability of the introduced fish. Related to this question of individual survivability is analysis of whether the introduced population can be self-sustaining, which requires information gathering and an assessment of various life stages. Again, there is a dearth of information related to such a necessary monitoring program. This inadequacy in the DEIR must be corrected.

5 VI. **The Proposed Project Must Include A Monitoring Program Sufficient to Ensure Adherence to Congressionally-Mandated Protections**

Critical to determining both the efficacy of the introduction and the avoidance of impacts on the Water Authority's member agencies is the ability to accurately identify and monitor the experimental population. It is not acceptable to defer to the 10(j) determination and 4(d) rule. A comprehensive monitoring program, which includes genetic analysis, must be described as part of the Proposed Project. The Proposed Project described in the DEIR does not accomplish this fundamental prerequisite to moving forward.

VII. **Conclusion**

The Water Authority appreciates the time and effort expended by CDFW in the development of the Proposed Project and the DEIR. The Water Authority hopes its comments allow CDFW to improve the Proposed Project and ensure the reintroduction of spring-run Chinook does not reduce water allocations or result in more than de minimus water supplies of the Water Authority's member agencies.

Regards,



Daniel G. Nelson  
Executive Director  
San Luis & Delta-Mendota Water Authority

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## Public Comment Q: Letter and E-mail from Daniel G. Nelson, San Luis & Delta–Mendota Water Authority (December 2, 2013)

### Response to Comment Q-1

CDFW appreciates this comment; however, it is beyond the scope of the Proposed Project to evaluate the accuracy of the assertions made in the comment related to the provisions of the Settlement Act. Please refer to the discussion regarding *de minimus* water supply reductions, additional storage releases, or bypass flows on unwilling third parties in the final 10(J) Rule establishing a Nonessential Experimental Population of Central Valley spring-run Chinook salmon and associated take provisions under section 4(d) of the Endangered Species Act published by NOAA Fisheries (78 Fed. Reg. 79622) and the associated Environmental Assessment<sup>1</sup> prepared by NOAA Fisheries. Also, please refer the discussion regarding California Fish and Game Code Sections 2080.2 through 2080.4 beginning on page 8 of the DEIR.

Water use for operations of the proposed SCARF are evaluated in Chapter 17, *Utilities and Service Systems*, of the DEIR, under Impact UTL-OP-1. As part of the Proposed Project, up to 20 cfs may be delivered to the proposed SCARF for aquaculture operations, for the Interim Facility and other research needs. Tables 2-2 and 17-1 in the DEIR provide estimates of monthly inflow rates for the proposed SCARF. The proposed SCARF would be a flow-through facility with negligible consumptive use. Minor losses caused by evaporation and infiltration may occur. Such losses would not constitute a new substantial consumptive water use and would have negligible impacts on water supply for all water users, including the Water Authority member agencies. Water used by SCARF staff members would come from the existing San Joaquin Fish Hatchery's domestic water supply, which would have sufficient capacity to support the needs of these personnel.

### Response to Comment Q-2

CDFW appreciates this comment; however, it is beyond the scope of the DEIR to evaluate flows not a part of the Proposed Project and that have been discussed in the SJRRP Program Environmental Impact Statement/Report (Reclamation and DWR 2012). Please see Response to Comment Q-1.

### Response to Comment Q-3

CDFW has considered the potential for straying of fish that are reintroduced as part of the Proposed Project, in its capacity as an Implementing Agency of the Settlement Agreement as well as in its resource management responsibilities for fisheries in the Sacramento–San Joaquin basins. The Proposed Project, and the larger SJRRP, would include numerous management strategies and conservation measures that would maximize the fitness of fish produced at the proposed SCARF and would reduce the potential for straying of fish released into the San Joaquin River. Such measures would include:

<sup>1</sup> Available online: [http://www.westcoast.fisheries.noaa.gov/central\\_valley/san\\_joaquin/san\\_joaquin\\_reint.html](http://www.westcoast.fisheries.noaa.gov/central_valley/san_joaquin/san_joaquin_reint.html)

- Selecting and collecting hatchery-origin broodstock, in a manner that would capture phenotypic and genotypic diversity of the source population(s);
- Conducting genetic management, to minimize domestication selection and maximize effective population size of the broodstock, experimental population, and the combined (broodstock and experimental) populations;
- Using conservation hatchery procedures, to avoid inbreeding and maintain the initial genetic diversity in the captured broodstock;
- Implementing a volitional release strategy to maximize imprinting; and

Stray spring-run Chinook salmon would be unlikely to reduce fitness of fall-run Chinook salmon in the San Joaquin basin because of the differing life histories of these runs; a substantial, viable spring-run population does not exist in the San Joaquin Basin, and spring-running fish in the San Joaquin Basin would likely be strays themselves. Based on the proposed reintroduction strategy, the potential for straying to Sacramento River Basin streams that support the occurrence of spring-run Chinook salmon at levels that could result in significant population-level impacts would be improbable. The comment does not provide substantial evidence to the contrary. Thus, the potential impacts of straying related to the thresholds defined in the DEIR would be less than significant, see Response to Comment Q-1 regarding federal protections for straying spring-run.

#### **Response to Comment Q-4**

The baseline condition for CEQA analysis in the DEIR is that the Chinook salmon that would be released as part of the Proposed Project currently are not present in the Delta or the San Joaquin River. Therefore, no impacts on these fish would occur from a CEQA perspective; accordingly, no impacts on these fish were identified or evaluated in the DEIR.

The issues raised in the comment primarily are planning issues for the SJRRP, related to the ability of the Proposed Project to achieve its objectives rather than its impacts under CEQA.

The Proposed Project would include a robust monitoring program; see Section 2.4.6 of the DEIR, which describes the proposed research and monitoring activities. Further, the proposed strategies for reintroduction are coupled closely with an adaptively managed program which requires information and assessment of approaches and is also dependent upon implementation of channel improvement measures.

#### **Response to Comment Q-5**

The Proposed Project would include a robust monitoring program; see Section 2.4.6 Fisheries Research and Monitoring of the DEIR, which describes the proposed monitoring activities. Monitoring of fish genetics would be conducted as part of the Hatchery Genetic Management Plan (see Börk and Adelizi 2010).

In addition, please refer to the final 10(J) Rule establishing a Nonessential Experimental Population of Central Valley spring-run Chinook salmon and associated take provisions

under section 4(d) of the Endangered Species Act published by NOAA Fisheries (78 Fed. Reg. 79622) and the discussion regarding California Fish and Game Code Sections 2080.2 through 2080.4 beginning on page 8 of the DEIR. Monitoring efforts will be conducted in accordance with the 10(j) Rule and associated take provisions under section 4(d) of the Endangered Species Act and California Fish and Game Code Sections 2080.2 through 2080.4 and will include fish passage; fish biology; aquatic habitat; SCARF facility operations; marking of human-introduced Central Valley spring-run Chinook salmon; and an annual technical memo that will provide additional opportunity for comment by interested parties relative to take calculations and avoidance impacts.

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December 2, 2013

California Department of Fish and Wildlife  
ATTN: Gerald Hatler, SCARF Draft EIR Comments  
1234 E. Shaw Avenue  
Fresno, CA 93710

**Project: Notice of Availability of a Draft Environmental Impact Report (EIR)  
Regarding the Proposed Salmon Conservation and Research Facility (SCARF) and  
Related Management Actions Project**

**District Reference No: 20130889**

Dear Mr. Hatler:

The San Joaquin Valley Unified Air Pollution Control District (District) has reviewed the project referenced above for the construction and operation of a Salmon Conservation and Research Facility (SCARF) and associated related improvements and activities located at 17372 Brook Trout in Friant in Fresno County, CA. The draft Environmental Impact Report (EIR) is a Program EIR, which evaluated the project at a Program and Project level. The District offers the following comments:

- 1
1. On page 5-10 through 5-12, the draft EIR included SCARF Construction emissions; however the construction emissions resulting from Fisheries Management (page 5-16) and Recreation Management (page 5-20) were not calculated because the specific project-level detail was not yet available. The draft EIR includes *Mitigation Measure AQ-Management-1* (page 5-17) to ensure that the construction emissions from the Fisheries Management and Recreation Management will be calculated and compared to the District's significance threshold when project-level detail is available. The District recommends that the mitigation measure includes evaluating all air quality impacts, and not be limited construction emissions.
- 2
2. In *Table G-2. Assumptions and CALFEEMOD Inputs Used for SCARF Construction Emission Estimates of Appendix G-2.*, it is not clear whether the analysis calculated the construction emissions for all SCARF structures in Figure 2-3 (e.g., hatchery building, two (2) residential units, aeration tower, interim facility, Smolt Production Area, etc.) or only the construction emissions for the SCARF hatchery building. Therefore, the District recommends amending the text to clarify which structures were included in the CalFEEMod SCARF Construction Emission Estimates. Additionally, if the CalFEEMod SCARF Construction Emission Estimates only calculated the construction emissions for the SCARF hatchery building, the District recommends calculating the construction emissions for all SCARF structures in Figure 2-3. If the construction emissions exceed the District's significance threshold after

**Seyed Sadredin**  
Executive Director/Air Pollution Control Officer

**Northern Region**  
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**Central Region (Main Office)**  
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**Southern Region**  
34946 Flyover Court  
Bakersfield, CA 93308-9725  
Tel: 661-392-5500 FAX: 661-392-5585

- ↑
- 2 | recalculating the emissions for all SCARF structures, the District recommends including mitigation measures to reduce construction-related emissions to a less than significant impact.
- 3 | 3. The draft EIR references “Table 5-6” when discussing vehicle trips in *Chapter 5. Air Quality*; however, “Table 5-6” was not included in the document. The District recommends including the referenced table.
- 4 | 4. Based on the information provided, the proposed project is subject to District Rule 9510 (Indirect Source Review). Any applicant subject to District Rule 9510 is required to submit an Air Impact Assessment (AIA) application to the District no later than applying for final discretionary approval, and to pay any applicable off-site mitigation fees before issuance of the first building permit. If approval of the subject project constitutes the last discretionary approval by your agency, the District recommends that demonstration of compliance with District Rule 9510, including payment of all applicable fees before issuance of the first building permit, be made a condition of project approval. More information about how to comply with District Rule 9510 can be found on the District’s website at: <http://www.valleyair.org/ISR/ISRHome.htm>.
- 5 | 5. Individual development projects may also be subject to the following District rules: Regulation VIII, (Fugitive PM10 Prohibitions), Rule 4102 (Nuisance), Rule 4601 (Architectural Coatings), and Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations). In the event an existing building will be renovated, partially demolished or removed, the project may be subject to District Rule 4002 (National Emission Standards for Hazardous Air Pollutants).
- 6 | 6. The above list of rules is neither exhaustive nor exclusive. To identify other District rules or regulations that apply to this project or to obtain information about District permit requirements, the applicant is strongly encouraged to contact the District’s Small Business Assistance Office at (559) 230-5888. Current District rules can be found online at: [www.valleyair.org/rules/1ruleslist.htm](http://www.valleyair.org/rules/1ruleslist.htm).

If you have any questions or require further information, please call Angel Lor at (559) 230-5808.

Sincerely,

Dave Warner  
Director of Permit Services



For: Arnaud Marjollet  
Permit Services Manager

DW:al

## **Public Comment R: Letter from Dave Warner, San Joaquin Valley Air Pollution Control District (December 2, 2013)**

### **Response to Comment R-1**

Consistent with San Joaquin Valley Air Pollution Control District (SJVAPCD) guidance to evaluate non-overlapping construction and operational emissions separately, the non-construction (operational) emissions from the Proposed Project were quantified and evaluated in the DEIR under Impacts AQ-OP-1, AQ-REINTRO-1, AQ-MANAGEMENT-2, AQ-MONITORING-1, and AQ-RECREATION-2. These impacts would be less than significant and would not result in an exceedance of emissions thresholds when considered in combination with construction activities. Therefore, no further evaluation of operational emissions through Mitigation Measure AQ-MANAGEMENT-1 is needed. Operational emissions for programmatic components would receive further evaluation for conformance with the CEQA analysis of the Proposed Project, as details become available. Tiered CEQA documentation would be conducted if/as necessary, including as appropriate, development of mitigation measures to address emissions in excess of applicable thresholds.

### **Response to Comment R-2**

CDFW apologizes for the confusion regarding the CALEEMOD inputs. The CALEEMOD inputs that were used to calculate construction emissions included construction of all the new or modified structures at the proposed SCARF site, not just the hatchery building. The CALEEMOD inputs used a site-specific construction schedule and equipment list instead of CALEEMOD defaults. Therefore, no further analysis is necessary.

### **Response to Comment R-3**

The references to Table 5-6 in the DEIR were incorrect; the correct reference should have been Table 5-5 that shows the total operational emissions. For vehicle trip-specific breakdown of emissions, see Appendix G. CDFW apologizes for this error. The references to this table have been updated accordingly in Chapter 3 of this FEIR.

### **Response to Comment R-4**

CDFW plans to submit an Air Impact Assessment application to the SJVAPCD, in compliance with District Rule 9510.

### **Response to Comment R-5**

CDFW would comply with the listed SJVAPCD rules, as applicable.

### **Response to Comment R-6**

CDFW appreciates the information on District rules and regulations. CDFW would comply with all applicable SJAPCD rules and permit requirements.

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**Response of Pacific Gas and Electric Company  
December 2, 2013**

**San Joaquin River Restoration Program:  
Salmon Conservation and Research Facility  
And Related Fisheries Management Actions Project  
Draft Environmental Impact Report  
October 2013**

The California Department of Fish and Wildlife (CDFW) issued its *San Joaquin River Restoration Program: Salmon Conservation and Research Facility and Related Fisheries Management Actions Project, Draft Environmental Impact Report* (DEIR) on October 7, 2013, and requested comments by November 21. CDFW later extended the comment period to December 2, 2013. Pacific Gas and Electric Company (PG&E) is offering the following comments for consideration in the Final EIR, as well as in future planning and implementation efforts.

PG&E's comments relate to the Broodstock Collection element of the DEIR. Donor stock collection and broodstock development for spring-run Chinook salmon is discussed at several locations in the DEIR. One of the objectives of the project is to "produce a spring-run Chinook salmon stock on the San Joaquin River that is genetically diverse, while minimizing impacts to source populations" (Page 2-1). Initially spring-run Chinook salmon returning to the Feather River Fish Hatchery are being used to establish the broodstock, but the long-term goal is to collect eggs and/or juveniles from naturally spawning Central Valley stocks (Page 2-32). The potential wild sources are identified as "spring-run Chinook populations on Butte, Deer, and Mill Creeks, along with opportunistic collection of other spring-run Chinook from Stanislaus, Mokelumne, Feather, and Yuba Rivers, and Battle and Clear Creeks" (Page 2-34). The collection of fish in these streams "has potential for significant impacts on naturally spawning populations" (Page 6-52).

1

PG&E has concerns with the collection of naturally spawning broodstock, particularly in those streams where PG&E hydroelectric projects are located: Butte Creek (DeSabra-Centerville Project, FERC 803); Yuba River (Narrows Project, FERC 1403); and Battle Creek (Battle Creek Project, FERC 1121). Through the requirements of these FERC licenses and various operating agreements, PG&E implements protection measures for aquatic resources, including populations of spring-run Chinook salmon. Broodstock collection in these streams could adversely affect these populations, which PG&E is trying to protect. Given that PG&E is an important stakeholder in the Butte Creek, Yuba River, and Battle Creek watersheds, future discussions regarding possible broodstock collection in these watersheds should include PG&E.

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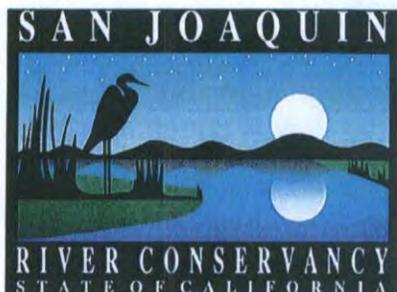
## **Public Comment S: Letter from the Pacific Gas and Electric Company (December 2, 2013)**

### **Response to Comment S-1**

CDFW appreciates Pacific Gas and Electric Company's (PG&E) interest in the Proposed Project and looks forward to coordinating with PG&E as appropriate regarding planning for broodstock collection.

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Public Comment T: San Joaquin River  
Conservancy



350.45

December 3, 2013

*Sent Via Email*

California Department of Fish and Wildlife  
ATTN: Gerald Hatler, SCARF Draft EIR Comments  
1234 E. Shaw Ave.  
Fresno CA 93710

Dear Mr. Hatler:

**SCARF DRAFT EIR COMMENTS**

The San Joaquin River Conservancy is a regionally governed state agency formed to implement and manage the San Joaquin River Parkway, a planned 22-mile regional natural and recreation area in the floodplain extending from Friant Dam to Highway 99. The Conservancy's mission includes acquiring approximately 5,900 acres from willing sellers; developing, operating and managing those lands for public access and recreation; and protecting, enhancing, and restoring riparian and floodplain habitat.

As presented in the Draft Environmental Impact Report (DEIR), the SCARF and Related Actions comprising the proposed project are generally consistent with the policies in the San Joaquin River Parkway Master Plan (1997). For example, the Parkway Master Plan encourages recreational fishing at off-stream excavated ponds (from gravel mining) and specifically supports anadromous fish restoration. The Conservancy offers the following detailed comments:

Proposed recreation actions, page 2-50

The Department (DFW) is assessing potential locations for enhancing recreational fishing opportunities in off-channel ponds between Friant Dam and Highway 99—the Parkway reach. Enhancement of recreational fishing by DFW, the SJRRP, and other partners must include physical improvements, stocking, and operations, maintenance, and management. Strong opportunities exist at the following Conservancy properties: Beck (as a part of Lost Lake Park), Ball Ranch, Gibson, River West, and Liddell. Gravel ponds could be isolated to protect salmon and provide for off-channel fishing at Milburn, Van Buren, Sycamore Island, and Camp Pashayan. Additional opportunities may become available as the mineral resources are exhausted and other off-channel gravel ponds may be acquired for public use. The Conservancy supports this proposed action, with a goal of working with DFW and the San Joaquin River Restoration Program (SJRRP) as partners to meet mutual objectives and achieve efficient public projects.

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**GOVERNING BOARD**

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Bryn Forhan  
Paul Gibson  
Carolyn Nolan  
*Citizen Representatives*

Melinda S. Marks  
*Executive Officer*

Edmund G. Brown, Jr.  
*Governor*

1

2 The proposed project includes increasing enforcement of fishing regulations and/or increasing monitoring of recreational activities, actions that are strongly supported by the Conservancy. DFW should also have a strong program and presence for outreach and education to develop a public awareness, appreciation, and guardianship for the salmon. DFW should also develop public facilities for observing salmon in the river.

3 Impact LU-OP-2: Potential for the SCARF to Conflict with Existing and Planned Land Uses within or adjacent to the SCARF Site or with Applicable Land Use Plans, Policies, and Regulations

The Conservancy concurs that the proposed project would not conflict with existing or planned Parkway land uses on or near the SCARF site.

San Joaquin Hatchery Public Access and Trail Project

The Conservancy strongly supports implementation of:

Mitigation Measure REC-CONSTRUCT-1a: Reroute the trail during construction, coordinate construction activities with the SJRC to minimize to the extent and duration of rerouting of the newly built San Joaquin Hatchery Public Access and Trail during construction of the SCARF.

Mitigation Measure REC-CONSTRUCT-1b: Provide signage during construction of the SCARF to notify those using the San Joaquin Hatchery Public Access and Trail of trail and access disruptions.

Mitigation Measure REC-CONSTRUCT-1c: Rebuild the trail if damaged during construction within two years of the damage.

4 Impact REC-OP-2: Operation of SCARF Would Provide New Recreational Facilities

The Conservancy concurs that the operation of the SCARF would provide educational opportunities and public viewing areas for SCARF operations, a beneficial impact.

Impact FISH-RECREATION-3: Inadvertent Harvesting of Listed Salmonids as a Result of Improved Access for Recreational Fishing Enhancements; and Impact REC-RECREATION-1 Restriction of Angling Opportunities Could Occur in Spawning Areas, Resulting in Substantial Physical Deterioration of Existing Recreational Facilities

The Conservancy supports DFW's commitment to project actions to ensure that impacts are less than significant including: enhancing off-channel recreational fishing, stocking in off-stream ponds, improving public access to off-stream fishing ponds, implementing new fishing restrictions that allow continued fishing for some fish species, increasing enforcement, and public education. Maintaining and enhancing recreational fishing at Lost Lake Park, on- and off-channel, are essential to the viability of the park and to the service to the public provided by the park.

5 Land ownership, page 7-52 and map

There is a misstatement on page 7-52 and on the map, Figure 2-2: the public land on the river opposite the San Joaquin Fish Hatchery (adjacent to the north and northwest) is owned by the State of California, San Joaquin River Conservancy, not the San Joaquin River Parkway and Conservation Trust, a nonprofit organization.

6 Buffers, page 7-52

The Conservancy concurs with the conclusion on page 7-52 that the Parkway Master Plan buffer policy is infeasible at the SCARF site. The Master Plan policy includes language recognizing that in some cases the ideal buffers cannot be provided and that some uses are river-dependent. Further, as noted

Mr. Gerald Hatler  
December 3, 2013  
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in the DEIR, the proposed project is consistent with a Parkway policy encouraging low-intensity use and habitat conservation on land opposite a more intensively developed side of the river.

Alternatives Analysis

6  
The DEIR considers as an alternative constructing the SCARF on the Conservancy's River Vista property across the river. The Conservancy concurs with DFW's conclusion that the alternative would increase negative impacts in comparison to the proposed project. In addition to the significant increased impacts cited in the DEIR (lack of infrastructure and utilities, impacts associated with an undeveloped site, etc.), a plan for low impact recreational use at River Vista is currently underway, and there are cultural resources at River Vista that might not be avoidable for developing the SCARF.

↓  
I apologize for submitting these comments a late, and hope that you will be able to include them in the final EIR. Please contact me at (559) 253-7324 ext. 3 if you have questions or need additional information.

Respectfully,



Melinda S. Marks  
Executive Officer

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## **Public Comment T: E-mail from Melinda S. Marks, San Joaquin River Conservancy (December 3, 2013)**

### **Response to Comment T-1**

CDFW appreciates the San Joaquin River Conservancy's (the Conservancy) support of CDFW's proposed recreation actions. CDFW looks forward to collaborating with the Conservancy to enhance recreational fishing opportunities and thanks the Conservancy for suggesting possible fishing locations within its property.

### **Response to Comment T-2**

The Proposed Project would provide educational opportunities and would complement educational outreach activities supported by groups such as the Conservancy. Impact REC-OP-2 in Section 15.4.3 of the DEIR (page 15-21) states that the design of the proposed SCARF would allow for public use of the planned San Joaquin Hatchery Public Access and Trail Project, and that when operating, the proposed SCARF would provide educational opportunities and public viewing areas.

### **Response to Comment T-3**

CDFW appreciates the time taken to independently verify that the Proposed Project would not conflict with existing or planned Parkway land uses on or near the proposed SCARF site.

### **Response to Comment T-4**

CDFW appreciates the Conservancy's support for Mitigation Measures REC-CONSTRUCT-1a, -1b, and -1c, and its support for CDFW's analysis regarding Impact REC-OP-2 and Impact FISH-RECREATION-3.

### **Response to Comment T-5**

CDFW thanks the Conservancy for bringing to its attention the misstatement on page 7-52 and Figure 2-2 in the DEIR, and apologizes for these errors. CDFW has corrected the errors; the corrected versions of page 7-52 and Figure 2-2 are provided in Chapter 3.

### **Response to Comment T-6**

CDFW thanks the Conservancy for independently verifying CDFW's conclusion that the parkway Master Plan buffer policy would be infeasible at the proposed SCARF site and that the River Vista alternative for siting the proposed SCARF could have adverse impacts in comparison to the proposed location. CDFW greatly appreciates the Conservancy's time and effort in preparing its comments to the DEIR.

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State Clearinghouse and Planning Unit



Edmund G. Brown Jr.  
Governor



Ken Alex  
Director

December 6, 2013

Gerald Hatler  
California Department of Fish and Game  
San Joaquin Valley / Southern Sierra Region  
1234 E. Shaw Avenue  
Fresno, CA 93710



Subject: San Joaquin River Restoration Program - SCARF and Related Management Actions Project  
SCH#: 2012111083

Dear Gerald Hatler:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on December 5, 2013, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

1

"A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Scott Morgan  
Director, State Clearinghouse

Enclosures

cc: Resources Agency  
3400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044  
TEL (916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

**Document Details Report  
State Clearinghouse Data Base**

**SCH#** 2012111083  
**Project Title** San Joaquin River Restoration Program - SCARF and Related Management Actions Project  
**Lead Agency** Fish & Game #4

**Type** EIR Draft EIR  
**Description** Note: Extended Review per lead

The primary purpose of the Salmon Conservation and Research Facility (SCARF) is to produce Chinook salmon for reintroduction to the San Joaquin River. The SCARF also would serve as a research facility for studies related to Chinook salmon in the San Joaquin River Restoration Program Restoration Area. The SCARF would provide CDFW with the ability to use relatively small numbers of Chinook salmon eggs and juveniles collected from various donor populations to develop a broodstock. This broodstock would enable CDFW to produce a conservation stock that is genetically diverse, while minimizing impacts to source populations. The SCARF would include structures, a parking area, water supply and wastewater systems, drainage and stormwater management, an access road, up to two staff residences, and other ancillary improvements.

**Lead Agency Contact**

**Name** Gerald Hatler  
**Agency** California Department of Fish and Game  
**Phone** (559) 243-4014 **Fax**  
**email**  
**Address** San Joaquin Valley / Southern Sierra Region  
 1234 E. Shaw Avenue  
**City** Fresno **State** CA **Zip** 93710

**Project Location**

**County** Butte, Contra Costa, Fresno, Madera, Mariposa, Merced, Napa, ...  
**City**  
**Region**  
**Lat / Long**  
**Cross Streets** 17372 Brook Trout Drive near North Friant Road  
**Parcel No.**  
**Township** **Range** **Section** **Base**

**Proximity to:**

**Highways**  
**Airports**  
**Railways**  
**Waterways**  
**Schools**  
**Land Use** Recreational District: Fish Hatchery

**Project Issues** Air Quality; Archaeologic-Historic; Biological Resources; Drainage/Absorption; Flood Plain/Flooding; Geologic/Seismic; Noise; Recreation/Parks; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Landuse; Cumulative Effects; Aesthetic/Visual; Agricultural Land; Growth Inducing; Minerals; Septic System

**Reviewing Agencies** Resources Agency; Department of Conservation; Cal Fire; Department of Parks and Recreation; Central Valley Flood Protection Board; Department of Water Resources; Caltrans, Division of Transportation Planning; Air Resources Board; State Water Resources Control Board, Division of Water Quality; Native American Heritage Commission; State Lands Commission; Regional Water Quality Control Bd., Region 5 (Fresno)

Document Details Report  
State Clearinghouse Data Base

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*Date Received* 10/07/2013

*Start of Review* 10/07/2013

*End of Review* 12/05/2013

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## **Public Comment U: Letter from Scott Morgan, State Clearinghouse (December 6, 2013)**

### **Response to Comment U-1**

CDFW appreciates this guidance from the State Clearinghouse.

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Public Comment V: Caleen Sisk

Hello Janis,

First, can I have you change my name to Chief Caleen Sisk.

V1

I realize that this project may is well underway, but could you provide more detailed maps of the collection areas? You must realize that the Battle and Clear Creek areas was heavily populated by more then 14,000 Wintu fishery Peoples. There were fisheries all along the McCloud River watershed down into the tributaries of Cow and Battles Creeks as wellas Clear Creek broodstock Chinook Salmon who are barely making it now.

V2

I am also requesting that there be an impact fee to cover the cost of the required work time for us to participate in this highly important Chinook Salmon restoration project ....our time is not free. There also needs to be a full process in place for us to be able to disclose our information concerning the location of any cultural resource.  
Currently there is no confidentiality in place for protecting our Chinook Salmon.

Thank you for your time and consideration in working with you on the restoration of Chinook Slamon in California.

--

Caleen Sisk  
Tribal Chief and Spiritual Leader  
Winnemem Wintu Tribe  
14840 Bear Mountain Road  
Redding, CA 96003

Water is Sacred - Water is Life

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## **Public Comment V: E-mail from Chief Caleen Sisk, Tribal Chief and Spiritual Leader, Winnemem Wintu Tribe (November 4, 2013)**

### **Response to Comment V-1**

The potential broodstock collection streams showed in Figure 2-1 of the DEIR show the possible streams from which salmon eggs and/or juveniles will be collected. More detailed information has not been developed at this time; therefore it is not possible to show a more detailed map. Such more detailed maps can be provided once they are available.

### **Response to Comment V-2**

Thank you for your concern regarding the Proposed Project's implementation. CDFW is in the planning stages of the broodstock collection aspect of the Proposed Project, but will continue to update you as new developments unfold. Also, CDFW appreciates further input from you on the Proposed Project.

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Janis Offermann  
Crown Corporate center  
2870 Gateway Oaks Drive, Suite 150  
Sacramento, California 95833

November 15, 2013

Mrs. Offermann,

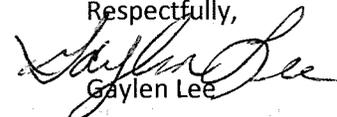
I am a traditional Nim (Mono) from the upper reaches of the San Joaquin River. My great grandfather's fished for Agai (Salmon) in Ewahu (SJR) until the Dams were constructed in the 1940's. The grandfathers lived close to the river at the Exact Center of California to spear salmon on summer to fall runs. There are many Tigwati (spearing) places along the SJR at which they fished. They had preferences below the Millerton Lake Dam to California State Highway 99 Bridge do to the gravel bars on the edge of the river.

Before contact the salmon were plentiful, my grandfathers would tell stories of men walking across the river atop the Salmon. The salmon were dried for winter staple consumption. The Agai speared were spread out on bushes at their salmon camps to dry. the camps looked as if there was sea of pink. Good times were had in the salmon camps with other fellow Indians living close to the camps. No longer can this cultural activity can be seen after the 1940's. A fishing culture died and turned to domesticated beef, chicken, swine after the dams impedance of the salmon runs.

I as a generation that did not have opportunity to Tigwati have lost a cultural identity with the Salmon. Songs and dances for the salmon were handed down to a select few of the indigenous tribes that once lived along Ewahu. A welcome back to the salmon should be performed so the fish will come forever run again in the San Joaquin River.

Therefore, I would like to be involved with replacing the smolt into EWAHU with Nim blessings. Also, a meeting should be held with your office URS and California Department of Fish and Wildlife at the San Joaquin River hatchery. An invitation should be sent to other indigenous tribal elders 75 to85 that once utilized the AGAI.

Respectfully,

  
Gaylen Lee

W1

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## **Public Comment W: Letter from Gaylen Lee, North Fork Rancheria (November 15, 2013)**

### **Response to Comment W-1**

Thank you for your concern. CDFW will continue to conduct communications with the tribes and, where requested, individuals, pursuant to the California Natural Resources Agency's Tribal Consultation Policy.

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Thanks Christopher Peske, for contacting the Nashville-Eldorado Miwok Tribe on re: the reintroduction of the San Joaquin River Salmon.

It appears that your Company, URS Corporation, here in Sacramento, in conjunction with the U.S. National Marine Fisheries Services will be working together to formulate a permit process to handle the young or to be hatched salmon in the tributaries as mentioned on your attached maps.

X1 [ The Nashville-Eldorado Miwok Tribe Elder's Committee have reviewed the attached documents, including the maps of the potentially impacted area and could not (at this time) establish and Native American Historical Sites in the noted area.

The Tribe would like to thank you and your associates for involving us with your proposed Salmon Release projects. Thanks again for giving us the opportunity to review these particular potentially historical sacred site locations.

Sincerely,

/S/

Cosme A. Valdez, CEO-Chair  
Nashville-Eldorado Miwok Tribe  
Koot'-Bah Rancheria  
P.O. Box 580986  
Elk Grove, CA 95758-0017  
Voice/Fax: 916.429.8047

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## **Public Comment X: E-mail from Cosme Valdez (November 20, 2013)**

### **Response to Comment X-1**

Thank you, CDFW appreciates your comment, and values any future comments you or the Nashville-Eldorado Miwok Tribe may have.

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Public Comment Letter Y: Gene Whitehouse



MIWOK United Auburn Indian Community  
MAIDU of the Auburn Rancheria

Gene Whitehouse  
Chairman

John L. Williams  
Vice Chairman

Danny Rey  
Secretary

Brenda Adams  
Treasurer

Calvin Moman  
Council Member

November 20, 2013

Janis Offermann  
Senior Cultural Resources Specialist  
URS Corporation  
Crown Corporate Center  
2870 Gateway Oaks Drive, Suite 150  
Sacramento, CA 95833

Subject: CDFW, SJRRP, Reintroduction of Chinook Salmon to the San Joaquin River

Dear Ms. Offermann,

Thank you for requesting information regarding the above referenced project. The United Auburn Indian Community (UAIC) of the Auburn Rancheria is comprised of Miwok and Southern Maidu (Nisenan) people whose tribal lands are within Placer County and whose service area includes El Dorado, Nevada, Placer, Sacramento, Sutter, and Yuba counties. The UAIC is concerned about development within its aboriginal territory that has potential to impact the lifeways, cultural sites, and landscapes that may be of sacred or ceremonial significance. We appreciate the opportunity to comment on this and other projects in your jurisdiction.

Y1

In order to ascertain whether or not the project could affect cultural resources that may be of importance to the UAIC, we would like to receive copies of any archaeological reports that have been, or will be, completed for the project. We also request copies of future environmental documents for the proposed project so that we have the opportunity to comment on potential impacts and proposed mitigation measures related to cultural resources. The UAIC would also like the opportunity to have our tribal monitors accompany you during the field survey. The information gathered will provide us with a better understanding of the project and cultural resources on site and is invaluable for consultation purposes.

Y2

The UAIC's preservation committee would like to set up a meeting and consult about the proposed project. Thank you again for taking these matters into consideration, and for involving the UAIC early in the planning process. We look forward to reviewing the aforementioned documents as requested. Please contact Marcos Guerrero, Cultural Resources Manager, at (530) 883-2364 or email at [mguerrero@auburnrancheria.com](mailto:mguerrero@auburnrancheria.com) if you have any questions.

Sincerely,

Gene Whitehouse,  
Chairman

CC: Marcos Guerrero, CRM

Tribal Office 10720 Indian Hill Road Auburn, CA 95603 (530) 883-2390 FAX (530) 883-2380

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## **Public Comment Y: Letter from Gene Whitehouse, Chairman of the United Auburn Indian Community of the Auburn Rancheria (November 20, 2013)**

### **Response to Comment Y-1**

Thank you for your concern. CDFW will continue to conduct communications with the tribes and, where requested, individuals, pursuant to the California Natural Resources Agency's Tribal Consultation Policy. The archeological report that has been prepared to date for the Proposed Project is included in the DEIR as Appendix K.

### **Response to Comment Y-2**

Again, CDFW appreciates your interest in and concern for the Proposed Project. CDFW looks forward to coordinating with you further.

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Organization/Tribe	Name of Contact	Comments	Response to Comments
Enterprise Rancheria of Maidu Indians	Art Angle	11/15/2013: Mr. Angle to bring up Proposed Project at next tribal meeting.	Thank you. CDFW appreciates any future input from the Enterprise Rancheria of Maidu Indians regarding the Proposed Project.
Big Sandy Rancheria of Mono Indians	Miles Baty	11/18/2013: Mr. Baty to bring Proposed Project to Tribal Council’s attention.	Thank you. CDFW appreciates any future input from the Big Sandy Rancheria of Mono Indians regarding the Proposed Project.
Sierra Nevada Native American Coalition	Lawrence Bill	11/15/2013: Mr. Bill asked the following questions: <ol style="list-style-type: none"> <li>1. Does the San Joaquin River reach the Delta?</li> <li>2. Which salmon will be relocated for the Proposed Project?</li> <li>3. Will tribes still have ceremonial access to the salmon?</li> <li>4. Will the salmon be able to adapt to living in new parts of the San Joaquin River?</li> </ol>	<ol style="list-style-type: none"> <li>1. Yes, it does. The settlement agreement reached in 2006 through federal court action of NRDC et al v. Kirk Rodgers et al. provides the basis for ensuring the San Joaquin River flows year-round to the Delta.</li> <li>2. Chapter 2, Section 2.4.1 of the DEIR (page 2-5) states that one of the goals of the project is to establish populations of spring run and/or fall run Chinook salmon. Salmon eggs and/or juveniles will be collected to develop a conservation stock for the SJRRP.</li> <li>3. Broodstock collection will not alter the rights the tribes currently have for accessing the salmon for ceremonial purposes.</li> <li>4. The Proposed Project includes a monitoring and adaptive management approach to address this topic. Please refer to Section 2.4.6 of the DEIR.</li> </ol>
Wintu Educational and Cultural Council	Robert Burns	11/15/2013: Mr. Burns is concerned about marijuana growing activities affecting fish from the Feather River.	Thank you for your comment, however it is outside of the scope of the Proposed Project. The CDFW Law Enforcement Division may be of assistance.
Ione Band of Miwok Indians Cultural Committee	Anthony Burris	10/25/2013: Mr. Burris stated that Randy Yonemura will be representing the Ione Band Cultural Committee regarding this matter.	Thank you, this comment has been noted.
Tuolumne Band of Mi-Wuk	Stanley Cox	11/15/2013: No concerns were raised.	Thank you. CDFW appreciates any future input from the Tuolumne Band of Mi-Wuk regarding the Proposed Project.

Organization/Tribe	Name of Contact	Comments	Response to Comments
Mechoopda Indian Tribe of Chico Rancheria	Mike DeSpain	11/18/2013: Mr. DeSpain would like to have a monitor from his tribe present while collecting between Deer Creek and Oroville.	Thank you for your comment. CDFW will coordinate with tribes regarding its broodstock collection activities and any related site monitors.
Picayune Rancheria of Chuckchansi	Samuel Elizondo	11/18/2013: No concerns were raised.	Thank you. CDFW appreciates any future input from the Picayune Rancheria of Chuckchansi regarding the Proposed Project.
None listed	Rose Enos	11/18/2013: No concerns were raised.	Thank you. CDFW appreciates any future input you may have regarding the Proposed Project.
North Fork Rancheria	Elaine (Judy) Fink	<p>12/16/2013: Ms. Fink raised the following concerns:</p> <ol style="list-style-type: none"> <li>1. A paid tribal cultural monitor should be present when ground disturbance activities take place.</li> <li>2. Is the Proposed Project feasible due to the modifications of the San Joaquin River?</li> <li>3. After the salmon populations are restored, who will monitor fishing and other human activities that could harm the local environment?</li> <li>4. CDFW should bring the Proposed Project to the attention of the Sierra National Forest Tribal Forum, and should contact other tribes regarding the Proposed Project.</li> </ol>	<ol style="list-style-type: none"> <li>1. Thank you for your comment. CDFW will coordinate with tribes regarding any site monitors during ground disturbing activities.</li> <li>2. The SJRRP includes actions to restore the San Joaquin River. Such actions are outside of the scope of the Proposed Project. As regards the Proposed Project’s feasibility, its proposed design is the result of extensive collaboration among CDFW, other entities involved in the SJRRP, and an engineering design team. These entities have designed the Proposed Project such that it will be feasible to operate.</li> <li>3. CDFW Wildlife Officers, and the law enforcement personnel of other agencies, will monitor such activities.</li> <li>4. Thank you. CDFW has contacted a number of other tribes regarding the Proposed Project.</li> </ol>

Organization/Tribe	Name of Contact	Comments	Response to Comments
Shingle Springs Band of Miwok Indians	Daniel Fonseca	12/11/2013: The Shingle Springs Band of Miwok Indians is not aware of any known cultural resources on this site. However, the Shingle Springs Rancheria would like to be continually updated as the Proposed Project progresses, and requests any and all completed environmental, archaeological, and cultural record searches and/or surveys that were done in or around the project area.	Thank you for your comment. CDFW will continue to conduct communications with the tribes and, where requested, individuals, pursuant to the Resource Agency’s Tribal Consultation Policy.
United Tribe of Northern California, Inc. (Wintu, Wintun, Wintoon)	Gloria Gomes	12/2/2013: Gloria Gomes deferred to Chief Caleen Sisk and Robert Burns regarding the Proposed Project.	Comment noted.
Cachil DeHe Band of Wintun Indians	Daniel Gomez	11/18/2013: The tribe will call back if they have concerns regarding the Proposed Project.	Thank you. CDFW appreciates any future input from the Cachil DeHe Band of Wintun Indians regarding the Proposed Project.
United Auburn Indian Community of the Auburn Rancheria	Marcos Guerrero	10/24/2013: Mr. Guerrero stated that he would like to meet to discuss broodstock collection on the American and Yuba rivers.	Thank you. CDFW will continue its outreach to the tribes on the development of the Proposed Project, which includes planning for broodstock collection.
Big Sandy Rancheria of Mono Indians	Liz Hutchins Kipp	11/20/2013: No comments on the Proposed Project were provided, but a member of the tribe requested an additional Section 106 letter.	Thank you, CDFW appreciates any future input from the Big Sandy Rancheria of Mono Indians on the Proposed Project. Also, the Section 106 letter was sent the day after the request.
Southern Sierra Miwuk Nation	Les James	11/18/2013: Mr. James would like to speak with CDFW about the Proposed Project.	Thank you for your comment. CDFW will contact you to address your concerns.
North Fork Rancheria	Gaylen Lee	See Public Comment V, above.	See Response to Public Comment V, above.

Organization/Tribe	Name of Contact	Comments	Response to Comments
San Manuel Band of Mission Indians	Daniel McCarthy	12/13/2013: Mr. McCarthy stated that the Proposed Project is taking place outside of ancestral lands, but suggests that other tribes be contacted.	Thank you for your comment. CDFW has contacted a number of other tribes regarding the Proposed Project.
Yocha Dehe Wintun Nation	Marshall McKay	12/16/2013: Mr. McKay requested copies of maps showing the potentially affected areas as well as mitigation measures for the Proposed Project.	Thank you for your comment. Mitigation Measures are available to the public and are included in both the DEIR and Final Impact Report FEIR. Maps of project activities for the Proposed Project are also located in the DEIR as well.
Tejon Indian Tribe	Kathryn Montes Morgan	12/12/2013: Ms. Morgan stated that although the project is outside of the Tejon Indian Tribe's territory, she requests to be notified immediately if any sites and/or artifacts are discovered during the implementation of the Proposed Project.	Comment noted. Thank you. Mitigation Measure CR-CONSTRUCT-1a includes notification of appropriate Native American tribes in the event of such discoveries. CDFW will continue to conduct communications with the tribes and, where requested, individuals, pursuant to the Resource Agency's consultation policy.
Not listed	Beverly Ogle	11/19/2013: Will call if concerns arise.	Thank you. CDFW appreciates any future input from you regarding the Proposed Project.
Pit River Tribe of California	Dolores Raglin	11/19/2013: Will call if concerns arise.	Thank you, CDFW appreciates any future input from the Pit River Tribe of California regarding the Proposed Project.
Kern Valley Indian Council	Robert Robinson	11/19/2013: No concerns were raised.	Thank you, CDFW appreciates any future input from the Kern Valley Indian Council regarding the Proposed Project.
Yocha Dehe Wintun Nation	Ray Rouse	11/19/2013: Mr. Rouse requested to have a new Section 106 letter mailed to him and that he would bring the letter to the attention of the Tribal Council.	The new letter was emailed to Mr. Rouse on November 20, 2013.
Winnemem Wintu Tribe	Caleen Sisk	See Public Comment W, above.	See Response to Public Comment W, above.
Nashville-El Dorado Miwok	Cosme Valdez	See Public Comment X, above.	See Response to Public Comment X, above.

Organization/Tribe	Name of Contact	Comments	Response to Comments
United Auburn Indian Community of the Auburn Rancheria	Gene Whitehouse	See Public Comment Y, above.	See Response to Public Comment Y, above.
Calaveras Band of Mi-Wuk Indians	Lois Williams	11/19/2013: No concerns were raised.	Thank you, CDFW appreciates any future input from the Calaveras Band of Mi-Wuk Indians regarding the Proposed Project.
Calaveras Band of Mi-Wuk Indians	Charles Wilson	11/19/2013: No concerns were raised.	Thank you, CDFW appreciates any future input from the Calaveras Band of Mi-Wuk Indians regarding the Proposed Project.
Ione Band of Miwok Indians Cultural Committee	Randy Yonemura	11/6/2013: Representatives for the Ione Band of Miwok Indians, including Randy Yonemura, Anthony Burris, and Andrew Ramie expressed concerns on how the fish will be raised and fed, and would like fish captured from their territories to be tracked. They also would like to meet with CDFW.	CDFW will continue to conduct communications with the tribes and, where requested, individuals, pursuant to the Resource Agency's Tribal Consultation Policy. Broodstock collection locations have not been finalized. Chapters 2 (Project Description) and 6 (Biological Resources – Fisheries) of the DEIR provide information on the hatchery and fish propagation activities, however more information is available by contacting CDFW.
Berry Creek Rancheria of Maidu Indians	Goodie Mixx	11/19/2013: No concerns were raised.	Thank you. CDFW appreciates any future input from the Berry Creek Rancheria of Maidu Indians regarding the Proposed Project.
Native American Heritage Commission	Dave Singleton	See Public Comment C, above.	See Responses to Public Comment C, above.
Bear River Rancheria	Theresa McGinnis	12/2/2013: No comments.	Thank you. CDFW appreciates any future input from the Bear River Rancheria regarding the Proposed Project.
Matt Root	Winnemem Wintu Tribe	12/4/2013 and 12/6/2013: No comments.	Thank you. CDFW appreciates any future input from the Winnemem Wintu Tribe regarding the Proposed Project.

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# Chapter 3

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## Revisions to the DEIR

## Chapter 3 REVISIONS TO THE DEIR

Responses to comments in Chapter 2 of this FEIR have resulted in revisions to the DEIR. Those revisions are presented below. Text to be deleted is shown in ~~strike through~~, and text that has been inserted is shown in **bold face**. Revisions are shown in the order of appearance in the DEIR.

### Chapter 2. Project Description

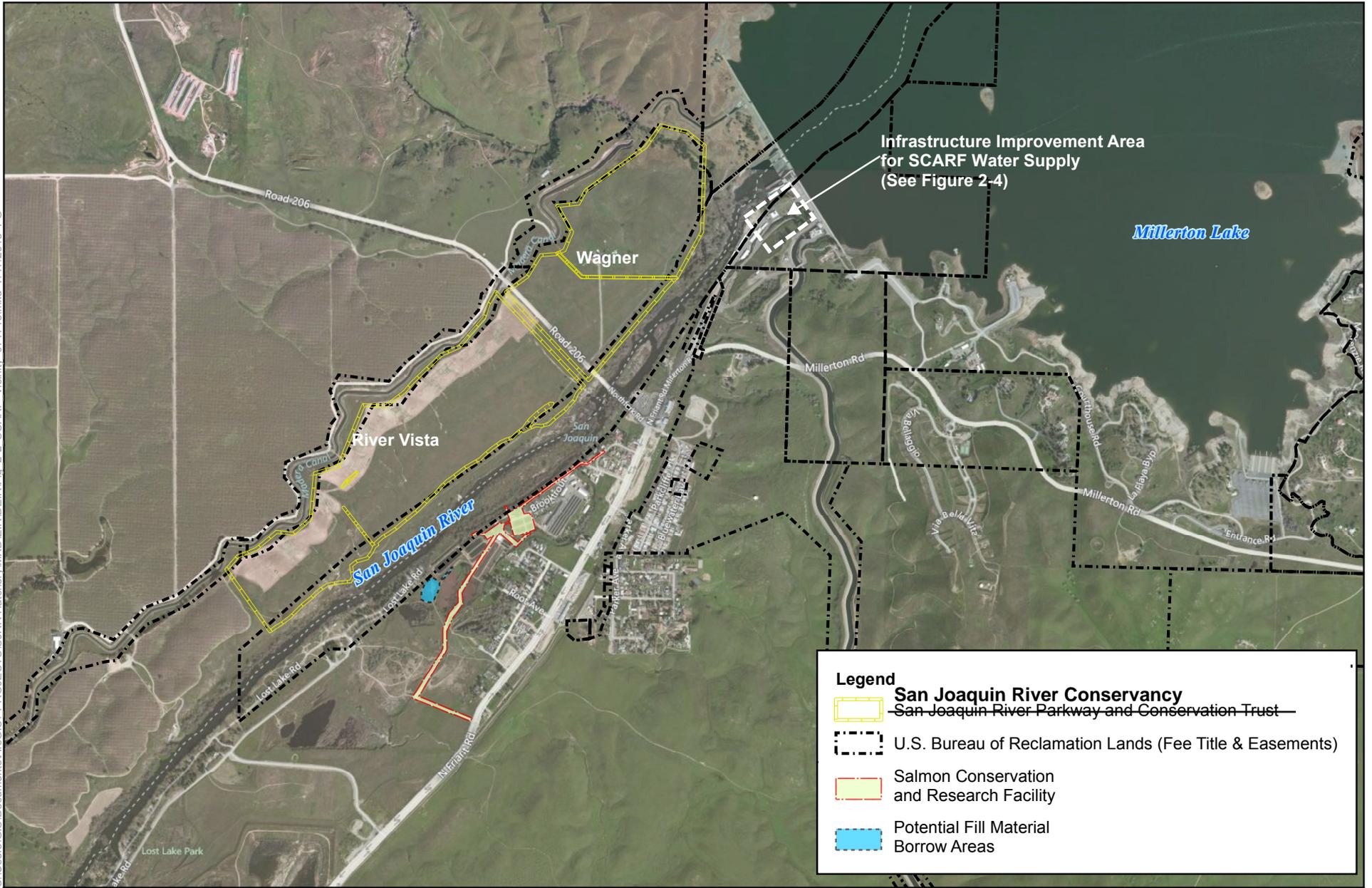
*The Legend for Figure 2-2 incorrectly states that land on the river opposite the proposed SCARF is owned by the San Joaquin River Parkway and Conservation Trust. The land is owned by the State of California, San Joaquin River Conservancy.*

*The corrected version of Figure 2-2 is shown on page 3-3.*

*The following revision has been made to the description of treatment of juvenile salmon selected for translocation (Section 2.4.4 of the DEIR (on pages 2-37 and 2-38)):*

Juveniles for translocation would be selected following a Fish Health Assessment and approval from the State Fish Health Lab. **Depending on the results of the assessment, juveniles may require some sort of treatment prior to transport, or may not be transported at all.** Juveniles would be moved from the FRFH to the Restoration Area mostly commonly in a 500-gallon transport tank. Appropriate BMPs would be employed during transport, as USFWS has specified in its **application for 10(a)1(A) Permit 17781**; these BMPs are provided in Appendix E, *Best Management Practices for Collection and Transport of Salmonid Eggs and Juveniles*. It is estimated that it would require between 3 to 6 trips to transport the juveniles; the number of trips would depend on the equipment used and the size and availability of the fish. ~~Consistent with the current 10(a)1(A) permit, it is anticipated that 60 juveniles would need to be set aside for pathology testing prior to translocation. If those juveniles are positive for certain pathogens, the fish collected for translocation would not be released into the San Joaquin River.~~

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**Legend**

-  San Joaquin River Conservancy
-  San Joaquin River Parkway and Conservation Trust
-  U.S. Bureau of Reclamation Lands (Fee Title & Easements)
-  Salmon Conservation and Research Facility
-  Potential Fill Material Borrow Areas

Prepared by:  
  
 Prepared for:  
 California Department of Fish and Wildlife  
 California Department of General Services



Imagery Source: Reclamation; Bing Maps

**Figure 2-2: Salmon Conservation and Research Facility Vicinity Map**

**SCARF and Related Management Actions Project  
 Draft Environmental Impact Report**

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### Chapter 4. Aesthetics

Mitigation Measure AES-CONSTRUCT-3b (Section 4.4.3 of the DEIR, page 4-21) incorrectly refers to Mitigation Measure BIO-TER-CONSTRUCT-10a and Mitigation Measure BIO-TER-CONSTRUCT-10b. These mitigation measures do not exist for the Proposed Project, and the text is revised below:

**Mitigation Measure AES-CONSTRUCT-3b: Landscaping of SCARF Facilities Shall Consist of Native Vegetation.**

CDFW or the construction contractor shall use native plants for landscaping in a manner consistent with Mitigation Measure ~~BIO-TER-CONSTRUCT 10a (Minimize Area of Disturbance of Riparian Habitat)~~ **BIO-CONSTRUCT 11a (Minimize Area of Disturbance of Riparian Habitat)** and with Mitigation Measure ~~BIO-TER-CONSTRUCT-10b (Develop and Implement Revegetation Plan for Riparian Habitat and Sensitive Natural Communities Disturbed by Construction)~~ **BIO-CONSTRUCT-11b (Develop and Implement Revegetation Plan for Riparian Habitat Disturbed by Construction)**.

### Chapter 5. Air Quality

The references to Table 5-6 in the DEIR were incorrect; the correct reference should have been Table 5-5.

For convenience, Table 5-5 is provided below:

**Table 5-5. Operational Emissions of Criteria Pollutants (tons per year)**

Operation Activity	NO <sub>x</sub>	ROG	CO	SO <sub>x</sub>	PM <sub>10</sub> (total)	PM <sub>2.5</sub> (total)
SCARF Operation	0.11	0.06	0.22	0	0.04	0.01
Fish Reintroduction	0.029	0.02	0.17	0	0.05	0.01
Fisheries Management	0.15	0.04	0.14	0	0.04	0
Fisheries Research and Monitoring	0.37	2.02	4.32	0	0.40	0.37
Recreational Management	0.01	0	0.01	0	0	0
<i>Total Operational Emissions</i>	<i>0.66</i>	<i>2.14</i>	<i>4.86</i>	<i>0</i>	<i>0.53</i>	<i>0.39</i>
SJVAPCD Threshold	10	10	100	27	15	15
Exceed Threshold?	No	No	No	No	No	No

Notes: CO = carbon monoxide, N/A = Not applicable, NO<sub>x</sub> = nitrogen oxides, PM<sub>2.5</sub> = fine particulate matter 2.5 micrometers in diameter or smaller, PM<sub>10</sub> = inhalable particulate matter 10 micrometers in diameter or smaller, ROG = reactive organic gas, SJVAPCD = San Joaquin Valley Air Pollution Control District, SO<sub>x</sub> = sulfur oxides

Source: CALEEMOD 2011.1.1 and OFFROAD 2007 were used to calculate emission estimates. See Appendix G, *Air Quality Emission Estimates*, of this DEIR for methodology. Also, see Appendix G for detailed emission calculations. Emissions shown are for 2016, the first year of SCARF project operations.

*The following revision has been made to the description of Impact AQ-OP-2, in Section 5.4.3 of the DEIR (on pages 5-13 and 5-14):*

The closest sensitive receptors to the SCARF site are residences located approximately 50 to 75 feet from the site. Diesel particulate matter from truck exhaust represents the only source of TACs from SCARF operations. The primary TAC from diesel trucks is DPM. The Project would involve a small number of diesel truck trips that would either originate or terminate at the SCARF facility. Because of the small number of trips, and because CARB regulations limit diesel truck idling to 5 minutes or less, the Proposed Project would not expose nearby residents to significant health risks during project operation. In addition, as shown in ~~Table 5-6~~**Table 5-5**, truck and vehicle trips associated with SCARF operational activities would not generate particulate emissions in significant quantities. Thus, the Proposed Project would not pose significant health risks to nearby residents and workers in the SCARF vicinity. The impact on sensitive receptors from particulates would be less than significant.

*The following revision has been made to the description of Impact AQ-REINTRO-1, in Section 5.4.3 of the DEIR (on pages 5-14 and 5-15):*

Fish reintroduction would primarily consist of mobile source trips. The fish reintroduction activities would require truck and vehicle trips for the collection, transport, and/or release of Chinook salmon (eggs, juveniles, or adults). These truck and vehicle trips could originate in or pass through the SJVAB, the Sacramento Valley Air Basin, and/or the San Francisco Bay Area Air Basin, and thus could be required to comply with the regulations of the multiple air districts overseeing these air basins. These activities are estimated to be seasonal, likely spanning 5 months per year during the fall and 5 months during the spring. The frequency of delivery trips from the FRFH to the quarantine facilities is assumed to be 4 times per week, and the frequency of delivery trips from the quarantine facility to SCARF is also assumed to be 4 times per week. The emissions from these truck trips is shown in ~~Table 5-6~~**Table 5-5** illustrating that (in combination with the operations of other project components) the ROG, NO<sub>x</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, CO, and SO<sub>x</sub> emissions that are substantially less than the SJVAPCD's significance thresholds, which are also lower than or equal to the significance thresholds adopted by other air districts that vehicles may pass through. Therefore, emissions would not be expected to be substantial or to exceed the applicable significance thresholds set by relevant air districts.

Furthermore, the SJVAPCD's Small Project Analysis Level guidance states that general industrial activities generating less than 1,506 trips per day are assumed to have a less-than-significant impact on air quality, and criteria pollutant emissions associated with these activities would not need to be quantified. The Proposed Project's activities, including reintroduction activities, would result in a fraction of this truck trip significance threshold and resulting emissions shown in ~~Table 5-6~~**Table 5-5** confirming that the activities are a fraction of the emissions significance threshold. These limited daily truck trips and emissions would not be expected to conflict with or obstruct implementation of the local air districts' air quality plans or increase criteria pollutant emissions above significant thresholds.

*The following revision has been made to the description of Impact AQ-MANAGEMENT-2, in Section 5.4.3 of the DEIR (on pages 5-18 and 5-19):*

Operation of the weir(s) may involve infrequent truck or vehicle trips by SCARF employees to perform minor maintenance or operation activities on the weir(s), such as minor patchwork or temporary removal of portions of the weir (barriers). These activities would average less than two vehicle trips daily and would occur seasonally. In addition, trap and haul efforts would involve up to two vehicle trips daily. The emissions from these vehicle trips are shown in ~~Table 5-6~~**Table 5-5**, illustrating that (in combination with the operations of other project components) the ROG, NO<sub>x</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, CO, and SO<sub>x</sub> emissions would be substantially less than the SJVAPCD's significance thresholds. It is not anticipated that any stationary emission sources (e.g., diesel generators) would be required to operate the weirs. Vehicle or truck trips for maintenance and operation would be infrequent, minimal, and substantially less than the 1,506 trips per day industrial activity significance threshold identified in the SJVAPCD's Small Project Analysis Level guidance. Therefore, unless trips exceed 1,506 trips per day the project would not result in emissions above the significant thresholds. In combination with other components of the Proposed Project, these limited truck/vehicle trips and emissions associated with operation of the fish segregation weirs as shown in ~~Table 5-6~~**Table 5-5** would not be expected to conflict with or obstruct implementation of the local air districts' air quality plans or to increase criteria pollutant emissions above significant thresholds, or to cause potential health risks.

*The following revision has been made to the description of Impact AQ-MONITORING-1, in Section 5.4.3 of the DEIR (on pages 5-19 and 5-20):*

The Proposed Project's fisheries research and monitoring activities would require truck and vehicle trips and would potentially require the use of watercraft for the various research and monitoring activities located along the San Joaquin River and within the SJVAPCD's jurisdiction. These research and monitoring activities are not expected to require any permanent stationary emission sources (e.g., diesel generators). Although the exact quantity of vehicle trips and watercraft use is unknown, for the management of fish segregation weirs, it can reasonably be assumed that these activities would average less than four vehicle trips daily and 4752 hours of annual boat use. The emissions from these vehicle trips and boat use is shown in ~~Table 5-6~~**Table 5-5**, illustrating that (in combination with the operations of other project components) the ROG, NO<sub>x</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, CO, and SO<sub>x</sub> emissions would be substantially less than the SJVAPCD's significance thresholds. Emissions from the truck or vehicle trips and from watercraft would not be substantial nor exceed SJVAPCD significance thresholds.

Furthermore, the SJVAPCD's Small Project Analysis Level guidance indicates that industrial activities generating less than 1,506 trips per day would have a less-than-significant impact on air quality, and criteria pollutant emissions associated with these activities would not need to be quantified. The Proposed Project's research and monitoring activities would result in a fraction of this truck trip significance threshold. The limited daily truck trips and watercraft usage, and their resulting emissions as shown in ~~Table 5-6~~**Table 5-5**, are not expected to conflict with or

obstruct implementation of the local air districts' air quality plans or to increase criteria pollutant emissions above significant thresholds.

*The following revision has been made to the description of Impact AQ-RECREATION-2, in Section 5.4.3 of the DEIR (on pages 5-21 and 5-22):*

The emissions from the recreation management operational vehicle trips is shown in ~~Table 5-6~~ **Table 5-5**, illustrating that (in combination with the operations of other project components) the ROG, NO<sub>x</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, CO, and SO<sub>x</sub> emissions would be substantially less than the SJVAPCD's significance thresholds.

## Chapter 6. Biological Resources – Fisheries

*Copper sulfate will not be used at the Salmon Conservation and Research Facility (SCARF); therefore, discussion of the chemical and its effects has been removed from Chapter 6, Biological Resources of the DEIR.*

*The following revision has been made to the description of Impact FISH-OP-2, in Section 6.5.3 of the DEIR (on page 6-46 and 6-47):*

### ***Impact FISH-OP-2: Release of Chemicals and Pharmaceuticals Associated with Aquaculture into the San Joaquin River (Significance Criteria A and B, Project Level, Less than Significant)***

Common chemicals and pharmaceuticals released by hatcheries include ~~copper sulfate~~, hydrogen peroxide, and potassium permanganate (ICF Jones and Stokes 2010). Since both hydrogen peroxide and potassium permanganate have short half-lives, they are expected to degrade rapidly after being discharged into the river. Moreover, these chemicals are typically used intermittently and for short duration; therefore, the acute risk to aquatic organisms as a result of hydrogen peroxide and potassium permanganate would be transient (Schmidt et al. 2006). ~~In contrast, copper sulfate has the potential to have adverse effects on downstream biological resources. This chemical is potentially toxic to aquatic invertebrates, fish, amphibians, and naturally occurring algae and macrophytes at the levels necessary to control algal outbreaks (Dorzab and Arkoh 2005, Horne and Dunson 1995). However, copper quickly binds to particulate matter and settles out, and free copper ions are rarely present in the water column (Alabaster and Lloyd 1980, ICF Jones and Stokes 2010).~~

The SCARF would be operated under an NPDES permit and a RWQCB Order that specifies discharge parameters for cold water concentrated aquatic animal production (CAAP) facilities. As described in Chapter 12, *Hydrology, Geomorphology, and Water Quality*, the NPDES CAAP permit authorizes the discharges for these aquaculture chemicals and drugs to surface waters in accordance with label directions, effluent limitations, Best Management Practice requirements, Monitoring and Reporting Requirements and other conditions listed in the RWQCB Order. According to the NPDES permit, ~~copper sulfate~~, hydrogen peroxide, and potassium permanganate, when administered at recommended levels, are not discharged at

levels that have reasonable potential to affect water quality objectives set in the San Joaquin River Basin Plan, which includes water quality objectives that are protective of freshwater fish habitat. Compliance with the NPDES requirements would ensure the impact to water quality from effluent containing aquaculture chemicals and drugs is reduced to a less than significant level.

## Chapter 7. Biological Resources – Vegetation and Wildlife

*The discussion in Chapter 7, Biological Resources – Vegetation and Wildlife of the DEIR (on page 7-52) incorrectly states that lands on the opposite (northwest) side of the San Joaquin River, across from the proposed SCARF, is property of the San Joaquin River Parkway and Conservation Trust. The lands are owned by the State of California, San Joaquin River Conservancy.*

*The following revision has been made to the description of Impact BIO-CONSTRUCT-14, in Section 7.5.3 of the DEIR (on pages 7-51 and 7-52):*

While the Parkway Master Plan recommends guidelines for a wildlife habitat and movement buffer zone, the suggested buffer width is infeasible for the Proposed Project due to both topography (i.e., the site is constrained by the bluff to the south) and the need for the SCARF to be located in close proximity to the river to allow for volitional fish releases. However, since the land on the opposite (northwest) side of the river is protected land held by the ~~San Joaquin River Parkway and Conservation Trust~~ **San Joaquin River Conservancy** (Figure 2-2), the buffer zone has been accommodated on the opposite side of the river; therefore, there would be a less than significant impact arising from conflicts with local ordinances and policies protecting biological resources.

## Chapter 8. Cultural Resources

*The following changes have been made to Chapter 8: Cultural Resources to reflect correspondence between CDFW and Native American representatives which has occurred since circulation of the DEIR:*

### 8.4 Impact Analysis

#### 8.4.1 Methodology

##### ***SCARF Hatchery***

In-depth cultural resources studies have been conducted of the SCARF site and are described below. Many programmatic-level activities associated with the Proposed Project have not yet been defined or exact locations determined. Once specific activities/locations have been chosen, additional analyses will be conducted.

Before SCARF field work began, a record search was conducted by the Southern San Joaquin Valley Information Center (SSJVIC) of the California Historical Resources Information System at California State University, Stanislaus. The purpose of the

record search was to identify any previously recorded cultural resources within the SCARF site and determine if any of the area had previously been surveyed for cultural resources. The record search indicated that no cultural resources had previously been recorded within the SCARF site, although no fewer than five archaeological surveys had been conducted on various portions of the property. One prehistoric archaeological site and numerous historical-era buildings and features have been recorded near the SCARF site.

A request was made to the California Native American Heritage Commission (NAHC) **on June 19, 2012** to review its files for records of sacred sites in the SCARF vicinity. No sacred sites were identified during this search. The NAHC provided a list of individuals who might have additional information about important Native American sites in or near the SCARF site. These individuals were contacted by mail **on June 26, 2012**, then by phone. Table 8-1 provides a summary of contacts with the Native Americans identified by NAHC. Most of the individuals contacted had no concerns about the Proposed Project. However, members of the Dumna Wo-Wah and North Fork Mono tribes expressed concern about the potential presence of both archaeological sites and traditional-use areas in the SCARF vicinity. Numerous individuals also requested copies of the completed cultural resources report for the SCARF.

On July 27, 2012, a cultural resources field survey was conducted of the entire SCARF site by personnel who meet the U.S. Secretary of Interior's professional standards in archaeology and architectural history. The archaeological field survey included pedestrian transects spaced approximately 60 feet apart in broad open spaces, such as the proposed borrow areas. The architectural history inventory focused on photographing buildings and other built-environment features of the existing SJFH, as well as buildings immediately adjacent to the SCARF site. All cultural resources were recorded on appropriate Department of Parks and Recreation 523 series forms. Archaeological sites were further recorded with GPS and by photography.

**Table 8-1. Native American Consultation**

Organization/Tribe	Name of Contact	Letter Date	Telephone Follow-up Date	Comments
Big Sandy Rancheria of Mono Indians	Liz Hutchins Kipp, Chairperson	June 26, 2012	August 7, 2012	A voice message was left. No return call was received as of date of writing.
Dumna Wo-Wah	Robert Ledger, Sr., Tribal Chairperson	June 26, 2012	August 7, 2012	Mr. Ledger recommends a Native American monitor during construction. He also requested a follow-up e-mail. The follow-up e-mail was sent on August 7, 2012. Further e-mail communication continued.
Cold Springs Rancheria of Mono Indians	Robert Marquez, Chairperson	June 26, 2012	August 23, 2012	Mr. Marquez requested that detailed project maps be sent to him via e-mail. After initial difficulty with the e-mail address, the maps were sent on September 26, 2012.
Sierra Nevada Native American Coalition	Lawrence Bill, Interim Chairperson	June 26, 2012	August 23, 2012	Telephone number provided is not functioning.
North Fork Mono Tribe	Ron Goode, Chairperson	June 26, 2012	August 23, 2012	Mr. Goode expressed concern for potential impacts on traditional-use areas and archaeological resources. He requests that archaeological and Native American monitors be present during ground-disturbing activities related to the Project.
Choinumni Tribe; Choinumni/Mono	Lorrie Planas	June 26, 2012	August 23, 2012	No telephone number is listed.
Santa Rosa Rancheria	Rueben Barrios	June 26, 2012	August 23, 2012	A voice message was left. No return call was received as of date of writing.
Table Mountain Rancheria	Bob Pennell, Cultural Resources Director	June 26, 2012	August 23, 2012	A message was left with Ms. Taylor, a staff member at Table Mountain Rancheria. Further telephone communications and e-mails are included in Appendix B, <i>Native American Correspondence</i> , of the Cultural Resources Appendix (Appendix K, <i>Cultural Resources Appendix</i> , of this DEIR).

**Table 8-1. Native American Consultation**

<b>Organization/Tribe</b>	<b>Name of Contact</b>	<b>Letter Date</b>	<b>Telephone Follow-up Date</b>	<b>Comments</b>
Kings River Choinumni Farm Tribe	John Davis, Chairman	June 26, 2012	August 23, 2012	Mr. Davis requests to be called upon discovery of cultural resources.
The Choinumni Tribe of Yokuts	Rosemary Smith, Chairperson	June 26, 2012	August 23, 2012	No telephone number is listed.
Dunlap Band of Mono Historical Preservation Society	Mandy Marine, Board Chairperson	June 26, 2012	August 23, 2012	Ms. Marine indicated that she has no immediate concerns, but requests a copy of the final report.
Unaffiliated	Frank Marquez	June 26, 2012	August 23, 2012	A voice message was left. No return call was received as of date of writing.
Chowchilla Tribe of Yokuts	Jerry Brown	June 26, 2012	August 23, 2012	Telephone number provided is not functioning.
Santa Rosa Tachi Rancheria	Lalo Franco, Cultural Coordinator	June 26, 2012	August 23, 2012	A voice message was left. No return call was received as of date of writing.
Kings River Choinumni Farm Tribe	Stan Alec	June 26, 2012	August 23, 2012	Mr. Alec requests that the letter be resent to a new address. Letter was resent on October 1, 2012.
Dumna Wo-Wah Tribal Government	Eric Smith, Cultural Resource Manager	June 26, 2012	August 23, 2012	Telephone number provided is the same for all members of the Dumna Wo-Wah Tribal Government. See comments related to communication with Robert Ledger, Sr.
Dumna Wo-Wah Tribal Government	John Ledger, Assistant Cultural Resource Manager	June 26, 2012	August 23, 2012	Telephone number provided is the same for all members of the Dumna Wo-Wah Tribal Government. See comments related to communication with Robert Ledger, Sr.

***SCARF Operations, Fish Reintroduction, and Fisheries Research and Monitoring***

The potential impacts of SCARF Operations, Fish Reintroduction, and Fisheries Research and Monitoring on cultural resources will not be discussed below. ~~This is because these actions are not anticipated to cause ground disturbance or modifications to existing buildings, and, as discussed in Chapter 2, Project Description, ground disturbance as the result of broodstock collection activities would be minimal (i.e., limited to incidental disturbance caused by the collection techniques).~~ Furthermore, the limited time it will take to make the collections will not substantially impede access to any fishing location that might be of significant cultural value. Any impacts from Fish Reintroduction will be culturally beneficial to the Yokuts who live along the San Joaquin River, but there will be no impacts to TCPs.

**Although it is not anticipated that SCARF Operations, Fish Reintroduction, and Fisheries Research and Monitoring are not anticipated to would have any impact on cultural resources that are TCPs.** ~~With regard to Fish Reintroduction, the exact locations of broodstock collection have not yet been determined, and it is remotely possible that a selected collection location may coincide with a place that may have cultural value as a site pursuant to California Code of Regulations, title 14, section 4852(a)(2) (aka TCP) as a place that has been an important fishing spot for generations of Native Americans. As a result, a request was made to the NAHC on August 23, 2013 to review its files for records of sacred sites along all of the rivers and streams that might selected for broodstock collection (Figure ES-1 in the DEIR Executive Summary). The NAHC identified numerous recorded Native American cultural places in the vicinity of potential broodstock collection streams located north of Sacramento County and south of Calaveras County. The NAHC also provided a list of individuals who might have knowledge about cultural places along the selected water courses. Letters were sent to all 117 individuals listed by the NAHC on October 3, 2013, and follow up phone calls were made between November 15 and 19, 2014. The individuals contacted included the following:~~ However, as discussed in Chapter 2, Project Description, ground disturbance as the result of broodstock collection activities would be minimal (i.e., limited to incidental disturbance caused by the collection techniques).

- David Alvarez, Chairperson, Traditional Choinumni Tribe
- Art Angle, Vice Chairperson, Enterprise Rancheria of Maidu Indians
- Gary Archuleta, Chairperson, Mooretown Rancheria of Maidu Indians
- Nancy Ayala, Chairperson, Picayune Rancheria of Chuckchansi
- Rueben Barrios Sr., Chairperson, Santa Rosa Rancheria
- Miles Baty, Big Sandy Rancheria of Mono Indians
- Leora Beihn, North Fork Rancheria
- Lawrence Bill, Interim Chairperson, Sierra Nevada Native American Coalition
- Cathy Bishop, Chairperson, Strawberry Valley Rancheria
- Anthony Brochini, Chairperson, Southern Sierra Miwuk Nation
- Jerry Brown, Chowchilla Tribe of Yokuts

- **Jerry Brown, Chowchilla Tribe of Yokuts**
- **Robert Burns, Wintu Educational and Cultural Council**
- **Anthony Burris, Chairperson, Ione Band of Miwok Indians Cultural Committee**
- **Jason Camp, THPO, United Auburn Indian Community of the Auburn Rancheria**
- **John Castro, Cultural Liaison, United Tribe of Northern Calif., Inc., Wintu, Wintun, Winton**
- **Ben Charlie, Chairperson, Dunlap Band of Mono Indians**
- **Cynthia Clarke, Native Cultural Renewal Committee, Yocha Dehe Wintun Nation**
- **Grayson Coney, Cultural Director, T' si-Akim Maidu**
- **Bill Cornelius, Tribal Administrator, Mooretown Rancheria of Maidu Indians**
- **Stanley Cox , Cultural Resources Director, Tuolumne Band of Mi-Wuk**
- **Briana Creekmore**
- **Pamela Cubbler, Colfax-Todds Valley Consolidated Tribe**
- **John Davis, Chairperson, Kings River Choinumni Farm Tribe**
- **Kevin Day, Chairperson, Tuolumne Band of Me-Wuk**
- **Marilyn Delgado, Chairperson, Nor-Rel-Muk Nation**
- **Mike DeSpain, Director-OEPP, Mechoopda Indian Tribe of Chico Rancheria**
- **Regina Dock, Grindstone Rancheria of Wintun-Wailaki**
- **Delia Dominguez, Chairperson, Kitanemuk & Yowlumne Tejon Indians**
- **James Edwards, Chairperson, Berry Creek Rancheria of Maidu Indians**
- **Tracy Edwards, Chief Executive Officer, Redding Rancheria**
- **Sammuel Elizondo, Environmental Director, Picayune Rancheria of Chuckchansi**
- **Rose Enos**
- **Katherine Erolinda Perez, North Valley Yokuts Tribe**
- **Elaine (Judy) Fink, Chairperson, North Fork Rancheria**
- **Dene Fink, North Fork Rancheria**
- **ArvadaFisher, Vice Chairperson, Calaveras County Mountain Miwok Indian Council**
- **Kesner Flores**
- **Nicholas Fonseca, Chairperson, Shingle Springs Band of Miwok Indians**
- **Daniel Fonseca, Cultural Resources Director, Shingle Springs Band of Miwok Indians**
- **Lalo Franco, Cultural Coordinator, Santa Rosa Tachi Rancheria**
- **Andrew Franklin, Chairperson, Wilton Rancheria**
- **Andrew Freeman, Chairperson, Paskenta Band of Nomlaki Indians**

- **Reba Fuller, Tuolumne Band of Mi-Wuk**
- **Morning Star Gali, Pit River Tribe Historical Preservation Office**
- **Joey Garfield, Tribal Archeological Coordinator, Tule River Indian Tribe**
- **Gloria Gomes, Chairperson, United Tribe of Northern Calif., Inc., Wintu, Wintun, Wintoon**
- **Daniel Gomez, Chairman, Cachil DeHe Band of Wintun Indians**
- **Robert Gomez, Jr., Tribal Chairperson, Tubatulabals of Kern Valley**
- **Ron Goode, Chairperson, North Fork Mono Tribe**
- **Gloria Grimes, Chairperson, Calaveras Band of Mi-Wuk Indians**
- **Debra Grimes, Cultural Resources Specialist, Calaveras Band of Mi-Wuk Indians**
- **Marcos Guerrero, Tribal Preservation Committee, United Auburn Indian Community of the Auburn Rancheria**
- **Jason Hart, Chairperson, Redding Rancheria**
- **Jill Harvey**
- **Kelli Hayward, Wintu Tribe of Northern California**
- **James Hayward, Sr., Cultural Resources Program, Redding Rancheria**
- **Steve Hutchason, Director of Cultural Preservation, Wilton Rancheria**
- **Liz Hutchins Kipp, Chairperson, Big Sandy Rancheria of Mono Indians**
- **Les James, Spiritual Leader, Southern Sierra Miwuk Nation**
- **Leland Kinter, Native Cultural Renewal Committee, Yocha Dehe Wintun Nation**
- **Ronald Kirk, Chairperson, Grindstone Rancheria of Wintun-Wailaki**
- **Clara LeCompte, Maidu Nation**
- **Robert Ledger, Tribal Chairperson, Dumna Wo-Wah Tribal Government**
- **John Ledger, Assistant Cultural Resource Manager, Dumna Wo-Wah Tribal Government**
- **Gaylen Lee, North Fork Rancheria**
- **Adam Lewis, Tribal Preservation Assistant, Calaveras Band of Mi-Wuk Indians**
- **Jennifer Malone**
- **Mandy Marine, Board Chairperson, Dunlap Band of Mono Historical Preservation Society**
- **Judith Marks, Colfax-Todds Valley Consolidated Tribe**
- **Robert Marquez, Chairperson, Cold Springs Rancheria of Mono Indians**
- **Frank Marquez**
- **Lloyd Mathiesen, Chairperson, Chicken Ranch Rancheria of Me-Wuk**
- **Daniel McCarthy, Director-CRM Dept., San Manuel Band of Mission Indians**
- **Marshall McKay, Chairperson, Yocha Dehe Wintun Nation**
- **Yvonne Miller, Chairperson, one Band of Miwok Indians**

- **Wayne Mitchum, Jr., Cachil DeHe Band of Wintun Indians**
- **Katherine Montes-Morgan, Chairperson, Tejon Indian Tribe**
- **Eileen Moon, Vice- Chairperson, T' si-Akim Maidu**
- **Rhonda Morningstar Pope, Chairperson, Buena Vista Rancheria**
- **Glenda Nelson, Chairperson, Enterprise Rancheria of Maidu Indians**
- **Beverly Ogle**
- **Hermo Olanio, Vice-Chairperson, Shingle Springs Band of Miwok Indians**
- **Bob Pennell, Cultural Resource Director, Table Mountain Rancheria**
- **Neil Peyron, Chairperson, Tule River Indian Tribe**
- **Lorrie Planas, Chairperson, Choinumni Tribe, Choinumni/Mono**
- **Melissa Powell, Cultural Resources Coordinator, Chicken Ranch Rancheria of Me-Wuk**
- **Dolores Raglin, Chairperson, Pit River Tribe of California**
- **Melissa Ralston, CEO, Chicken Ranch Rancheria of Me-Wuk**
- **Dennis Ramirez, Chairperson, Mechoopda Indian Tribe of Chico Rancheria**
- **Ren Reynolds, Butte Tribal Council**
- **David Laughinghorse Robinson, Kawaiisu Tribe of Tejon Reservation**
- **Robert Robinson, Co-Chairperson, Kern Valley Indian Council**
- **Matthew Root**
- **Loretta Root**
- **Ray Rouse, Yocha Dehe Wintun Nation**
- **Don Ryberg, Chairperson, T' si-Akim Maidu**
- **John Sartuche, Wuksache Tribe**
- **Kyle Self, Chairperson, Greenville Rancheria of Maidu Indians**
- **Caleen Sisk, Tribal Chair, Winnemem Wintu Tribe**
- **Eric Smith, Cultural Resource Manager, Dumna Wo-Wah Tribal Government**
- **Rosemary Smith, Chairperson, Choinumni Tribe of Yokuts**
- **John Otterman, Tribal Administrator, Tuolumne Band of Me-Wuk**
- **Julie Turner, Secretary, Kern Valley Indian Council**
- **Cosme Valdez, Interim Chief Executive Officer, Nashville-El Dorado Miwok**
- **John Valenzuela, Chairperson, San Fernando Band of Mission Indians**
- **Kerri Vera, Environmental Department, Tule River Indian Tribe**
- **Leann Walker Grant, Chairperson, Table Mountain Rancheria**
- **April Wallace Moore**
- **Charles White, Tribal Administrator, Pit River Tribe of California**
- **Gene Whitehouse, Chairperson, United Auburn Indian Community of the Auburn Rancheria**
- **Lois William, Calaveras Band of Mi-Wuk Indians**
- **Charles Wilson, Chairperson, Calaveras Band of Mi-Wuk Indians**

- **Kenneth Woodrow, Chairperson, Wuksache Indian Tribe/Eshom Valley Band**
- **Charlie Wright, Chairperson, Cortina Band of Indians**
- **Randy Yonemura**
- **Chairperson, California Valley Miwok Tribe**
- **Cultural Resources Coordinator, Berry Creek Rancheria of Maidu Indians**
- **Chairperson, Kon Kow Band of Maidu**

**An October 3, 2013 letter was sent to these individuals, of whom 32 provided responses via telephone, letter, or email. Twenty of the responders noted that they had no comment on the Proposed Project, would call back if they had concerns, requested that letters be resent, or deferred to other representatives within their tribe. The remaining 12 individuals requested additional information about the Proposed Project, continued consultation, that a monitor be present during broodstock collection, or to meet with CDFW directly to discuss the project. CDFW responses to the comments and requests are provided in Chapter 2 of the FEIR.**

## **Chapter 12. Hydrology, Geomorphology, and Water Quality**

*Copper sulfate will not be used at the proposed SCARF; therefore, discussion of the chemical and its effects has been removed from Chapter 12, Hydrology, Geomorphology, and Water Quality of the DEIR.*

*The following revisions have been made to the description of Aquatic Animal Production Facility Discharges in Section 12.2.2 of the DEIR (on page 12-6) as well as to Tables 12-3 and 12-4:*

The Central Valley RWQCB regulates discharges for cold water concentrated aquatic animal production (CAAP) facilities to surface waters. The waste discharge requirements for CAAP facilities are specified in Order No. R5-2012-0012 (General NPDES No. CAG135001) (CVRWQCB 2012), which amends Order No. R5-2010-0018-01 (General NPDES No. CAG135001) (CVRWQCB 2010). The Order is applicable to the SJFH and planned SCARF operations, and covers discharges to surface waters from CAAP facilities in the Central Valley Region discharging to the Sacramento and San Joaquin River Basins and the Tulare Lake Basin. Discharges to land from domestic sewage from hatchery buildings and private residences on-site to septic tank/leachfield systems are regulated by the Order. Effluent limitation and discharge specifications are set in the Order. Influent monitoring and effluent monitoring is required for settleable solids, pH, electrical conductivity, copper, hardness, total suspended solids, and other constituents, depending on the use of ~~copper sulfate~~, sodium chloride, and other chemicals and aquaculture drugs. Screening levels are specified for priority pollutant metals to determine whether reasonable potential to exceed water quality objectives exists. The Order authorizes the discharge of specific chemicals and aquaculture drugs to surface waters in accordance with label

directions, effluent limitations, Best Management Practice requirements, monitoring and reporting requirements and other conditions (CVRWQCB 2012).

**Table 12-3.** Common Treatment Chemicals Potentially Used at SCARF

<b>Drug or Chemical</b>	<b>Purpose of Application</b>	<b>Expected Method of Application or Treatment</b>
Acetic Acid	Control of external parasites	(1) Continuous flow bath: 1.5 to 2.2 gallons of glacial acetic acid as a bolus to top of raceway. Gives a treatment level of approximately 335 to 500 mg/L. (2) Bath: used at a rate of 500 to 2,000 mg/L for 1 to 10 minutes.
Amoxicillin trihydrate	Control and prevention of external and system bacterial infections	Injected intraperitoneally: into broodstock twice a week, prior to spawning, at a rate of 40 mg/kg of fish.
Carbon dioxide	Anesthetic	Bath: bubbled in water. Usually used in small volumes of water.
Chloramine-T (N-sodium-N-chloro-p-toluenesulphonamide)	Control of external gill bacteria	(1) Continuous flow bath: used at concentrations of 10 mg/L for 1 hour. (2) Bath: used at a concentration of 10 mg/L for 1 hour.
Copper sulfate	Control of external parasites and bacteria	Continuous flow bath: used at a rate of up to 0.5 pounds per cfs of raceway flow.
Erythromycin	Control and prevention of external and systemic bacterial infections	(1) Injected intraperitoneally: at a rate of 40 mg/kg of fish, at 30-day intervals. (2) Feed: used in medicated feed or fish pills at a rate of 100 mg/kg of fish.
Florfenicol (Nuflor)	Control and prevention of external and systemic bacterial infections	Feed: Purchased medicated feed is administered to fish at a rate of 10 mg/kg of fish per day, split into morning and afternoon feedings.
Formalin (37% formaldehyde solution)	(1) Control of external parasites (2) Fungus control on fish eggs	(1) Continuous flow bath: Low dose used at a concentration of 25 mg/L for 8 hours. High dose used at a concentration of 167 to 250 mg/L for 1 hour. (2) Bath: used at a concentration of 2,000 mg/L, or less, for 15 minutes.
Hydrogen peroxide	Control of external parasites and fungus	Continuous flow bath: (a) used on fish at a rate of 100 mg/L, or less, for 45 minutes to 1 hour (b) used on fish eggs at a concentration of 500 to 1,000 mg/L for 15 minutes
MS-222/tricaine methane sulfonate (Finquel, Tricaine-S)	Anesthetic	Bath: used at a rate of 50 to 250 mg/L, usually in a small volume of water.
Oxytetracycline HCL (Terramycin)	Control and prevention of external and systematic bacterial infections	(1) Bath: used in tanks for 6 to 8 hours at a concentration of 100 mg/L or less. (2) Feed: fed at a rate of 3.75 grams of oxytetracycline per 100 pounds of fish per day.

<b>Drug or Chemical</b>	<b>Purpose of Application</b>	<b>Expected Method of Application or Treatment</b>
Penicillin G potassium	Control and prevention of external and systemic bacterial infections	Bath: used in tanks for 6 to 8 hours at a concentration of 150 IU/ml (500,000,000 IU/311.8 g packet).
Potassium permanganate	Control of external parasites and bacteria	(1) Flush: used at a rate of 2 ounces per cfs of raceway flow, poured in all at once, for a total of three treatments, spaced 10 to 15 minutes apart (2.32 mg/L for a 45-minute treatment, 3.48 mg/L for a 30-minute treatment). (2) Bath: used at a rate of 2 mg/L, or less, for 1 hour.
PVP iodine	Disinfect and control diseases on fish eggs	Bath: used at a concentration of 100 mg/L for 10 to 30 minutes.
Sodium bicarbonate	Anesthetic	Bath: used at a rate of 142 to 642 mg/L, usually in a small volume of water.
Sodium chloride (salt)	Fish cleansing, disease control, and stress reduction	Continuous flow bath: used at a rate of 150 to 700 pounds of salt per cfs of raceway flow.
Sulfadimethoxine-orometoprim (Romet-30)	Control and prevention of external and systemic bacterial infections	Feed: used at a rate of 50 mg/kg of fish per day.
Notes: cfs = cubic feet per second g = gram IU/ml = international unites per milliliter mg/L = milligrams per liter mg/kg = milligrams per kilogram		

**Table 12-4:** Common Treatment Chemicals Potentially Used at SCARF Compared to CDFW Hatchery Discharge Concentrations

Chemical	Treatment Dose <sup>1</sup>	Guidance Concentrations		Hatchery Discharge Concentrations
		Aquatic Toxicity	Drinking Water	
Acetic Acid	335-2,000 mg/L		97 µg/L <sup>2</sup>	-
Chloramine-T	10 mg/L	86.3 mg/L <sup>3</sup> 187 mg/L <sup>3</sup>	-	-
Copper sulfate	<del>2240 µg/L Cu</del>	<del>77.9 µg/L<sup>4</sup></del>	<del>1,000 µg/L<sup>5</sup></del> <del>1,300 µg/L<sup>6</sup></del>	1-122 µg/L Cu (36 samples) <sup>a</sup>
Formalin (37% formaldehyde solution)	225-2,000 mg/L	11.3 mg/L <sup>7</sup>	0.1 mg/L <sup>8</sup> 1.4 mg/L <sup>9</sup>	<0.005 mg/L (1 sample) <sup>a</sup> ND (3 samples) <sup>a</sup> 1.4/0.55 (1 sample) <sup>a</sup>
Hydrogen peroxide	1100 mg/L	11.3 mg/L <sup>10</sup>	--	0.3-37 mg/L (5 samples) <sup>a</sup> 2.6-3.6 mg/L (2 samples) <sup>a</sup> 0.2-0.8 mg/L (5 samples) <sup>a</sup> 0.0 mg/L (1 sample) <sup>a</sup> 3 mg/L (2 samples) <sup>a</sup>
MS-222/tricane methane sulfonate	550-250 mg/L	770 mg/L <sup>10</sup>	--	0.01 – 0.29 mg/L (3 samples) <sup>a</sup>
Oxytetracycline HCL (Terramycin)	1100 mg/L	440.4 mg/L <sup>10</sup>	--	-
Potassium permanganate	22-3.48 mg/L	0.038 mg/L <sup>10</sup> 0.20 mg/L <sup>10</sup> 0.25 mg/L <sup>10</sup>	--	0.1-5.0 mg/L (6 samples) <sup>a</sup> 0.03-0.06 mg/L (25 samples) <sup>a</sup> 0.06-0.36 mg/L (7 samples) <sup>a</sup> 0.004-0.084 mg/L (7 samples) <sup>a</sup>
PVP iodine	1100 mg/L	00.86 mg/L <sup>10</sup>	--	0.00 mg/L (8 samples) <sup>a</sup> ND (5 samples) <sup>a</sup> ND (4 samples) <sup>a</sup>

Chemical	Treatment Dose <sup>1</sup>	Guidance Concentrations		Hatchery Discharge Concentrations
		Aquatic Toxicity	Drinking Water	
<p>Notes:</p> <ul style="list-style-type: none"> <li>- = No data available</li> <li>ND = Not Detected</li> </ul> <p><sup>1</sup> Refer to Table 12-2</p> <p><sup>2</sup> Taste and odor thresholds (CVRWQCB 2010)</p> <p><sup>3</sup> 86.3 mg/L is No Observed Effect Concentration and 187 mg/L is Lowest Observed Effective Concentration from DFG Pesticide Unit C. <i>dubia</i> test (CVRWQCB 2010)</p> <p><sup>4</sup> Hardness-dependent chronic California Toxics Rule dissolved copper criteria used for derivation of NPDES permit limitations; based on hardness of 75 mg/L as calcium carbonate</p> <p><sup>5</sup> California Department of Public Health secondary drinking water maximum contaminant level.</p> <p><sup>6</sup> California Toxics Rule human health criterion for consumption of water and organisms</p> <p><sup>7</sup> Maximum daily limit of 1.3 mg/L based on 96-hour No Observed Effect Level from USEPA (CVRWQCB 2010)</p> <p><sup>8</sup> California Department of Public Health Drinking Water Action Level</p> <p><sup>9</sup> EPA Integrated Risk Information System dose as a drinking water level</p> <p><sup>10</sup> 96-hour acute No Observed Effect Level from DFG Pesticide Unit C. <i>dubia</i> test (CVRWQCB 2010)</p> <p><sup>a</sup> Discharge Monitoring Report data for Hot Creek, Mt. Shasta, Nimbus, American River, Crystal Lake, Mokelumne River, Moccasin Creek, and Iron Gate Hatcheries.</p> <p>Source: Modified from Table 3-11 (ICF Jones &amp; Stokes 2010)</p>				

# Chapter 4

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## Report Preparation

## Chapter 4 REPORT PREPARATION

The following presents the list of individuals who assisted in preparing and/or reviewing the FEIR. For a list of individuals who assisted in preparing and/or reviewing the DEIR, please refer to Chapter 20 of the DEIR.

### **California Department of Fish and Wildlife**

1234 E. Shaw Avenue  
Fresno, CA 93710  
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Gerald Hatler	Environmental Program Manager
Julie Vance	Environmental Program Manager
Brian Erlandsen	Senior Environmental Scientist
Annee Ferranti	Senior Environmental Scientist
Paul Adelizi	Environmental Scientist
Benessa Espino	Environmental Scientist
Margarita Gordus	Environmental Scientist
Erica Meyers	Environmental Scientist
Mathew Bigelow	Environmental Scientist
Patrick Ferguson	Environmental Scientist
Brian Mahardja	Environmental Scientist
Wendy Bogdan	Senior Staff Counsel
Shannon Little	Staff Counsel

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Michael Siemering	Project Director

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Jennifer Schulte, Ph.D.	Senior Consultant
Cori Lu	Senior Consultant
Patrick Donaldson	Analyst
Jacob Finkle	Analyst
Beth Duffey	Editor

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Janis Offermann	Senior Cultural Resource Specialist
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(916) 443-2745

Sabrina Teller, JD	Partner
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# Chapter 5

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## References

## Chapter 5 REFERENCES

- Börk, K. S. and P.D. Adelizi. 2010. Hatchery and Genetic Management Plan, San Joaquin River Restoration Program. Available: [http://restoresjr.net/program\\_library/02-Program\\_Docs/HatGenMgmtPlanSJRRP2010Dec.pdf](http://restoresjr.net/program_library/02-Program_Docs/HatGenMgmtPlanSJRRP2010Dec.pdf). Accessed. September 7, 2012.
- California Department of Water Resources (DWR). 1981. California Well Standards. Available: [http://www.water.ca.gov/groundwater/well\\_info\\_and\\_other/california\\_well\\_standards/well\\_standards\\_content.html](http://www.water.ca.gov/groundwater/well_info_and_other/california_well_standards/well_standards_content.html). Accessed: March 17, 2014.
- California Department of Water Resources (DWR). 1990. California Well Standards: Bulletin 74-90. Available: [http://www.water.ca.gov/pubs/groundwater/water\\_well\\_standards\\_bulletin\\_74-90/ca\\_well\\_standards\\_bulletin74-90\\_1991.pdf](http://www.water.ca.gov/pubs/groundwater/water_well_standards_bulletin_74-90/ca_well_standards_bulletin74-90_1991.pdf). Accessed: March 17, 2014.
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- San Joaquin River Restoration Program Technical Advisory Committee (TAC). 2008. Recommendations on Restoring Fall-run Chinook Salmon to the Upper San Joaquin River. February. Available: [http://restoresjr.net/program\\_library/04-RA\\_Recommends/2008/tac\\_all\\_run\\_final\\_2-20-08\\_1.pdf](http://restoresjr.net/program_library/04-RA_Recommends/2008/tac_all_run_final_2-20-08_1.pdf). Accessed: March 17, 2014.
- U.S. Bureau of Reclamation (Reclamation) and California Department of Water Resources (DWR). 2012. San Joaquin River Restoration Program Final Program Environmental Impact Statement/Report. July. Available: [http://www.usbr.gov/mp/nepa/nepa\\_projdetails.cfm?Project\\_ID=2940](http://www.usbr.gov/mp/nepa/nepa_projdetails.cfm?Project_ID=2940) Accessed: November 7, 2012.

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# Appendix A

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## DEIR Notices and Mailing List

## **Appendix A**

# **DEIR NOTICES AND MAILING LIST**

This appendix contains the Notice of Availability of the DEIR, the Notice of Completion of the DEIR that was sent to the State Office of Planning and Research (OPR), the newspaper advertisements announcing the availability of the DEIR and details regarding the public meetings, and the distribution list for DEIR notices.

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# DEIR Notice of Availability

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October 7, 2013

**Re: Notice of Availability of a Draft Environmental Impact Report Regarding the Proposed Salmon Conservation and Research Facility and Related Management Actions Project**

To Interested Parties:

**NOTICE IS HEREBY GIVEN** that the California Department of Fish and Wildlife (CDFW), as lead agency under the California Environmental Quality Act (CEQA), is making available a draft environmental impact report (DEIR) for public review. CDFW, formerly known as the California Department of Fish and Game, has prepared this DEIR to provide the public, responsible agencies, and trustee agencies with information about the potential environmental effects of the proposed Salmon Conservation and Research Facility (SCARF) and Related Fisheries Management Actions Project (Project or Proposed Project). This DEIR was prepared in compliance with the California Environmental Quality Act (CEQA) of 1970 (as amended) and the State CEQA Guidelines (California Code of Regulations [CCR] title 14, section (§) 15000 et seq.). CDFW hereby invites comments on the adequacy and completeness of the environmental analyses in the DEIR.

**PROJECT LOCATION:** The SCARF would be located at the address currently listed as 17372 Brook Trout Drive in Friant, Fresno County, California. The SCARF site is adjacent to the San Joaquin River approximately 1.1 miles downstream of Friant Dam, immediately west of CDFW's existing San Joaquin Fish Hatchery (SJFH). The Project Area also includes other locations where physical actions that are part of the Proposed Project would take place, including broodstock collection sites, quarantine sites, Chinook salmon production and reintroduction sites, and fisheries management and research areas. The DEIR also makes reference to the Restoration Area, which includes the San Joaquin River below Friant Dam to the confluence of the Merced River, and the Potentially Affected Area, including the portions of the San Joaquin River watershed, Sacramento River watershed, Sacramento-San Joaquin Delta (Delta), San Francisco Bay, and Pacific Ocean that are accessible to salmon released under the Proposed Project.

**PROJECT DESCRIPTION AND ENVIRONMENTAL REVIEW:** The Proposed Project, as analyzed in this DEIR, consists of evaluation of the proposed construction and operation of the SCARF and associated improvements and activities. The primary purpose of the SCARF is to produce Chinook salmon for reintroduction to the San Joaquin River. The SCARF would provide CDFW with the ability to use relatively small numbers of Chinook salmon eggs and juveniles collected from various donor populations to develop a broodstock. This broodstock would enable CDFW to produce a conservation stock that is genetically diverse, while minimizing impacts to source populations. Thus, the SCARF would play an important role in achieving the SJRRP spring-run Chinook salmon population objectives established in the FMP.

The DEIR evaluates the potential environmental impacts of the Proposed Project and four project alternatives: the No Project Alternative (CDFW would not construct the SCARF or other facilities to propagate spring-run or fall-run Chinook salmon); the Spring-Run Only Alternative (which would reintroduce only spring-run Chinook salmon to the Restoration Area; no fall-run Chinook salmon would be actively reintroduced); the Hatchery Broodstock Only Alternative (only the Feather River Fish Hatchery would be used to provide a source of spring-run broodstock; no

wild sources of broodstock would be used); and the SCARF siting Alternative (the SCARF would be constructed at an alternative site).

In accordance with CEQA Guidelines §415087, 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 DEIR concluded that the location for the SCARF facility does 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. Other facilities to be constructed under the Proposed Project would be evaluated for their potential to be located on a hazardous waste site or listed toxic site listed by the Department of Toxic Substances Control (Cal-EPA) once their specific locations have been identified.

**DOCUMENT AVAILABILITY:** The DEIR and supporting documents are available for download from the CDFW's website: <http://www.dfg.ca.gov/news/pubnotice/>.

Printed copies of the DEIR and supporting documents are available to review during regular business hours at CDFW's offices in Fresno and Sacramento (listed below). Copies are also available to review at county libraries in Davis, Fresno, Los Banos, Sacramento, Visalia, Willows, and Yolo (listed below). CDs are available on request by phoning (510) 986-1850 or emailing [REG4SCARFCEQA@wildlife.ca.gov](mailto:REG4SCARFCEQA@wildlife.ca.gov). They will also be available at the public meetings in Fresno and Sacramento. Printed copies are also available at cost plus postage, upon request using the above contact information.

**PUBLIC REVIEW PERIOD:** The DEIR is available for a 45-day public review and comment period, which begins on October 7, 2013 and ends at 5 p.m. on November 21, 2013. **Please send comments on the DEIR at the earliest possible date, but postmarked no later than 5 p.m. on November 21, 2013 in order for your comments to be considered.**

Comments may be mailed to the following address:

California Department of Fish and Wildlife  
ATTN: Gerald Hatler, SCARF Draft EIR Comments  
1234 E. Shaw Avenue  
Fresno, CA 93710

Written comments may also be submitted by email to: [REG4SCARFCEQA@wildlife.ca.gov](mailto:REG4SCARFCEQA@wildlife.ca.gov). Emailed comments are preferred, and should include your name, address, and daytime telephone number so a representative of CDFW 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 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 DEIR. Two public meetings will be held at the following locations and times:

- Fresno, CA: Monday, November 4, 2013 from 6:00 to 8:00 p.m. at the California Retired Teachers Association Building (3930 E. Saginaw Way, Fresno, CA 93726)

- Sacramento, CA: Wednesday, November 6, 2013 from 6:00 to 8:00 p.m. at the Department of Health Care Services and Department of Public Health Building (1500 Capitol Avenue, Sacramento, CA 95814).

Sincerely,

A handwritten signature in black ink, appearing to read 'JRS', with a long horizontal line extending to the right.

Jeffrey R. Single, Ph.D.  
Regional Manager

**Locations where DEIR copies can be reviewed:**

- California Department of Fish and Wildlife, Fresno Office, 1234 East Shaw Avenue, Fresno, CA 93710
- California Department of Fish and Wildlife, Fresno Office, 1130 East Shaw Avenue, Suite 206, Fresno, CA 93710
- California Department of Fish and Wildlife, Sacramento Office, 1416 9<sup>th</sup> Street, 12<sup>th</sup> Floor, Sacramento, CA 95814
- Fresno Central Branch Library, 2420 Mariposa Street, Fresno, CA 93721
- Los Banos Public Library, 1312 South 7<sup>th</sup> Street, Los Banos, CA 93635
- Sacramento Public Library, 828 I Street, Sacramento, CA, 95814
- Visalia Branch Library, 200 West Oak Avenue, Visalia, CA 93291-4931
- Willows Public Library, 201 North Lassen Street, Willows, CA 95988
- Yolo County Library, 37750 Sacramento Street, Yolo, CA 95697
- Yolo County Library, Davis Branch, 315 East 14<sup>th</sup> Street, Davis, CA 95616

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# Notice of DEIR Comment Period Extension

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State of California - Natural Resources Agency  
DEPARTMENT OF FISH AND WILDLIFE  
1234 E. Shaw Avenue  
Fresno, CA 93710  
<http://www.dfg.ca.gov>

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

October 31, 2013

**Re: Extension of Public Review Period and Additional Public Meeting for the Draft Environmental Impact Report Regarding the Proposed Salmon Conservation and Research Facility and Related Management Actions Project**

To Interested Parties:

For a week following the beginning of the public review period for the above-referenced project, technical difficulties prevented the use of the email address at which the California Department of Fish and Wildlife (CDFW) is receiving public comments on the Draft Environmental Impact Report (DEIR). For this reason, the public review period has been extended and will end at **5 p.m. on December 2, 2013**.

In addition, a printed copy of the DEIR is now available for review at the Chico Branch of the Butte County Library, in addition to the other locations where printed copies are available (address below).

Finally, CDFW will be holding an additional public meeting in Chico, as follows:

- Chico, CA: Monday, November 18, 2013 from 6:00 to 8:00 p.m. at the Lakeside Pavilion (2565 California Park Drive, Chico, CA 95928)

The remainder of this letter repeats information from the previously distributed Notice of Availability regarding document availability, the public review period, and public meetings.

**DOCUMENT AVAILABILITY:** The DEIR and supporting documents remain available for download from the CDFW's website: <http://www.dfg.ca.gov/news/pubnotice/>. Printed copies of the DEIR and supporting documents are available to review during regular business hours at CDFW's offices in Fresno and Sacramento (listed below). Copies are also available to review at county libraries in Chico, Davis, Fresno, Los Banos, Sacramento, Visalia, Willows, and Yolo (listed below). CDs are available on request by phoning (510) 986-1850 or emailing [REG4SCARFCEQA@wildlife.ca.gov](mailto:REG4SCARFCEQA@wildlife.ca.gov). They will also be available at the public meetings in Fresno, Sacramento and Chico. Printed copies are also available at cost plus postage, upon request using the above contact information.

**PUBLIC REVIEW PERIOD:** The DEIR is available for a 56-day public review and comment period, which begins on October 7, 2013 and ends at 5 p.m. on December 2, 2013. **Please send comments on the DEIR at the earliest possible date, but postmarked no later than 5 p.m. on December 2, 2013 in order for your comments to be considered.**

Comments may be mailed to the following address:

California Department of Fish and Wildlife  
ATTN: Gerald Hatler, SCARF Draft EIR Comments  
1234 E. Shaw Avenue  
Fresno, CA 93710

Written comments may also be submitted by email to: [REG4SCARFCEQA@wildlife.ca.gov](mailto:REG4SCARFCEQA@wildlife.ca.gov). Emailed comments are preferred, and should include your name, address, and daytime

telephone number so a representative of CDFW 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 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 DEIR. Three public meetings will be held at the following locations and times:

- Fresno, CA: Monday, November 4, 2013 from 6:00 to 8:00 p.m. at the California Retired Teachers Association Building (3930 E. Saginaw Way, Fresno, CA 93726)
- Sacramento, CA: Wednesday, November 6, 2013 from 6:00 to 8:00 p.m. at the Department of Health Care Services and Department of Public Health Building (1500 Capitol Avenue, Sacramento, CA 95814)
- Chico, CA: Monday, November 18, 2013 from 6:00 to 8:00 p.m. at the Lakeside Pavilion (2565 California Park Drive, Chico, CA 95928).

Sincerely,



Jeffrey R. Single, Ph.D.  
Regional Manager

**Locations where DEIR copies can be reviewed:**

- California Department of Fish and Wildlife, Fresno Office, 1234 East Shaw Avenue, Fresno, CA 93710
- California Department of Fish and Wildlife, Fresno Office, 1130 East Shaw Avenue, Suite 206, Fresno, CA 93710
- California Department of Fish and Wildlife, Sacramento Office, 1416 9<sup>th</sup> Street, 12<sup>th</sup> Floor, Sacramento, CA 95814
- Chico Branch of the Butte County Library, 1108 Sherman Avenue, Chico, CA 95926
- Fresno Central Branch Library, 2420 Mariposa Street, Fresno, CA 93721
- Los Banos Public Library, 1312 South 7<sup>th</sup> Street, Los Banos, CA 93635
- Sacramento Public Library, 828 I Street, Sacramento, CA, 95814
- Visalia Branch Library, 200 West Oak Avenue, Visalia, CA 93291-4931
- Willows Public Library, 201 North Lassen Street, Willows, CA 95988
- Yolo County Library, 37750 Sacramento Street, Yolo, CA 95697
- Yolo County Library, Davis Branch, 315 East 14<sup>th</sup> Street, Davis, CA 95616

# DEIR 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 # 2012111083

Project Title: San Joaquin River Restoration Program: Salmon Conservation and Research Facility and Related Management

Lead Agency: California Department of Fish and Wildlife Contact Person: Gerald Hatler
Mailing Address: 1234 E. Shaw Avenue Phone: 559/243-4014
City: Fresno Zip: 93710 County: Fresno

Project Location: County: Fresno, Madera, Merced, Shasta, City/Nearest Community: Friant; various

Cross Streets: 17372 Brook Trout Drive near North Friant Road Zip Code: 93626

Longitude/Latitude (degrees, minutes and seconds): ... N / ... W Total Acres: ...

Assessor's Parcel No.: ... Section: ... Twp.: ... Range: ... Base: ...

Within 2 Miles: State Hwy #: ... Waterways: ...
Airports: ... Railways: ... Schools: ...

Document Type:

- CEQA: [ ] NOP [x] Draft EIR NEPA: [ ] NOI Other: [ ] Joint Document
[ ] Early Cons [ ] Supplement/Subsequent EIR [ ] EA [ ] Final Document
[ ] Neg Dec (Prior SCH No.) [ ] Draft EIS [ ] Other:
[ ] Mit Neg Dec Other:

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:

Development Type:

- [ ] Residential: Units Acres
[ ] Office: Sq.ft. Acres Employees [ ] Transportation: Type
[ ] Commercial: Sq.ft. Acres Employees [ ] Mining: Mineral
[ ] Industrial: Sq.ft. Acres Employees [ ] Power: Type MW
[ ] Educational: [ ] Waste Treatment: Type MGD
[ ] Recreational: [ ] Hazardous Waste: Type
[ ] Water Facilities: Type MGD [x] Other: fish hatchery

Project Issues Discussed in Document:

- [x] Aesthetic/Visual [ ] Fiscal [x] Recreation/Parks [x] Vegetation
[x] Agricultural Land [x] Flood Plain/Flooding [ ] Schools/Universities [x] Water Quality
[x] Air Quality [ ] Forest Land/Fire Hazard [x] Septic Systems [x] Water Supply/Groundwater
[x] Archeological/Historical [x] Geologic/Seismic [x] Sewer Capacity [x] Wetland/Riparian
[x] Biological Resources [x] Minerals [x] Soil Erosion/Compaction/Grading [x] Growth Inducement
[ ] Coastal Zone [x] Noise [x] Solid Waste [x] Land Use
[x] Drainage/Absorption [x] Population/Housing Balance [x] Toxic/Hazardous [x] Cumulative Effects
[ ] Economic/Jobs [x] Public Services/Facilities [x] Traffic/Circulation [ ] Other:

Present Land Use/Zoning/General Plan Designation:

fish hatchery

Project Description: (please use a separate page if necessary)

The primary purpose of the Salmon Conservation and Research Facility (SCARF) is to produce Chinook salmon for reintroduction to the San Joaquin River. The SCARF also would serve as a research facility for studies related to Chinook salmon in the San Joaquin River Restoration Program Restoration Area. The SCARF would provide CDFW with the ability to use relatively small numbers of Chinook salmon eggs and juveniles collected from various donor populations to develop a broodstock. This broodstock would enable CDFW to produce a conservation stock that is genetically diverse, while minimizing impacts to source populations. The SCARF would include structures, a parking area, water supply and wastewater systems, drainage and stormwater management, an access road, up to two staff residences, and other ancillary improvements.

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".

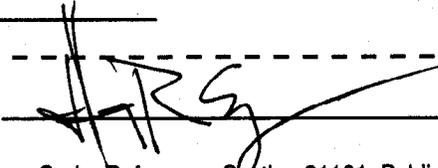
- |   |  |
|---|--|
| <input checked="" type="checkbox"/> Air Resources Board                   | <input type="checkbox"/> Office of Historic Preservation                     |
| <input checked="" type="checkbox"/> Boating & Waterways, Department of    | <input type="checkbox"/> Office of Public School Construction                |
| <input type="checkbox"/> California Emergency Management Agency           | <input checked="" 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 #6                  | <input type="checkbox"/> Public Utilities Commission                         |
| <input type="checkbox"/> Caltrans Division of Aeronautics                 | <input checked="" type="checkbox"/> Regional WQCB #5                         |
| <input 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 checked="" type="checkbox"/> San Joaquin River Conservancy            |
| <input 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 type="checkbox"/> Delta Protection Commission                      | <input type="checkbox"/> SWRCB: Clean Water Grants                           |
| <input type="checkbox"/> Education, Department of                         | <input type="checkbox"/> SWRCB: Water Quality                                |
| <input type="checkbox"/> Energy Commission                                | <input type="checkbox"/> SWRCB: Water Rights                                 |
| <input type="checkbox"/> Fish & Game Region #                             | <input type="checkbox"/> Tahoe Regional Planning Agency                      |
| <input type="checkbox"/> Food & Agriculture, Department of                | <input type="checkbox"/> Toxic Substances Control, Department of             |
| <input type="checkbox"/> Forestry and Fire Protection, Department of      | <input checked="" 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 10/7/2013 Ending Date 11/21/2013

**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 94612</u>	City/State/Zip: _____
Contact: <u>Michael Stevenson</u>	Phone: _____
Phone: <u>510/986-1852</u>	

Signature of Lead Agency Representative:  Date: 10-2-13

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.

# Newspaper Advertisements on DEIR Availability and Public Meetings

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# Chico Enterprise-Record

400 E. Park Ave.  
Chico, Ca 95928  
530-896-7702  
erlegal@chicoer.com

HORIZON WATER AND ENVIRONMENT  
180 GRAND AVE SUITE 1405  
OAKLAND CA 94612

## IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA, IN AND FOR THE COUNTY OF BUTTE

In The Matter Of  
**PUBLIC MEETING.**

### AFFIDAVIT OF PUBLICATION

STATE OF CALIFORNIA }  
COUNTY OF BUTTE } **SS.**

The undersigned resident of the county of Butte, State of California, says:

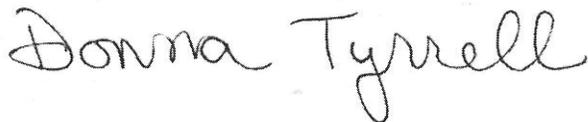
That I am, and at all times herein mentioned was a citizen of the United States and not a party to nor interested in the above entitled matter; that I am the principal clerk of the printer and publisher of

**The Chico Enterprise-Record  
The Oroville Mercury-Register**

That said newspaper is one of general circulation as defined by Section 6000 Government Code of the State of California, Case No. 26796 by the Superior Court of the State of California, in and for the County of Butte; that said newspaper at all times herein mentioned was printed and published daily in the City of Chico and County of Butte; that the notice of which the annexed is a true printed copy, was published in said newspaper on the following days:

**10/7/2013**

Dated October 10, 2013  
at Chico, California



(Signature)

Legal No. **0004990179**

**Join us for a  
CEQA public meeting  
on the  
Salmon Conservation and Research  
Facility and Related Management Actions  
EIR**

The California Department of Fish and Wildlife is circulating a Draft Environmental Impact Report (DEIR) for the Salmon Conservation and Research Facility and Related Management Actions Project for a 45-day review public review and comment period beginning on Monday October 7, 2013 and ending on Thursday, November 21, 2013. During this period, CDFW will hold two public meetings, in Fresno and Sacramento. The purpose of public circulation and the public meetings is to provide agencies and interested individuals with opportunities to comment on or express concerns regarding the contents of the DEIR. There will be two meetings, as follows:

**Monday November 4th " 6:00 p.m.  
California Retired Teachers Association building  
3930 E. Saginaw Way  
Fresno, CA 93726**

**Wednesday November 6th " 6:00 p.m.  
Sacramento Department of Health Care Services and De-  
partment of Public Health Building  
1500 Capitol Avenue  
Sacramento, CA 95814**

**Website: <http://www.dfg.ca.gov/news/pubnotice/>**

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.  
Publish: 10/7/13

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HORIZON WATER AND ENVIRONMENT

180 GRAND AVENUE #1405

OAKLAND, CA 94612

# PROOF OF PUBLICATION

## COUNTY OF FRESNO STATE OF CALIFORNIA

### EXHIBIT A.

The undersigned states:

McClatchy Newspapers in and on all dates herein stated was a corporation, and the owner and publisher of The Fresno Bee.

The Fresno Bee is a daily newspaper of general circulation now published, and on all-the-dates herein stated was published in the City of Fresno, County of Fresno, and has been adjudged a newspaper of general circulation by the Superior Court of the County of Fresno, State of California, under the date of November 22, 1994, Action No. 520058-9.

The undersigned is and on all dates herein mentioned was a citizen of the United States, over the age of twenty-one years, and is the principal clerk of the printer and publisher of said newspaper; and that the notice, a copy of which is hereto annexed, marked Exhibit A, hereby made a part hereof, was published in The Fresno Bee in each issue thereof (in type not smaller than nonpareil), on the following dates.

*Oct. 7, 2013*

PUBLIC NOTICE

#13982  
Join us for a  
**CEQA public meeting**  
on the  
**Salmon Conservation and Research  
Facility and Related Management  
Actions EIR**

The California Department of Fish and Wildlife is circulating a Draft Environmental Impact Report (DEIR) for the Salmon Conservation and Research Facility and Related Management Actions Project for a 45-day review public review and comment period beginning on Monday October 7, 2013 and ending on Thursday, November 21, 2013. During this period, CDFW will hold two public meetings, in Fresno and Sacramento. The purpose of public circulation and the public meetings is to provide agencies and interested individuals with opportunities to comment on or express concerns regarding the contents of the DEIR. There will be two meetings, as follows:

**Monday November 4th 6:00 p.m.**  
California Retired Teachers Association building  
3930 E. Saginaw Way  
Fresno, CA 93726

**Wednesday November 6th 6:00 p.m.**  
Sacramento Department of Health Care Services  
and Department of Public Health Building  
1500 Capitol Avenue  
Sacramento, CA 95814

Website: <http://www.dfg.ca.gov/news/pubnotice/>

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.

I certify (or declare) under penalty of perjury that the foregoing is true and correct.

Dated OCTOBER 7, 2013  
*W. Williams*

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# The Sacramento Bee

P.O. Box 15779 • 2100 Q Street • Sacramento, CA 95852

**HORIZON WATER & ENVIRONMENT  
180 GRAND AVE #1405  
OAKLAND, CA 94612**

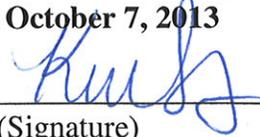
DECLARATION OF PUBLICATION  
(C.C.P. 2015.5)

COUNTY OF SACRAMENTO  
STATE OF CALIFORNIA

I am a citizen of the United States and a resident of the County aforesaid; I am over the age of eighteen years, and not a party to or interested in the above entitled matter. I am the printer and principal clerk of the publisher of The Sacramento Bee, printed and published in the City of Sacramento, County of Sacramento, State of California, daily, for which said newspaper has been adjudged a newspaper of general circulation by the Superior Court of the County of Sacramento, State of California, under the date of September 26, 1994, Action No. 379071; that the notice of which the annexed is a printed copy, has been published in each issue thereof and not in any supplement thereof on the following dates, to wit:

**October 7, 2013**

I certify (or declare) under penalty of perjury that the foregoing is true and correct and that this declaration was executed at Sacramento, California, on **October 7, 2013**

  
\_\_\_\_\_  
(Signature)

**NO 141 PUBLIC NOTICE**

Join us for a  
**CEQA public meeting**  
on the  
**Salmon Conservation and Research  
Facility and Related Management Actions  
EIR**

The California Department of Fish and Wildlife is circulating a Draft Environmental Impact Report (DEIR) for the Salmon Conservation and Research Facility and Related Management Actions Project for a 45-day review public review and comment period beginning on Monday October 7, 2013 and ending on Thursday, November 21, 2013. During this period, CDFW will hold two public meetings, in Fresno and Sacramento. The purpose of public circulation and the public meetings is to provide agencies and interested individuals with opportunities to comment on or express concerns regarding the contents of the DEIR. There will be two meetings, as follows:

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California Retired Teachers Association building  
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Fresno, CA 93726

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Sacramento Department of Health Care Services and Department of Public Health Building  
1500 Capitol Avenue  
Sacramento, CA 95814

Website: <http://www.dfg.ca.gov/news/pubnotice/>

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# Chico Enterprise-Record

400 E. Park Ave.  
Chico, Ca 95928  
530-896-7702  
erlegal@chicoer.com

HORIZON WATER AND ENVIRONMENT  
180 GRAND AVE SUITE 1405  
OAKLAND CA 94612

## IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA, IN AND FOR THE COUNTY OF BUTTE

In The Matter Of  
**CEQA Public Meeting.**

### AFFIDAVIT OF PUBLICATION

STATE OF CALIFORNIA }  
COUNTY OF BUTTE } **SS.**

The undersigned resident of the county of Butte, State of California, says:

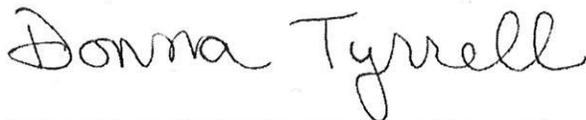
That I am, and at all times herein mentioned was a citizen of the United States and not a party to nor interested in the above entitled matter; that I am the principal clerk of the printer and publisher of

**The Chico Enterprise-Record  
The Oroville Mercury-Register**

That said newspaper is one of general circulation as defined by Section 6000 Government Code of the State of California, Case No. 26796 by the Superior Court of the State of California, in and for the County of Butte; that said newspaper at all times herein mentioned was printed and published daily in the City of Chico and County of Butte; that the notice of which the annexed is a true printed copy, was published in said newspaper on the following days:

**11/4/2013**

Dated November 08, 2013  
at Chico, California



(Signature)

Legal No. **0005016904**

**Join us for a  
CEQA public meeting  
on the  
Salmon Conservation and Research Facility and Related  
Management Actions  
EIR**

The California Department of Fish and Wildlife is circulating a Draft Environmental Impact Report (DEIR) for the Salmon Conservation and Research Facility and Related Management Actions Project for a 56-day review public review and comment period beginning on Monday October 7, 2013 and ending on Monday, December 2, 2013. During this period, CDFW will hold three public meetings, in Fresno, Sacramento and Chico. The purpose of public circulation and the public meetings is to provide agencies and interested individuals with opportunities to comment on or express concerns regarding the contents of the DEIR. There will be three meetings, as follows:

**Monday November 4th @ 6:00 p.m.  
California Retired Teachers Association building  
3930 E. Saginaw Way  
Fresno, CA 93726**

**Wednesday November 6th @ 6:00 p.m.  
Sacramento Department of Health Care Services and Department of Public Health Building  
1500 Capitol Avenue  
Sacramento, CA 95814**

**Monday November 18th @ 6:00 p.m.  
Lakeside Pavilion  
2565 California Park Drive  
Chico, CA 95928**

**Website: <http://www.dfg.ca.gov/news/pubnotice/>**

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.  
Publish: 11/4/13

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**The Fresno Bee**

1626 E Street  
 Fresno, CA 93786  
 (559) 441-6271

**ADVERTISING MEMO INVOICE**

HORIZON WATER AND ENVIRONMENT  
 180 GRAND AVENUE #1405  
 OAKLAND, CA 94612

ACCOUNT NUMBER: F- HORI5109861617  
 AD NUMBER: 043976  
 DATE: NOVEMBER 4, 2013  
 INVOICE NUMBER: T110404397601

PLEASE RETURN DUPLICATE WITH PAYMENT

START DATE	END DATE	DESCRIPTION	CLASS	LINES/ INCHES	# RUN	TOTAL LINES	RATE	TOTAL AMOUNT
11/04/13	11/04/13	PUBLIC NOTICE # 43976 Join us	894	126	1	126	\$ .00	\$621.18
							TOTAL	\$621.18

RATE SHOWN SUBJECT TO ADJUSTMENT AT THE END OF CONTRACT YEAR  
 DEPENDING ON AMOUNT OF SPACE USED

**The Fresno Bee**

1626 E Street  
 Fresno, CA 93786  
 (559) 441-6271

**ADVERTISING MEMO INVOICE**

HORIZON WATER AND ENVIRONMENT  
 180 GRAND AVENUE #1405  
 OAKLAND, CA 94612

ACCOUNT NUMBER: F- HORI5109861617  
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11/04/13	11/04/13	PUBLIC NOTICE # 43976 Join us	894	126	1	126	\$ .00	\$621.18
							TOTAL	\$621.18

RATE SHOWN SUBJECT TO ADJUSTMENT AT THE END OF CONTRACT YEAR  
 DEPENDING ON AMOUNT OF SPACE USED

FMEMO

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# The Sacramento Bee

P.O. Box 15779 • 2100 Q Street • Sacramento, CA 95852

**HORIZON WATER & ENVIRONMENT  
PATRICK DONALDSON  
180 GRAND AVE #1405  
OAKLAND, CA 94612**

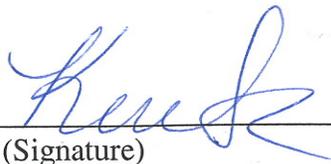
DECLARATION OF PUBLICATION  
(C.C.P. 2015.5)

COUNTY OF SACRAMENTO  
STATE OF CALIFORNIA

I am a citizen of the United States and a resident of the County aforesaid; I am over the age of eighteen years, and not a party to or interest in the above entitled matter. I am the printer and principal clerk of the publisher of The Sacramento Bee, printed and published in the City of Sacramento, County of Sacramento, State of California, daily, for which said newspaper has been adjudged a newspaper of general circulation by the Superior Court of the County of Sacramento, State of California, under the date of September 26, 1994, Action No. 379071; that the notice of which the annexed is a printed copy, has been published in each issue thereof and not in any supplement thereof on the following dates, to wit:

**November 4, 2013**

I certify (or declare) under penalty of perjury that the foregoing is true and correct and that this declaration was executed at Sacramento, California, on **November 4, 2013**

  
(Signature)

**NO 212 PUBLIC NOTICE**

Join us for a  
**CEQA public meeting**  
on the  
**Salmon Conservation and Research  
Facility and Related Management Actions  
EIR**

The California Department of Fish and Wildlife is circulating a Draft Environmental Impact Report (DEIR) for the Salmon Conservation and Research Facility and Related Management Actions Project for a 56-day review public review and comment period beginning on Monday October 7, 2013 and ending on Monday, December 2, 2013. During this period, CDFW will hold three public meetings, in Fresno, Sacramento and Chico. The purpose of public circulation and the public meetings is to provide agencies and interested individuals with opportunities to comment on or express concerns regarding the contents of the DEIR. There will be three meetings, as follows:

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Fresno, CA 93726

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Sacramento Department of Health Care Services and  
Department of Public Health Building  
1500 Capitol Avenue  
Sacramento, CA 95814

**Monday November 18th 6:00 p.m.**  
Lakeside Pavilion  
2565 California Park Drive  
Chico, CA 95928

Website: <http://www.dfg.ca.gov/news/pubnotice/>

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## Distribution List for DEIR Notices

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Last	First	Title	Agency/Affiliation	Street Address	City	Zip
			120 Duck Club	6439 North Harrison	Fresno	93711
Stearns	Mike		4W Ranch	47375 W Dakota Avenue	Firebaugh	93622
Willis	Michael and Wendy		4-W Ranch	12593 Elgin Road	Dos Palos	93620
Adolphson	Gordon	Owner	Adolphson Farming	5570 N Madera Avenue	Kerman	93630
Geringer	Tricia	Director of Government Affairs	Agricultural Council of California	1000 G Street, Suite 230	Sacramento	95814-6800
			Alameda County Board of Supervisors	1221 Oak Street, Suite 536	Oakland	94612
Lopez	Albert		Alameda County Planning Department	399 Elmhurst, Room 136	Hayward	94544
			Alameda County Water District	43885 South Grimmer Boulevard	Fremont	94538
Catania	Roy		Aliso Water District	10302 Av 7 1/2	Firebaugh	93622
			Alpaugh Irrigation District	5458 Road 38	Alpaugh	93201
Leonard	Bill		American Indian Council of Mariposa County	P.O. Box 1200	Mariposa	95338
			American Indian Movement Grand Governing Council	P.O. Box 13521	Minneapolis	55414
Haynes	Brenda	President	Anderson-Cottonwood Irrigation District	2810 Silver Street	Anderson	96007
Andrews	Johnny		Andrews Farms, APartnership	6635 West Andrews Road	Dos Palos	93620
Vlamis	Barbara	Executive Director	AquAlliance	PO Box 4024	Chico	95927
Collop	Steve		Arvin-Edison Water Storage District	20401 Bear Mountain Boulevard	Arvin	93203
Frick	Howard	President	Arvin-Edison Water Storage District	20401 Bear Mountain Boulevard	Arvin	93203
			Association of California Water Agencies	910 K Street, Suite 100	Sacramento	95814
Vincent	Darrell		B B Limited	78 Hollister Ranch Road	Gaviota	93117
Ward	Bill		B B Limited	78 Hollister Ranch Road	Gaviota	93117
Baker	Barry		Baker, Barry S. & Byron R. et al.	45499 W. Panoche Road	Firebaugh	93622

Last	First	Title	Agency/Affiliation	Street Address	City	Zip
McLeod	James	President	Banta-Carbona Irrigation District	3514 West Lehman Road	Tracy	95304
Barger	Ray and Darlene		Barger Farms	4256 Columbia Road	Firebaugh	93622
Blaisdell	Lynette	President	Bella Vista Water District	11368 East Stillwater Way	Redding	96003
Edwards	James	Chairperson	Berry Creek Rancheria of Maidu Indians	5 Tyme Way	Oroville	95966
		Cultural Resources Coordinator	Berry Creek Rancheria of Maidu Indians	5 Tyme Way	Oroville	95966
Hutchins Kipp	Liz	Chairperson	Big Sandy Rancheria of Mono Indians	P. O. Box 337/3702	Auberry	93602
Spain	Bob		Bob Spain, Jr. Trust	20358 State Highway 33	Dos Palos	93620
Lawrence	John Mark		Bowles Farming Company	11078 Sunset Boulevard	Los Angeles	90049
Michael	Cannon		Bowles Farming Company	11609 S. Hereford Road	Los Banos	93635
			Bownick Partnership	505 Sansome Street 1975	San Francisco	94111
Morningstar Pope	Rhonda	Chairperson	Buena Vista Rancheria	1418 20th Street, Suite 200	Sacramento	95811
			Buena Vista Rancheria	1418 20th Street, Suite 200	Sacramento	95811
			Bufkin, Otis I Tr	1111 E. Simpson Avenue	Fresno	93704
Reeves	Christopher		Bureau of Indian Affairs	2800 Cottage Way	Sacramento	95825
Thomas	Jennifer		Bureau of Indian Affairs	2800 Cottage Way	Sacramento	95825
			Bureau of Land Management - San Joaquin River Gorge	P.O. Box 248	Auberry	93602
Rice	Erin		Bureau of Reclamation	2800 Cottage Way	Sacramento	95825
Bryant	Robert	President	Butte Slough Irrigation Company	P.O. Box 129	Meridian	95957
Reynolds	Ren		Butte Tribal Council	1693 Mt. Ida Road	Oroville	95966
Teixeira	Tom		Butts, Carolyn	9715 Denton Leake Road	Dos Palos	93620
Kagehiro	Russell	President	Byron-Bethany Irrigation District	7995 Bruns Road	Byron	94514
Gomez	Daniel	Chairman	Cachil DeHe Band of Wintun Indians	3730 Highway 45	Colusa	95932
Mitchum, Jr.	Wayne		Cachil DeHe Band of Wintun Indians	3730 Highway 45	Colusa	95932

Last	First	Title	Agency/Affiliation	Street Address	City	Zip
Grimes	Gloria	Chairperson	Calaveras Band of Mi-Wuk Indians	P.O. Box 899	West Point	95255
Grimes	Debra	Cultural Resources Specialist	Calaveras Band of Mi-Wuk Indians	P.O. Box 1015	West Point	95255
Lewis	Adam	Tribal Preservation Assistant	Calaveras Band of Mi-Wuk Indians	P.O. Box 899	West Point	95255
Williams	Lois		Calaveras Band of Mi-Wuk Indians	P.O. Box 876	West Point	95255
Wilson	Charles	Chairperson	Calaveras Band of Mi-Wuk Indians	546 Bald Mountain Road	West Point	95255
Fisher	Arvada	Vice Chairperson	Calaveras County Mountain Miwok Indian Council	416 Railroad Flat	Railroad Flat	95248
			California Air Resources Board	1001 I Street	Sacramento	95814
			California Association of Resource Conservation Districts	801 K Street, Suite 1318	Sacramento	95814-3500
Taylor	Daniel	Central Valley/Sierra Nevada Conservation Coordinator	California Audubon Society	765 University Avenue	Sacramento	95825
Sweet	Scott	President	California Bass Federation	6116 Al Way	Simi Valley	93063
			California Business, Transportation, and Housing Agency	980 9th Street, Suite 2450	Sacramento	95814
			California Coastal Commission	725 Front Street, Suite 300	Santa Cruz	95060
Sotelo	Mike		California Department of Boating and Waterways	2000 Evergreen Street, Suite 100	Sacramento	95815
Lowrie	John M.		California Department of Conservation	801 K Street, MS 24-01	Sacramento	95814
Nechodom	Mark		California Department of Conservation	801 K Street, MS 24-01	Sacramento	95814
Bonham	Chuck		California Department of Fish and Wildlife	1416 9th Street, 12th Floor	Sacramento	95814
Hatler	Gerald		California Department of Fish and Wildlife	1234 East Shaw Avenue	Fresno	93710

Last	First	Title	Agency/Affiliation	Street Address	City	Zip
Little	Shannon		California Department of Fish and Wildlife	1416 9 <sup>th</sup> Street, Suite 1341	Sacramento	95814
Marston	Dean	Environmental Program Manager	California Department of Fish and Wildlife	1234 East Shaw Avenue	Fresno	93710
Single	Jeffrey		California Department of Fish and Wildlife	1234 East Shaw Avenue	Fresno	93710
Vance	Julie		California Department of Fish and Wildlife	1234 East Shaw Avenue	Fresno	93710
Yoshioka	Janice	Staff Services Analyst	California Department of Fish and Wildlife, Region 4	1234 East Shaw Avenue	Fresno	93710
Vail	Nita	Executive Officer	California Department of Food and Agriculture	1220 N Street	Sacramento	95864
Hendricks	Paul		California Department of Forestry and Fire Protection	96 Kendal Court	Chico	95973
Coleman	Ruth	Director	California Department of Parks and Recreation	1416 9 <sup>th</sup> Street	Sacramento	95814
Mellon	Knox		California Department of Parks and Recreation	1416 9 <sup>th</sup> Street, Room 1442	Sacramento	95814
Raphael	Debbie	Director	California Department of Toxic Substances Control	1001 I Street	Sacramento	95814-2828
Ajise	Kome	Director	California Department of Transportation, District 10	1976 East Charter Way	Stockton	95205
Cox	Christine		California Department of Transportation, District 6	2015 East Shields Avenue, Suite 100	Fresno	93726
Ghilarducci	Mark	Secretary	California Emergency Management Agency	3650 Schriever Avenue	Mather	95655
		Deputy Secretary for Science and the Environment	California Environmental Protection Agency	1001 I Street	Sacramento	95814
			California Farm Bureau Federation	2300 River Plaza Drive	Sacramento	95833-3239
			California Farm Water Coalition	5999 Freeport Boulevard	Sacramento	95822

Last	First	Title	Agency/Affiliation	Street Address	City	Zip
			California Fish and Wildlife Commission	1416 Ninth Street, Room 1320	Sacramento	95833-2090
			California Highway Patrol	6 Massie Court	Sacramento	95823
			California Native Plant Society	1424 South Van Ness Avenue #A	San Francisco	94110-4024
Laird	John	Secretary	California Natural Resources Agency	1416 9th Street, Suite 1311	Sacramento	95814
Youngsen	Jim		California Natural Resources Agency - Policy Planning Department	1416 9th Street, Room 1311	Sacramento	95814
Donaldson	Milford	State Historic Preservation Officer	California Office of Historic Preservation	1416 9th Street, Room 1442	Sacramento	95814
Jennings	Bill	Executive Director	California Sportfishing Protection Alliance	3536 Rainier Avenue	Stockton	95204
Schutes	Chris		California Sportfishing Protection Alliance	1360 Neilson Street	Berkeley	94702
			California State Counties Association	1100 K Street, Suite 101	Sacramento	95814
Brown	Judy		California State Lands Commission	100 Howe Avenue, Suite 100 South	Sacramento	95825
Lehman	Steve		California State Lands Commission	100 Howe Avenue, Suite 100 S.	Sacramento	95825
Oggins	Cy		California State Lands Commission	100 Howe Avenue, Suite 100 South	Sacramento	95825-8202
Smith	Jane	Public Land Management Specialist	California State Lands Commission	100 Howe Avenue, Suite 100 South	Sacramento	95825-8202
Kelly	Patrick	Ph.D .	California State University, Stanislaus	1 University Circle	Turlock	95382
		General Manager	California State Water Contractors	1121 L Street, Suite 1050	Sacramento	95814
Chapman	Jack	President	California Striped Bass Association	5042 Caviar Port	Fair Oaks	95628
			California Valley Land Company, Inc.	P.O. Box 219	Huron	93234
Krieger	Carolee	President	California Water Impact Network	808 Romero Canyon Road	Santa Barbara	93108
Stroshane	Tim	Senior Research Associate	California Water Impact Network	639 San Carlos Avenue	Albany	94706

Last	First	Title	Agency/Affiliation	Street Address	City	Zip
			California Waterfowl Association	4630 Northgate Boulevard, Suite 150	Sacramento	95834
			CalTrout	360 Pine Street, 4th Floor	San Francisco	94104
			Cardella Family Limited Partnership	39984 W North Avenue	Mendota	93640
			Carter Mutual Water District	4746 River Road	Colusa	95932-4200
Federighi	Douglas		Castle Duck Club	1051 MacArthur Blvd.	San Leandro	94577
			Cawelo Water District	17207 Industrial Farm Road	Bakersfield	93308
Johnston	Terry	President	Centinella Water District	P.O. Box 1596	Patterson	95363
White	Chris	General Manager	Central California Irrigation District	1335 W I St	Los Banos	93635-4545
Biagi	George	President	Central Delta Water Agency	235 East Weber Avenue	Stockton	95201
Thompson	Grant	President	Central San Joaquin Water Conservation District	311 East Main Street, Suite 202	Stockton	95202
Marino	Len		Central Valley Flood Protection Board	3310 El Camino Avenue, Room 151	Sacramento	95821
Punia	Jay	Executive Officer	Central Valley Flood Protection Board	3310 El Camino Avenue	Sacramento	95821
			Central Valley Miwok Tribe	10601 North Escondido Place	Stockton	95212
Denn	Sandy	President	Central Valley Project Water Association	1521 I Street	Sacramento	95814
Ditto	TJ		Central Valley Regional Water Quality Control Board	11020 Sun Center Drive, Suite 200 Attn: Rudy Schnagl	Rancho Cordova	95670
Schagl	Rudy		Central Valley Regional Water Quality Control Board	11020 Sun Center Drive, Suite 200	Rancho Cordova	95670
Vaughn	Greg	Senior WRCE	Central Valley Regional Water Quality Control Board	11020 Sun Center Drive, Suite 200	Rancho Cordova	95670
Wass	Lonnie	Supervising Engineer	Central Valley Regional Water Quality Control Board	1685 E Street, Suite 200	Fresno	93706
Tull	Rob		CH2M Hill	2485 Natomas Park Drive, Suite 600	Sacramento	95833
			Chicken Ranch Rancheria	16955 Nelson Road	Jamestown	95327
Mathiesen	Lloyd	Chairperson	Chicken Ranch Rancheria of Me-Wuk	P.O. Box 1159	Jamestown	95327

Last	First	Title	Agency/Affiliation	Street Address	City	Zip
Powell	Melissa	Cultural Resources Coor.	Chicken Ranch Rancheria of Me-Wuk	P.O. Box 1159	Jamestown	95327
Smith	Sally	Tribal Administrator	Chicken Ranch Rancheria of Me-Wuk	P.O. Box 1159	Jamestown	95327
			Choinumni Tribe	2736 Palo Alto	Clovis	93611
Planas	Lorrie	Chairperson	Choinumni Tribe, Choinumni/Mono	2736 Palo Alto	Clovis	93611
Brown	Jerry		Chowchilla Tribe of Yokuts	10553 N. Rice Road	Fresno	93720
Maddalena	Dan	President	Chowchilla Water District	327 South Chowchilla Boulevard	Chowchilla	93610
Welch	Doug	General Manager	Chowchilla Water District	327 S. Chowchilla Boulevard	Chowchilla	93610
Nicoletti	Cynthia		Christiana-Santa Rita Farms	16035 Indiana Road	Dos Palos	93620
		Mayor	City of Avenal	919 Skyline Boulevard	Avenal	93204
		Mayor	City of Coalinga	155 West Durian Avenue	Concord	93210
		Mayor	City of Dos Palos	2174 Blossom Street	Dos Palos	93620
		Mayor	City of Firebaugh	1133 P Street	Firebaugh	93622-2230
			City of Folsom	50 Natoma Street	Folsom	95630
Swearengin	Ashley	Mayor	City of Fresno	2600 Fresno Street, Room 3065	Fresno	93721
		Mayor	City of Huron	36311 S. Lassen Avenue	Huron	93234
Townsend	Scott	Manager	City of Lindsay	251 E Honolulu Street	Lindsay	93247
		Mayor	City of Los Banos	520 J Street	Los Banos	93635
		Mayor	City of Madera	205 West 4th Street	Madera	93637
		Mayor	City of Mendota	643 Quince Street	Mendota	93640
			City of Merced, Planning Department	678 West 18th Street	Merced	95340
Little	Bill	Manager	City of Orange Cove	633 6th Street	Orange Cove	93646
Boesetti	Rick	Mayor	City of Redding	777 Cypress Avenue	Redding	96001-2718
		Mayor	City of Roseville	2005 Hilltop Circle	Roseville	95747
Kerridge	Ray	City Manager	City of Sacramento	1395 35th Avenue	Sacramento	95616
			City of Tracy	City Hall, 325 East 10th Street	Tracy	95376

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Silva	Gary	President	Clay Water District	13070 Twin Cities Road	Herald	95638
Connley	Clayton		Clayton Family Partnership	P.O. Box 24	El Nido	95317
			Coalition for Urban/Rural Environmental Stewardship	531-D North Alta Avenue	Dinuba	93618-3203
Coburn	Shawn		Coburn Family Trust	8174 Eucalyptus Road	Dos Palos	93620
Coelho	Joe		Coelho Family Trust	5494 West Mt. Whitney Avenue	Riverdale	93656
			Cold Springs Rancheria	32861 Sycamore Road #300	Tollhouse	93667
Marquez	Robert	Chairperson	Cold Springs Rancheria of Mono Indians	P. O. Box 209	Tollhouse	93667
Cubler	Pamela		Colfax-Todds Valley Consolidated Tribe	P.O. Box 734	Foresthill	95631
Marks	Judith		Colfax-Todds Valley Consolidated Tribe	1068 Silverton Circle	Lincoln	95648
Houk	Randall	General Manager	Columbia Canal Company	6770 Ave 7 1/2	Firebaugh	93622
Marshall	Mark	Chair	Colusa County	546 Jay Street	Colusa	95932-2400
Carter	Thomas	President	Colusa County Water District	840 1st Street	Arbuckle	95912
Massa	Larry	President	Colusa Drain Mutual Water Company	520 Market Street #3	Colusa	95932
			Consolidated Irrigation District	2255 Chandler Street	Selma	93662-3041
			Contra Costa County Board of Supervisors	651 Pine Street	Martinez	94553
Orloff	Leah		Contra Costa Water District	1331 Concord Avenue	Concord	94520
			Corcoran Irrigation District	P.O. Box 566	Corcoran	93212
			Corning Water District	22240 Gallagher Avenue	Corning	96021
			Cortina Water District	P.O. Box 757	Arbuckle	95912-0757
Couthard	Jeff		Coulthard Enterprises L P & Coulthard Jeffrey D. Trust	8104 Road 39	Madera	93636
Gorman	Lynn	AICP, Deputy Director of Planning	County of Fresno, Department of Public Works and Planning	2220 Tulare Street, Suite 600	Fresno	93721

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Weaver	Alan	Director	County of Fresno, Department of Public Works and Planning	2220 Tulare Street, Suite 600	Fresno	93721
James	Jerald	Director	County of Madera, Planning Department	2037 W. Cleveland Avenue M.S. G	Madera	93637
Lewis	Robert	Director	County of Merced, Planning and Development Services	2222 M Street	Merced	95340
			D&D Pombo LLC	25730 Hansen Road	Tracy	95377
			Davis Water District	P.O. Box 83	Arbuckle	95912-0083
			Deer Creek and Tule River Authority	357 East Olive Avenue	Tipton	93272
Berens	Bill		Deer Creek Watershed Conservancy	26240 7th	Vina	96092
			Del Puerto Water District	P.O. Box 1596	Patterson	95363
Nelson	Harold	President	Delano-Earlimart Irrigation District	14181 Avenue 24	Delano	93215
Petroni	Fred		Delta Farms	12730 South Hereford Road	Los Banos	93635
			Delta Protection Commission	2101 Stone Blvd., Suite 210	West Sacramento	95691
Isenberg	Phil	Chair	Delta Stewardship Council	980 9th Steet, Suite 1500	Sacramento	95814
Cantrell	Scott		DFG	830 S Street	Sacramento	95811
Peracchi	Donald		DJP Farm LLC	5151 N Palm Avenue 900	Fresno	93704
			Dos Palos Joint Powers Authority	1546 Golden Gate Avenue	Dos Palos	93620
Ansley	Jolie-Anne S.		Duane Morris LLP	One Market Plaza, Spear Tower, Suite 2200	San Francisco	94105-1127
Berliner	Thomas M.		Duane Morris LLP	One Market, Spear Tower, Suite 200	San Francisco	94105-1104
			Ducks Unlimited	3074 Gold Canal Drive	Rancho Cordova	95670
			Dumna Tribal Government	1305 East Sussex Way	Fresno	93704-4438
Ledger	Robert	Tribal Chairperson	Dumna Wo-Wah Tribal Government	2216 East Hammond Street	Fresno	93702
Ledger	John	Assistant Cultural	Dumna Wo-Wah Tribal Government	2216 East Hammond Street	Fresno	93602

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		Resource Manager				
Smith	Eric	Cultural Resource Manager	Dumna Wo-Wah Tribal Government	2216 East Hammond Street	Fresno	93602
Marine	Mandy	Board Chairperson	Dunlap Band of Mono Historical Preservation Society	P. O. Box 18	Dunlap	93621
Tex	Jeneen	CEO	Dunlap Band of Mono Indians	P. O. Box 44	Dunlap	93624
			Dunnigan Water District	3817 1st Street	Dunnigan	95937
Dulik	Karen	Environmental Program Manager	DWR Fresno	3374 East Shields Avenue	Fresno	93726
Kerckhoff	Laurence	Staff Counsel	DWR Sacramento 9th Street office	1416 9th Street	Sacramento	95814
			Eagle Field Irrigation District	51170 West Althea	Firebaugh	93622
Miyamoto	Joe		East Bay Municipal Utility District	375 11th Street	Oakland	94607
Sykes	Richard G.		East Bay Municipal Utility District	375 11th Street	Oakland	94607
			East Contra Costa Irrigation District	1711 Sellers Avenue	Brentwood	94513
			Eastside Mutual Water District	P.O. Box 1815	Woodland	95776-1815
			El Camino Irrigation District	8451 99W Road	Gerber	96035
			El Dorado County Water Agency	3932 Ponderosa Road, Suite 200	Shingle Springs	95682
			El Dorado Irrigation District	2890 Mosquito Road	Placerville	95667
Emmert	Steve	Owner	Emmert Farms	3870 Road 22	Madera	93637
Angle	Art	Vice Chairperson	Enterprise Rancheria of Maidu Indians	2133 Monta Vista Avenue	Oroville	95966
Nelson	Glenda	Chairperson	Enterprise Rancheria of Maidu Indians	2133 Monta Vista Avenue	Oroville	95966
Graff	Tom		Environmental Defense Fund	123 Mission Street, Floor 28	San Francisco	94105-5142
Cosart	Stanley	President	Exeter Irrigation District	150 South E Street	Exeter	93221
Logoluso	Frank		Farmers Water District	7567 Road 28	Madera	93637
			Feather Water District	280 Wilkie Avenue	Yuba City	95991-9405
			Federal Emergency Management Agency, Region IX	1111 Broadway, Suite 1200	Oakland	94607

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Bryant	Jeff	General Manager	Firebaugh Canal Water District	2412 Hwy 33 - Dos Palos Road	Mendota	93640
McNamara	Dan		Forbes, Yore & McGinn Corporation	P.O. Box 2985	Merced	95344
			Foresthill Public Utility District	24540 Main Street	Foresthill	95631
Stillwell	Jim		Frank A Logoluso Farms	7567 Road 28	Madera	93637
Grossi	Mark		Fresno Bee	1626 E Street	Fresno	93786
Warszawski	Marek		Fresno Bee	1626 E Street	Fresno	93786
			Fresno Central Branch Library	2420 Mariposa Street	Fresno	93721
			Fresno County Board of Supervisors	2281 Tulare Street, Suite 300	Fresno	93721-2198
Salazar	Victor E.		Fresno County Clerk/Register of Voters	2221 Kern Street	Fresno	93721
			Fresno County Department of Public Works and Planning	2220 Tulare Street, 6th Floor	Fresno	93721
			Fresno County Economic Opportunities Commission	1920 Mariposa Mall, Suite 300	Fresno	93721
			Fresno County Farm Bureau	1274 W. Hedges Avenue	Fresno	93728
Starcher	Steve	SJR Stewardship Program Coordinator	Fresno County Office of Education	1111 Van Ness Avenue	Fresno	93721
Trafican	Jeff		Fresno Fly Fishers for Conservation	100 East Sierra, PMB 3310	Fresno	93710
Boswell	Jeffrey	President	Fresno Irrigation District	2907 South Maple Avenue	Fresno	93725
Will	Mark		Fresno Metropolitan Flood Control District	5469 East Olive Avenue	Fresno	93727
			Fresno Sheriff's Department	2200 Fresno Street	Fresno	93721
Bailey	Harvey	Chair	Friant Water Authority	854 North Harvard Avenue	Lindsay	93247
Jacobsma	Ron	General Manager	Friant Water Authority	854 N. Harvard Avenue	Lindsay	93247
Luce	Bill	Resource Manager	Friant Water Authority	4969 East McKinley Avenue #201	Fresno	93727
Ottemoeller	Steve	Water Resource Manager	Friant Water Authority	4969 East McKinley Avenue #201	Fresno	93727

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			Friends of the San Joaquin	5638 West El Paso	Fresno	93722
Frusetta	Robert		Frusetta, Peter C. and Anita c.	8827 Road 6	Tres Pinos	93622
Raabe	Andy		FWS	2800 Cottage Way	Sacramento	
Lee	G. Fred		G. Fred Lee & Associates	27298 East El Macero Drive	El Macera	95618-1005
Ricchiuti	Pat	President	Garfield Water District	3825 East International Avenue	Clovis	93611
			Glenn-Colusa Irrigation District	344 East Laurel Street	Willows	95988
Gagnani	John		Gagnani Farms	PO Box 128	Tranquility	93668
Gagnani	Jerry		Gagnani Farms	PO Box 128	Tranquility	93668
			Grassland Water District	22759 South Mercy Springs Road	Los Banos	93635
Emmert	Steve		Gravelly Ford Ranch	3870 Road 22	Madera	93637
DaSilva	Timothy	President	Gravelly Ford Water District	18811 Road 27	Madera	93638
		President	Great Valley Center	201 Needham Street	Modesto	95354
Self	Kyle	Chairperson	Greenville Rancheria of Maidu Indians	P.O. Box 279	Greenville	95947
			Grigsby, Eules S & Opal Trust	P.O. Box 12	Friant	93626
Harman	Lawrence and Richard		Harman Bros.	802 Front Street	Dos Palos	93630
Bauer	Barry H.		Herb Bauer Sporting Goods	6264 North Blackstone Avenue	Fresno	93710
Stevenson	Michael		Horizon Water and Environment	180 Grand Avenue, Suite 1405	Oakland	94612
Stevenson	Michael		Horizon Water and Environment	180 Grand Avenue, Suite 1405	Oakland	94612
Iest	Richie		Iest Family Farms and Accommodators, Inc.	14676 Avenue 14	Madera	93637
Harlan	Floyd	President	International Water District	9010 East Tollhouse Street	Clovis	93619
Miller	Yvonne	Chairperson	Ione Band of Miwok Indians	P.O. Box 699	Plymouth	95669
		Tribal Administrator	Ione Band of Miwok Indians	P.O. Box 699	Plymouth	95669
Burris	Anthony	Chairperson	Ione Band of Miwok Indians Cultural Committee	P.O. Box 699	Plymouth	95699
Caviglia	Gary	President	Ivanhoe Irrigation District	33777 Road 164	Visalia	93292

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			Jackson Rancheria	P.O. Box 1090	Jackson	95642
Diedrich	James and Michael		James Diedrich Farms	P.O. Box 805	Firebaugh	93622
			James Irrigation District	P.O. Box 757	San Joaquin	93660
			James Maiorino and Annette Maiorino Trust	P.O. Box 458	Firebaugh	93622
Mills	Donald	President	Kaweah Delta Water Conservation District	2975 North Farmersville Boulevard	Farmersville	93223
			Kern County Board of Supervisors	1115 Truxton Avenue, 5th Floor	Bakersfield	93301
Beck	James		Kern County Water Agency	3200 Rio Mirada Drive	Bakersfield	93308
Lundquist	Gene	President	Kern County Water Agency	3200 Rio Mirado Drive	Bakersfield	93308
			Kern Valley Indian Council	6113 Olive Knols Drive	Barkersfield	93308
			Kern-Tulare Water District	401 Road 192	Delano	93215
			Kings County Administrative Office	1400 West Lacey Boulevard	Hanford	93230
			Kings County Board of Supervisors	1400 West Lacey Boulevard	Hanford	93230
			Kings River Conservation District	4886 East Jensen Avenue	Fresno	93725
Haugen	Steve	Executive Director	Kings River Water Association	4888 E. Jensen Avenue	Fresno	93725
Lollar	Clifton		Kings River Water Association	4888 East Jensen Avenue	Fresno	93725
Haugen	Steve		Kings River Water Conservation District	4888 E. Jensen Avenue	Fresno	93725
		Chairperson	KonKow Band of Maidu	1706 Sweem Street	Oroville	95965
			Laguna Water District	P.O. Box 305	Dos Palos	93620-0305
Lehman	Alex		Lehman Farms	15715 Avenue 13	Madera	93637
Dreyer	Dan	President	Lewis Creek Water District	209 South Locust Street	Visalia	93291
Luallen	Quinten	President	Lindmore Irrigation District	240 West Lindmore Street	Lindsay	93247
Pursell	Rex	President	Lindsay-Strathmore Irrigation District	23260 Round Valley Road	Lindsay	93247

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Keene	Thomas		Linneman, Burgess, Telles, Van Atta, Vierra, Rathmann, Whitehurst & Keene	1820 Marguerite Street	Dos Palos	93620
			Los Banos Public Library	1312 South 7th Street	Los Banos	93635-4757
			Los Banos Wildlife Management Area	18110 West Henry Miller Avenue	Los Banos	93635
Hill	Reggie	Secretary-Manager	Lower San Joaquin Levee District	11704 West Henry Miller Avenue	Dos Palos	93620
Simonich	Anton	President	Lower Tule River Irrigation District	357 East Olive Avenue	Tipton	93272
			Madera City Council	207 West Fourth Street	Madera	93637
			Madera County Agricultural Commissioner	332 Madera Avenue	Madera	93637
			Madera County Board of Supervisors	209 West Yosemite	Madera	93637
Martinez	Rebecca		Madera County Clerk	200 West 4th Street	Madera	93637
			Madera County Farm Bureau	1102 South Pine Street	Madera	93637
Harmstead	Scott		Madera County Planning Department	2037 W. Cleveland Avenue M.S. G	Madera	93637
Vang	Ken		Madera County Resource Management District	2037 W. Cleveland Avenue	Madera	93637
			Madera County Sheriff's Department	14143 Road 28	Madera	93638
Janzen	Carl	President	Madera Irrigation District	12152 Road 28-1/4	Madera	93637
			Main Stone Corporation	2930 Whitegate Drive	Merced	95340
Maiorino	Brian		Maiorino Farms	37618 W Silaxo Avenue	Firebaugh	93622
Mancebo	John		Mancebo, John and Beverly Trust	18557 Fairfax Avenue	Dos Palos	93620
			Mariposa County Board of Supervisors	5100 Buillon Street	Mariposa	95338
			Maxwell Irrigation District	3999 Two Mile Road	Maxwell	95955
DeSpain	Mike	Director-OEPP	Mechoopda Indian Tribe of Chico Rancheria	125 Mission Ranch Boulevard	Chico	95926
Ramirez	Dennis	Chairperson	Mechoopda Indian Tribe of Chico Rancheria	125 Mission Ranch Boulevard	Chico	95926
			Menefee River Ranch Company	1624 E Pachecho Boulevard	Los Banos	93635
			Merced County Board of Supervisors	2222 M Street	Merced	95340
Adams	Karen D.	CPA	Merced County Clerk	2222 M Street, Room 14	Merced	95340

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			Merced County Farm Bureau	646 South State Highway 59	Merced	95341
			Merced County Sheriff's Department	700 West 22nd Street	Merced	95340
Koda	Ed	President	Mercy Springs Water District	52027 West Althea Avenue	Firebaugh	93622
			Meridian Farms Water Company	1138 4th Street	Meridian	95957
			Metropolitan Water District	1121 L Street, Suite 900	Sacramento	95814
Orth	David	Manager	Mid-Valley Water Authority	4886 East Jensen Avenue	Fresno	93725
Cuoto	James	Vice President	Mid-Valley Water District	286 West Cromwell Avenue	Fresno	93711-6162
Bundy	Burt		Mill Creek Conservancy	40652 Highway 36 East	Mill Creek	96061
Burke	Kerry		Mill Creek Conservancy	40652 Highway 36 East	Mill Creek	96061
			Millerton Area Watershed Coalition	34876 SJ&E Road	Auberry	93602
			Millerton Lake Area Chamber of Commerce	P.O. Box 430	Friant	93626
			Modesto Irrigation District	1231 11th Street	Modesto	95354-0701
Archuleta	Gary	Chairperson	Mooretown Rancheria of Maidu Indians	1 Alverda Drive	Oroville	95966
Sanders	James	Tribal Administrator	Mooretown Rancheria of Maidu Indians	1 Alverda Drive	Oroville	95966
Moosios	Louis		Moosios River Ranch and San Joaquin Guide Service	7215 Road 35	Madera	93636
Moosios	Louis		Moosios River Ranch, San Joaquin Guide Service	7215 Road 35	Madera	93636
Morehead	Jim & Betty		Morehead Farms	PO Box 789	Pixley	93526
			Mumby Farms, Inc.	17996 Grandvale Road	Dos Palos	93620
			Myers-March Mutual Water Company	P.O. Box 1308	Arbuckle	95912-1308
Rea	Maria	Sacramento Area Supervisor	National Marine Fisheries Service, West Coast Region	650 Capitol Mall, Suite 5-100	Sacramento	95814
Reed	Rhonda		National Marine Fisheries Service, West Coast Region	650 Capitol Mall, Suite 5-100	Sacramento	95814

Last	First	Title	Agency/Affiliation	Street Address	City	Zip
Stuart	Jeff		National Marine Fisheries Service, West Coast Region	650 Capitol Mall, Suite 5-100	Sacramento	95814
			National Park Service, Pacific West Region	333 Bush Street, Suite 500	San Francisco	94104
Myers	Larry	Executive Secretary	Native American Heritage Commission	915 Capitol Mall, Room 364	Sacramento	95814
Ramos	James		Native American Heritage Commission	915 Capitol Mall, Room 364	Sacramento	95814
			Natomas Central Mutual Water Company	2601 West Elkhorn Boulevard	Rio Linda	95673-2905
Brown	Anita	State Information Officer	Natural Resource Conservation Service	4810 Seventh Avenue	Sacramento	95820
Alvis	Julie		Natural Resources Agency	1416 Ninth Street, Suite 1311	Sacramento	95814
Kemp	Patrick		Natural Resources Agency	1416 Ninth Street, Suite 1311	Sacramento	95814
Obegi	Doug		Natural Resources Defense Council	111 Sutter Street, 20th floor	San Francisco	94104
Schmitt	Monty	Senior Scientist	Natural Resources Defense Council	111 Sutter Street, 20th floor	San Francisco	94104
Nickel	James	CEO/President	Nickel Family LLC	15701 Highway 178	Bakersfield	93306-9500
Stearns	Brent		Nickel Family LLC	15701 Highway 178	Bakersfield	93306-9500
Burns	Daniel		Nickel Farms LLC	13252 Elgio Road	Dos Palos	93620
Delgado	Marilyn	Chairperson	Nor-Rel-Muk Nation	P.O. Box 1967	Weaverville	96093
			North Delta Water Agency	910 K Street, Suite 100	Sacramento	95814
Goode	Ron	Chairperson	North Fork Mono Tribe	13396 Tollhouse Road	Clovis	93619
Beihn	Leora		North Fork Rancheria	32024 Poy-Ah-Now Road	North Fork	93643
Fink	Elaine (Judy)	Chairperson	North Fork Rancheria	P. O. Box 929	North Fork	93643
Fink	Dene		North Fork Rancheria	32033 Poy-Ah-Now Road	North Fork	93643
Lee	Gaylen		North Fork Rancheria	P.O. Box 869	North Fork	93643
Matzke	Brett		North Fork Rancheria	33143 Road 222	North Fork	93643

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			North Fork Rancheria	13396 Tollhouse Road	Clovis	93611
			North San Joaquin Water Conservation District	P.O. Box 757	San Joaquin	93660
Erolinda Perez	Katherine		North Valley Yokuts Tribe	P. O. Box 717	Linden	95236
			Northern California Power Agency	180 Cirby Way	Roseville	95678
			Oakdale Irrigation District	1205 East F Street	Oakdale	95361
O'Banion	Mike	Owner	O'Banion Farms	4160 Brentwood Street	Chowchilla	93610-8449
Spector	Juliana	Regional Environmental Intern, Region IX	Office of Environmental Policy and Compliance, Dept. of the Interior	333 Bush Street, Suite 500	San Francisco	94104
			Omochumne-Hartnell Water District	7513 Sloughhouse Road	Elk Grove	95624
Bailey	Harvey	President	Orange Cove Irrigation District	1130 Park Boulevard	Orange Cove	93646
			Orland-Artois Water District	P.O. Box 218	Orland	95963
			Oro Loma Water District	2655 Grant Avenue	San Lorenzo	94580
			Pacheco Water District	52027 West Althea Avenue	Firebaugh	93622
Grader	Zeke	Executive Director	Pacific Coast Federation of Fishermen's Associations and Institute for Fisheries Research	PO Box 29370	San Francisco	94129-0370
			Pacific Gas and Electric, Technical and Ecological Services	3400 Crow Canyon Road	San Ramon	94583
			Pajaro Valley Water Management Agency	36 Brennan Street	Watsonville	95076
Mellilo	Tony		Palazzo Farms	13355 West Bisignani Road	Los Banos	93635
Palazzo	Pat		Palazzo Farms	13355 West Bisignani Road	Los Banos	93635
			Panoche Water District	52027 West Althea Avenue	Firebaugh	93622
Catania	Roy		Paramount Farming Company	7 1/2 Avenue 10302	Firebaugh	93622
Phillimore	William		Paramount Farming Company	33141 Lerdo Highway	Bakersfield	93308-9767
Widhalm	Mike		Paramount Farming Company	33141 East Lerdo Highway	Bakersfield	93308

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			Patterson Irrigation District	948 Orange Avenue	Patterson	95363-9692
Tucker	Scott		Pelger Mutual Water Company	805 Ridgeview	Woodland	95695
			Picayne Rancheria of Chuckchansi Indians	46575 Road 417	Coarsegold	93614
Ayala	Nancy	Chairperson	Picayune Rancheria of Chuckchansi	46575 Road 417	Coarsegold	93613
Elizondo	Sammuel	Environmental Director	Picayune Rancheria of Chuckchansi	46575 Road 417	Coarsegold	93614
Martin	Gary		Pikalok Farming	P.O. Box 549	Firebaugh	93622
Pirtle	Gary		Pirtle, Gary M. Trust et al.	6419 Road 24	Madera	93637
			Pixley Irrigation District	357 East Olive Avenue	Tipton	93272-9627
			Placer County Water Agency	144 Ferguson Road	Auburn	95603
Minton	Jonas	Senior Water Policy Advisor	Planning and Conservation League	1107 9th Street, Suite 901	Sacramento	95814
			Pleasant Grove-Verona Mutual Water Company	1510 West Catlett Road	Pleasant Grove	95668
			Pleasant Valley Water District	P.O. Box 468	Coalinga	93210-0468
Swingley	Robert		Porter Estate Co, Poso Ranch Inc.	100 Bush Street 800	San Francisco	94104
Lombardi	Guido	President	Porterville Irrigation District	22086 Avenue 160	Porterville	93257
Gardali	Thomas		PRBO Conservation Science	3820 Cypress Drive #11	Petaluma	94954
			Princeton-Codora-Glenn Irrigation District		Princeton	95970-0098
			Proberta Water District	21246 Dusty Way	Red Bluff	96080
			Provident Irrigation District	258 South Butte Street	Willows	95988-3005
Jennifer	Parson		Real Estate Services Division, Professional Services Branch; California Department of General Services	707 3rd Street, 3rd Floor	West Sacramento	95605
Hunt 96-42020	Shane		Reclamation DC	1849 C Street NW	Washington	20240-0001
			Reclamation District No. 1004	134 5th Street	Colusa	95932-2409
			Reclamation District No. 108	975 Wilson Bend Road	Grimes	95950

Last	First	Title	Agency/Affiliation	Street Address	City	Zip
Mallyon	John	General Manager	Reclamation District No. 1606	P.O. Box 757	San Joaquin	93660
			Reclamation District No. 770	P.O. Box 877	Corcoran	93212
			Reclamation District No. 830	450 Walnut Meadows Drive	Oakley	94561
Hyatt	David		Reclamation Fresno	1243 N Street	Fresno	93721
SJRRP Office			Reclamation Sacramento	2800 Cottage Way	Sacramento	95825
Edwards	Tracy	Chief Executive Officer	Redding Rancheria	2000 Redding Rancheria Road	Redding	96001
Hart	Jason	Chairperson	Redding Rancheria	2000 Redding Rancheria Road	Redding	96001
Hayward, Sr.	James	Cultural Resources Program	Redding Rancheria	2000 Redding Rancheria Road	Redding	96001
Fausone	Steve		Redfern Ranches	14664 Brannon Avenue	Dos Palos	93620
Redfern-West	Suzanne	Owner	Redfern Ranches (Steve Fausone)	14664 Brannon Avenue	Dos Palos	93620-9469
Reents	Gary	Chair	Regional Water Authority	5620 Birdcage Street, Suite 180	Citrus Heights	95610
Acree	Chris		Revive the San Joaquin	5132 North Palm Avenue, PMB 121	Fresno	93704
Rentner	Julie	Restoration Ecologist	River Partners	912 Eleventh Street, Suite LL2	Modesto	95354
			River Partners, SJV Project	806 14th Street	Modesto	95354
Sloan	Richard		River Tree Volunteers	1509 East Fallbrook	Fresno	93720
			Roberts Ditch Irrigation Company	436 Market Street	Colusa	95932
			Root Creek Water District	1368 West Herndon Avenue, Suite 103	Fresno	93711-7172
			Rosedale-Rio Bravo Water Storage District	849 Allen Road	Bakersfield	93314-9402
		Executive Director	Sacramento Area Flood Control Agency	1007 7th Street, 5th Floor	Sacramento	95814-3407
			Sacramento County Board of Supervisors	700 H Street, Suite 2450	Sacramento	95814
			Sacramento County Public Works - Planning Department	827 7th Street	Sacramento	95814

Last	First	Title	Agency/Affiliation	Street Address	City	Zip
			Sacramento County Water Agency	827 7th Street, Room 301	Sacramento	95814
			Sacramento Groundwater Agency	5620 Birdcage Street, Suite 180	Citrus Heights	95610
			Sacramento Municipal Utility District	P.O. Box 15830	Sacramento	95852
			Sacramento Public Library	828 I Street	Sacramento	95814
			Sacramento River Water Contractors Authority	910 K Street, Suite 310	Sacramento	95852-1830
			Sacramento Suburban Water District	3701 Marconi Avenue, Suite 100	Sacramento	95821-5346
Samarin	Ken		Samarin Farms	2085 North Lake	Kerman	93630
			San Benito County Water District	30 Mansfield Road	Hollister	95023-9732
			San Joaquin County Board of Supervisors	44 N. San Joaquin Street	Stockton	95202
Ornellas	Leroy	Chair	San Joaquin County Flood Control and Water Conservation District	1810 East Hazelton Avenue	Stockton	95205
			San Joaquin County Planning Department	6 South El Dorado Street, 2nd Floor	Stockton	95202
Brewer	Robert	President	San Joaquin River Association	10637 No. Lanes Road	Fresno	93720
Marks	Melinda	Executive Officer	San Joaquin River Conservancy	5469 E. Olive Avenue	Fresno	93727
Chedester	Steve		San Joaquin River Exchange Contractors Water Authority	PO Box 2115	Los Banos	93635
Koehler	Dave	Executive Director	San Joaquin River Parkway and Conservation Trust	11605 Old Friant Road	Fresno	93730
Green	Sargeant	Technical Coordinator	San Joaquin River Resource Management Coalition	6014 North Cedar Avenue	Fresno	93710
Martin	Mari	Chairperson	San Joaquin River Resource Management Coalition	PO Box 2115	Los Banos	93635
Meade	Rod	Restoration Administrator	San Joaquin River Restoration Program	1221 Torrey Pines Road	La Jolla	92037
Short	Allen	Coordinator	San Joaquin Tributary Association	1231 11th Street	Modesto	95352
Martinez	Jose		San Joaquin Valley Air Pollution Control District	1990 East Gettysbury Avenue	Fresno	93726

Last	First	Title	Agency/Affiliation	Street Address	City	Zip
Sadredin	Sayed		San Joaquin Valley Air Pollution Control District	1990 East Gettysbury Avenue	Fresno	93726
Willis	Jessica		San Joaquin Valley Air Pollution Control District	1990 East Gettysbury Avenue	Fresno	93726
Peterson	David	President	San Juan Water District	9935 Auburn Folsom Road	Granite Bay	95746
Nelson	Dan	Executive Director	San Luis & Delta-Mendota Water Authority	1415 L Street, Suite 800	Sacramento	95814
Rubin	Jon D.		San Luis & Delta-Mendota Water Authority	1415 L Street, Suite 800	Sacramento	95814
Hurley	Chase	General Manager	San Luis Canal Company/Henry Miller Reclamation District #2131	11704 West Henry Miller Avenue	Dos Palos	93620
Neves	Anthony	(Also Neves Farms)	San Luis Canal Company/Henry Miller Reclamation District #2131	715 Madison Avenue	Los Banos	93635-4716
Hurd	Chris	President	San Luis Water District	1015 6th Street	Los Banos	93635
Sanchez	Sig	Chair	Santa Clara Valley Water District	5750 Almaden Expressway	San Jose	95118-3686
Halliman	Thomas	President	Santa Nella County Water District	12931 South Highway 33	Santa Nella	95322
Barrios Sr.	Rueben	Chairperson	Santa Rosa Rancheria	P. O. Box 8	Lemoore	93245
Franco	Lalo	Cultural Coordinator	Santa Rosa Tachi Rancheria	P. O. Box 8	Lemoore	93245
Merritt	Eric	President	Saucelito Irrigation District	20712 Avenue 120	Porterville	93258
			Say Family Trust 1997	5775 Greenwood Avenue	Clovis	93619
Pedreira	Thomas		Seajar, LLC	102 West Alexander Avenue	Merced	95348
Boschman	Wilmar L.		Semitropic Water Storage District	1101 Central Avenue	Wasco	93280
Ezell	Jerry L.		Shafter-Wasco Irrigation District	PO Box 1168	Wasco	93280
Frantz	Mark	President	Shafter-Wasco Irrigation District	PO Box 1168	Wasco	93280
			Shasta County Water Agency	1855 Placer Street	Redding	96001-1759
Shehady	Larry		Shehadey Larry Farms Ltd.	144 E. Belmont Avenue	Fresno	93701
Fonseca	Nicholas	Chairperson	Shingle Springs Band of Miwok Indians	P.O Box 1340	Shingle Springs	95682

Last	First	Title	Agency/Affiliation	Street Address	City	Zip
Fonseca	Daniel	Cultural Resources Director	Shingle Springs Band of Miwok Indians	P.O. Box 1340	Shingle Springs	95682
Bill	Lawrence	Interim Chairperson	Sierra Nevada Native American Coalition	P. O. Box 125	Dunlap	93621
			South Delta Water Agency	4255 Pacific Avenue, No. 2	Stockton	95207
Fisher	John	President	Southern San Joaquin Municipal Utility District	P.O. Box 279	Delano	93216
Brochini	Anthony	Chairperson	Southern Sierra Miwuk Nation	P. O. Box 1200	Mariposa	95338
James	Les	Spiritual Leader	Southern Sierra Miwuk Nation	P.O. Box 1200	Mariposa	95338
			Southern Sierra Miwuk Nation	P.O. Box 1200	Mariposa	95338
		County Administrator	Stanislaus County	1010 10th Street	Modesto	95354
			Stanislaus County Board of Supervisors	1010 10th Street, Suite 6500	Modesto	95354
Mendez	Raul		Stanislaus County Environmental Review Committee	1010 10th Street, Suite 3400	Modesto	95354
Cotta	Stanley		Stanley Cotta Farms	3221 Emory Road	Dos Palos	93620
			State Clearinghouse	P.O. Box 3044	Sacramento	95812-3044
Erlewine	Terry		State Water Contractors	1121 L Street	Sacramento	95814
Carr	Chris		State Water Resources Control Board	1001 I Street, 14th Floor	Sacramento	95814
Grober	Les		State Water Resources Control Board	1001 I Street, 14th Floor	Sacramento	95814
Mrowka	Kathy	Chief, Inland Streams Unit	State Water Resources Control Board	1001 I Street	Sacramento	95814
Kelly	Robert	Owner	Stevenson Ranch	25079 West River Road	Stevenson	95374
Zolezzi	Jeanne M.		Stockton East Water District	6767 E Main Street	Stockton	95215
Simms	George	President	Stone Corral Irrigation District	37656 Road 172	Visalia	93292
			Stony Creek Water District	940 County Road 303	Elk Creek	95939
Bishop	Cathy	Chairperson	Strawberry Valley Rancheria	P.O. Box 667	Marysville	95901
Inamine	Mike	Executive Director	Sutter Butte Flood Control Agency	1227 Bridge Street, Suite C	Yuba City	95991

Last	First	Title	Agency/Affiliation	Street Address	City	Zip
			Sutter Mutual Water Company	15094 Cranmore Road	Robbins	95676
			Sutter-Extension Water District	4525 Franklin Road	Yuba City	95993
			Swinford Tract Irrigation District	P.O. Box 7321	Mammoth Lakes	93546
Coney	Grayson	Cultural Director	T' si-Akim Maidu	P.O. Box 1316	Colfax	95713
Moon	Eileen	Vice Chairperson	T' si-Akim Maidu	P.O. Box 1246	Grass Valley	95945
Ryberg	Don	Chairperson	T' si-Akim Maidu	1239 East Main Street	Grass Valley	95945
Pennell	Bob	Cultural Resource Director	Table Mountain Rancheria	P. O. Box 410	Friant	93626
Walker Grant	Leann	Chairperson	Table Mountain Rancheria	P. O. Box 410	Friant	93626
Walker-Grant	Leanne	Chairperson	Table Mountain Rancheria	23736 Sky Harbor Rd	Friant	93626
			Tachi Yokut Tribe	16835 Alkali Drive	Lemoore	93245-9463
Sherwood	David	President	Tea Pot Dome Water District	105 West Tea Pot Dome Avenue	Porterville	93257
			Tehama-Colusa Canal Authority	P.O. Box 1025	Willows	95988
Wheaton	Edwin	President	Terra Bella Irrigation District	24790 Avenue 95	Terra Bella	93270
Vorster	Peter		The Bay Institute	3901 Belfour Avenue	Oakland	94610
Smith	Rosemary	Chairperson	The Choinumni Tribe of Yokuts	1099 Pistachio Avenue	Clovis	96311
Matsumoto	Sandi	Program Director	The Nature Conservancy	555 Capitol Mall, Suite 1290	Sacramento	95814
Weber	Magill		The Nature Conservancy	555 Capitol Mall, Suite 1290	Sacramento	95814
			The West Side Irrigation District	1320 N Tracy Boulevard	Tracy	95376-3436
			Thomes Creek Water District	P.O. Box 1017	Corning	96021-1017
			Tisdale Irrigation & Drainage Company	P.O. Box 309	Meridian	95957-0309
Alvarez	David	Chairperson	Traditional Choinumni Tribe	2415 E. Houston Avenue	Fresno	93720
			Traditional Choinumni Tribe	2787 North Piedra Road	Sanger	93657

Last	First	Title	Agency/Affiliation	Street Address	City	Zip
			Traditional Mono Basket	P.O. Box 62	Friant	93626
			Tranquility Irrigation District	25390 W Silveria Street	Tranquility	93668
			Tranquility Public Utility District	97 South Corona Drive	Porterville	93257
		Executive Director	Tree Fresno	3150 E. Barstow Avenue	Fresno	93740
Ayres	Lee		TreeTOPS	5132 North Palm Avenue, PMB 121	Fresno	93704
			Tri-Valley Water District	15142 East Goodfellow Avenue	Sanger	93657
Ferrari	Chandra		Trout Unlimited	125 Ada Way	Sacramento	95819
Henery	Rene		Trout Unlimited	2239 5th Street	Berkeley	94710
			Tulare County	County Civic Center, 2800 West Burrel	Visalia	93921
			Tulare County Board of Supervisors	2800 West Burrel Avenue	Visalia	93921
			Tulare County Planning and Development	221 South Mooney Boulevard, County Civic Center 111	Visalia	93291-1920
Bixler	David	President	Tulare Irrigation District	6826 Avenue 240	Tulare	93274
Garfield	Joey	Tribal Archeological Coordinator	Tule River Indian Tribe	P.O. Box 589	Porterville	93258
Peyron	Neil	Chairperson	Tule River Indian Tribe	P. O. Box 589	Porterville	93258
Vera	Kerri	Environmental Department	Tule River Indian Tribe	P.O. Box 589	Porterville	93258
			Tule River Tribe	340 N Reservation Road	Porterville	93257
Camp	Mary	Tribal Administrator	Tuolumne Band of Me-Wuk	P.O. Box 699	Tuolumne	95379
Day	Kevin	Chairperson	Tuolumne Band of Me-Wuk	P.O. Box 699	Tuolumne	95379
Cox	Stanley	Cultural Resources Dr	Tuolumne Band of Mi-Wuk	P.O. Box 699	Tuolumne	95379
Fuller	Reba		Tuolumne Band of Mi-Wuk	P.O. Box 699	Tuolumne	95379
			Tuolumne Rancheria	P.O. Box 699	Tuolumne	95379
			Tuolumne Utilities District	18885 Nugget Boulevard	Sonora	95370-9284
			Turlock Irrigation District	333 East Canal Drive	Turlock	95381

Last	First	Title	Agency/Affiliation	Street Address	City	Zip
			Turner Island Farms	1269 W I Street	Los Banos	93635-3930
			Turner Island Water District	1269 West "I" Street	Los Banos	93635
Jewell	Michael	Chief, Regulatory Division	U.S. Army Corps of Engineers	1325 J Street	Sacramento	95814
Muncy	Brandon		U.S. Army Corps of Engineers	1325 J Street	Sacramento	95814-2928
Norton	Kathy		U.S. Army Corps of Engineers	1325 J Street	Sacramento	95814
Larson	Aaron		U.S. Army Corps of Engineers	1325 J Street	Sacramento	95814
Johannis	John		U.S. Army Corps of Engineers, Sacramento District	1325 J Street	Sacramento	95814
			U.S. Coast Guard	900 Beach Drive	Rio Vista	94571
			U.S. Coast Guard, Division of Boating Safety	6037 Price Avenue #1106	McLellan	95652-2400
			U.S. Department of Agriculture Forest Service	650 Capitol Mall, Suite 8-200	Sacramento	95814
			U.S. Department of Agriculture Forest Service - Sierra National Forest	1600 Tollhouse Road	Clovis	93611
Mahdavi	Sarvy		U.S. Environmental Protection Agency	Environmental Review Office 75 Hawthorne Street c/o Water 8	San Francisco	94105
Sachs	Carol		U.S. Environmental Protection Agency Region 9	Environmental Review Office 75 Hawthorne Street	San Francisco	94105
Goforth	Kathleen Martyn		U.S. Environmental Protection Agency, Environmental Review Office	75 Hawthorne Street	San Francisco	94105
Skophammer	Stephanie		U.S. Environmental Protection Agency, Region 9, CED-2	75 Hawthorne Street	San Francisco	94105
Cabrera-Stagno	Valentina		U.S. Environmental Protection Agency, WTR-2	75 Hawthorne Street	San Francisco	94105
Castleberry	Dan		U.S. Fish & Wildlife Service	2800 Cottage Way, W-2605	Sacramento	95825
Clark	Robert		U.S. Fish & Wildlife Service	2800 Cottage Way	Sacramento	95825-1898

Last	First	Title	Agency/Affiliation	Street Address	City	Zip
Dan	Welsh		U.S. Fish & Wildlife Service	2800 Cottage Way	Sacramento	95825-1898
Mesick	Carl		U.S. Fish & Wildlife Service	4001 North Wilson Way	Stockton	95205
Webb	Kim		U.S. Fish & Wildlife Service	4001 North Wilson Way	Stockton	95205
Forrest	Kim		U.S. Fish & Wildlife Service, Merced and San Luis National Wildlife Refuges	P.O. Box 2176	Los Banos	93635
Robert	Shaffer		U.S. Fish & Wildlife Service, Central Valley Joint Venture	2800 Cottage Way, W-1916	Sacramento	95825
			U.S. Geological Survey - California Water Science Center	6000 J Street Placer Hall Room 2005	Sacramento	95819-6129
			Union Public Utility District	339 Main Street	Murphys	95247
Baker	Gregory		United Auburn Indian Community of the Auburn Rancheria	953 Indian Rancheria Road	Auburn	95603
Camp	Jason	THPO	United Auburn Indian Community of the Auburn Rancheria	10720 Indian Hill Road	Auburn	95603
Guerrero	Marcos	Tribal Preservation Committee	United Auburn Indian Community of the Auburn Rancheria	10720 Indian Hill Road	Auburn	95603
Whitehouse	Gene	Chairperson	United Auburn Indian Community of the Auburn Rancheria	10720 Indian Hill Road	Auburn	95603
Castro	John	Cultural Liaison	United Tribe of Northern Calif., Inc., Wintu, Wintun, Wintoon	20059 Parocast	Redding	96003
Gomes	Gloria	Chairperson	United Tribe of Northern Calif., Inc., Wintu, Wintun, Wintoon	20059 Parocast	Redding	96003
Vida	Linda		University of California, Water Resources Center Archives	410 O'Brien Hall	Berkeley	94720-1718
Haze	Steve		Upper San Joaquin Stewardship Council	34876 SJ&E Road	Auberry	93602
			USDA-NRCS Fresno Area Office	4974 East Clinton Way, Suite 114	Fresno	93727
Michael and Wendy	Vander Dussen		Vander Dussen, Michael and Wendy Trust	729 E Jefferson Road	El Nido	95317
			Visalia Branch Library	200 West Oak Avenue	Visalia	93291-4931
Sudman	Rita		Water Education Foundation	717 K Street, #317	Sacramento	95818

Last	First	Title	Agency/Affiliation	Street Address	City	Zip
			Water Quality Improvement SPA	P.O. Box 218	South Dos Palos	93665
			West Stanislaus Irrigation District	P.O. Box 37	Westley	95387
Birmingham	Tom		Broadview Water District	3130 N Fresno Street	Fresno	93703-1126
			Westlands Water District	3130 N Fresno Street	Fresno	93703-1126
			Westside Water District	5005 State Highway 20	Williams	95987-5137
			Widren Water District	P.O. Box 1365	Los Banos	93635
			Willow Creek Mutual Water Company	134 West Sycamore Street	Willows	95988
			Willows Public Library	201 North Lassen Street	Willows	95988
Franklin	Andrew	Chairperson	Wilton Rancheria	9300 W. Stockton, Suite 200	Elk Grove	95758
Hutchason	Steve	Director of Cultural Preservation	Wilton Rancheria	9300 W. Stockton, Suite 200	Elk Grove	95758
Sisk-Franco	Caleen	Tribal Chair	Winnemem Wintu Tribe	14840 Bear Mountain Road	Redding	96003
Burns	Robert		Wintu Educational and Cultural Council	P.O. Box 483	Hayfork	96041
Hayward	Kelli		Wintu Tribe of Northern California	P.O. Box 995	Shasta Lake	96019
Skinner	L. Scott		Wolfsen Land and Cattle Company	1269 West "I" Street	Los Banos	93635
			Woodbridge Irrigation District	P.O. Box 580	Woodbridge	95258
Woodrow	Kenneth	Chairperson	Wuksache Indian Tribe/Eshom Valley Band	1179 Rock Haven Court	Salinas	93906
Sartuche	John		Wuksache Tribe	1028 East K Avenue	Visalia	93292
			Yolo County Library	37750 Sacramento Street	Yolo	95697
			Yolo County Library, Davis Branch	315 East 14th Street	Davis	95616
Amaro	Basilo					
Areias	James			11704 West Henry Miller Avenue	Dos Palos	93620

Last	First	Title	Agency/Affiliation	Street Address	City	Zip
Bong	Harold J IV & Kimberly A			P.O. Box 4	Friant	93626
Burkhart	Shane & Becky			4887 W Pinedale Avenue	Fresno	93722
Burrough	John Miller			P.O. Box 62	Friant	93626
Butts	Carolyn			732 Madison Avenue	Los Banos	93635
Cameron	John			2384 Northhill	Selma	93662
Cardoza	Cecilia			42779 Mint Road	Dos Palos	93620
Case	Mike			685 Roble Drive	Morgan Hill	95037
Creekmore	Briana			P.O. Box 84	Wilseyville	95257
Cullins	Maryann			P.O. Box 47	Friant	93626
Doty	Johnnie and Rosalie			19424 Farallon Road	Madera	93638
Ehrich	Tom			5231 Myrtle Drive	Concord	94521-1524
Enos	Rose			15310 Bancroft Road	Auburn	95603
Fox	Dennis			918 Blossom Street	Bakersfield	93306
Gaynor	Keith			PO Box 83	Friant	93626
Harvey	Jill			11799 McCourtney Road	Grass Valley	95949
Henderson	Kenneth and Ruby			P.O. Box 102 Friant	Friant	93626
Heredia	Mark			5491 N. Ferger Avenue	Fresno	93704
Hollenbeck	Jon			6260 N. Palm Ave 119	Fresno	93704
Hoover	John K and Michelle A	Trustees		13310W. Eagle Field Road	Firebaugh	93622
Hoover	John K and Michelle A	Trustees		17275 N. Friant Road	Friant	93626
Hovannisian, Et Al	John			P.O. Box 3665	Pinedale	93650
Howell	Nelson			7444 E State Route 88	Stockton	95215
Hunger	Paul			P.O. Box 592	Dos Palos	93620
Hunniecutt	Gloria P	Trustee		55 Topaz Way	San Francisco	94131

Last	First	Title	Agency/Affiliation	Street Address	City	Zip
Jaquith	Howard			28490 Road 26	Chowchilla	92610-8700
Kissee	William M. and Crystal K			4561 W. Celeste Avenue	Fresno	93722
Knight	Ray			1565 P Street	Firebaugh	93622
Knutson	Paulette Bianchi			P.O. Box 64 Friant	Friant	93626
Lanfranco	Reno & Suzanna			P.O. Box 132	Kerman	93630
Limas	Jessi			230 Ridgeview Ct.	Valley Springs	95252
Looney	Bowman			P.O. Box 468	LeGrand	95333
Lopes	James			757 Orchard Road	Vernalis	95385
Lotkowski	John M.			4848 N Delbert Avenue	Fresno	93722
Marquez	Frank			P.O Box 565	Friant	93626
Martin	Michael			P.O. Box 2216	Mariposa	95338
Mathis	Harold M and Carla M			P.O. Box 101	Friant	93626
McNamara	Dan			9695 Turner Island Road	Dos Palos	93620
McNeil	Deborah F			P.O. Box 1030	Bonsall	92003
Merlic	Edward			18381 Laurel Drive	Los Gatos	95030
Millar	Kent R. and Naomi M			9110 N. Woodlawn Drive	Fresno	93720
O'Banion	James			15775 So. Indiana Avenue	Dos Palos	93620
Ogle	Beverly			29855 Plum Creek Road	Paynes Creek	96075
Root	Matthew			16117 North Street	Keswick	96001
Root	Loretta			5620 Kofford Lane	Redding	96001
Roselli	John			628 Ventura Avenue	San Mateo	94403
Salazar	Joseph					
Schroeder	Ken			4213 Scott Court	Denair	95316
Seaborn	Joe and Leonor			P.O. Box 594 Friant	Friant	93626
Sequeira	Joe Eugene			15490 Willis Road	Dos Palos	93620
Shehren	Rick			1421 Birchwood Lane	Sacramento	95822

Last	First	Title	Agency/Affiliation	Street Address	City	Zip
Stewart	Gerald J			8708 N. 4th Street	Fresno	93720
Teixeira	Shane			11356 Road 5 1/2	Firebaugh	93622
Tostenson, <i>et al</i>	Mary F			4374 N Blackstone Avenue	Fresno	93726
Waldron	Robert			PO Box 3492	Carbondale	62902
Wallace Moore	April			19630 Placer Hills Road	Colfax	95713
Watson, <i>et al</i>	Ralph WW, A E Jr.			P.O. Box 27138	Fresno	93729
Watson, <i>et al</i>	Jenny WDW, A E			P.O. Box 27138	Fresno	93729
Weber	Peter			320 West Bluff Avenue #103	Fresno	93711
Westcot	Dennis			716 Valencia Avenue	Davis	95616-0153
Yonemura	Randy			4305 39th Avenue	Sacramento	95824
Burke	Kerry			34 Ames Port Landing	Half Moon Bay	94019

# Appendix B

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## Public Meeting Transcripts

**Appendix B**  
**PUBLIC MEETING TRANSCRIPTS**

This appendix contains transcripts of the public meetings that were held during the public review period of the DEIR.

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# Fresno Public Meeting Transcript

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REPORTER'S TRANSCRIPT OF PROCEEDINGS

NOVEMBER 4, 2013

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THE CALIFORNIA DEPARTMENT OF FISH AND  
WILDLIFE SALMON CONSERVATION AND RESEARCH  
FACILITY & RELATED FISHERIES MANAGEMENT ACTIONS  
DRAFT ENVIRONMENTAL IMPACT REPORT PUBLIC MEETING

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The proceedings in the above-entitled matter were held at the Saginaw Center, 3930 East Saginaw Way, Fresno, California, commencing at 6:15 p.m. on November 4, 2013, before DEVRA L. JOY, CSR No. 6459, a Certified Shorthand Reporter of the State of California, having offices located at Fresno, California.

PRESENT AT THE MEETING:

- MICHAEL STEVENSON
- GERALD HATLER
- RYAN ERLANDSEN
- BENESSA ESPINO
- JENNIFER PARSON
- KEVIND FISHER
- PATRICK DONALDSON

SPEAKER FROM THE COMMUNITY:

- RICHARD HASS

1                   MR. STEVENSON: Let's get started. Thank  
2 you all for coming tonight. My name is Michael  
3 Stevenson. I'm with a company called Horizon Water  
4 Environment, and we've been assisting the California  
5 Department of Fish & Wildlife in preparing the EIR. And  
6 I'm going to help facilitate the meeting tonight.

7                   We are going to start out with a  
8 presentation that describes the project that we're  
9 considering and the CEQA process, the reason why we're  
10 having this meeting, and where we go from here.

11                   So just a couple housekeeping things as I  
12 get started. You guys mostly have been here for a  
13 little bit, but we've got snacks in the back if you want  
14 a brownie or a danish or some regular or decaf coffee.  
15 Help yourself to that. There's also some poster boards  
16 you can take a look at. Restrooms are down the hall  
17 outside.

18                   And when you came in, you would have  
19 received a couple of handouts from Patrick. The first  
20 is a speaker card. If you want to give an oral comment  
21 tonight, please fill this out with your name and  
22 date. You can also take notes on it if you want to just  
23 track and outline your presentation or what you want to  
24 say.

25                   In addition, we've got a comment form, and

1 so for those of you who don't want to give verbal  
2 comment or want to do a written comment in addition,  
3 which we really encourage, please go ahead and complete  
4 one of these. You can just fold it right over. Staple  
5 or tape it, put a stamp on it, and drop it in the  
6 mail. You can also send in a letter on your own  
7 letterhead or by E-mail. There's an E-mail address.

8           There's a meeting agenda here, and on the  
9 back of this there's some basic ground rules. Most  
10 important one is if you have a cell phone, let's go  
11 ahead and put that on silent if you haven't already.  
12 I'm going to make sure I've done mine.

13           And then, finally, there's just a brief  
14 flier that tells a little more information about the  
15 project, how you can make comments on the Environmental  
16 Impact Report, and so forth.

17           In the audience we've got a number of  
18 folks from CDFW or other parts of the project team.  
19 Joe Hatler is here in the front. He's an environmental  
20 program manager, and he is helping manage this process  
21 for the Department of Fish and Wildlife. We also have  
22 Ryan Erlandsen from DFW. Benessa Espino, also from DFW.  
23 Jennifer Parson is here from Department of General  
24 Services. They've been assisting on the contracting  
25 side of this. And then Kevin Fisher is on my staff. So

1 hopefully we can assist you if you have any questions  
2 tonight.

3           So getting into the meeting agenda. So I  
4 already talked a little bit about the ground rules here.  
5 We'll talk a little bit more about that. Joe is going  
6 to tell you a little bit of background on the  
7 San Joaquin River restoration program and then the  
8 proposed project, and then I'm going to talk about the  
9 CEQA process, some of the highlights of the Draft  
10 Environmental Impact Report, how to comment during the  
11 public review period. And at that point we'll shift  
12 gears and start to take your public comments.

13           So the purpose of this meeting is we've  
14 got a Draft Environmental Impact Report that's been  
15 prepared for the Salmon Conservation & Research  
16 Facility. It's a hatchery that the Department is  
17 planning to build on the San Joaquin River.

18           The purpose of this is to provide the  
19 public and public agencies an opportunity to provide  
20 comments on the adequacy, sufficiency of the Draft  
21 Environmental Impact Report, the EIR, in analyzing  
22 possible impacts of the activity or the ways in which  
23 those effects, if they're significant, they might be  
24 avoided or reduced.

25           And so we really encourage you to provide

1 us if you have ideas for additional mitigation measures  
2 or alternatives that the Department should be  
3 considering. I really encourage you to provide that  
4 either orally or in writing. And, also, the basis for  
5 your comments if you have data to support them, relevant  
6 references, that's really useful to us as well.

7           So we're in the middle of our public  
8 review period. It's a 56-day public review period.  
9 Normally it's 45 days under CEQA. We had a glitch with  
10 the E-mail address at which we were supposed to be  
11 receiving comments, and that wasn't up and running for  
12 the first period, so we extended the public comment  
13 period to reflect that.

14           So once again, please silence all cell  
15 phones and pagers.

16           This probably won't be a problem, but  
17 if -- please, one person only speaking at a time. Clear  
18 and succinct comments are also very helpful.

19           And, finally, if you do hear any  
20 viewpoints that are different from your own, please be  
21 respectful. We want to have everyone have an  
22 opportunity to express their point of view.

23           So with that, I'm going to turn it over to  
24 Gerald.

25           GERALD HATLER: Thank you, Michael.

1 Well, thank you for coming tonight. I  
2 just want to give you a very, very brief background on  
3 the project.

4 So what you're -- what you're seeing here  
5 on the left, this is a Program Environmental Impact  
6 Statement, Environmental Impact Report that was prepared  
7 by the Bureau of Reclamation and Department of Water  
8 Resources. That document was released in 2011.

9 That document analyzes some of the broader  
10 aspects of the program, steps that the program needs to  
11 take to achieve the water management goal, flood  
12 management, some of those things.

13 There is some analysis of -- for fish  
14 reintroduction in that document, but it was based on, I  
15 think, the limited amount of information that they had  
16 at the time when that document was being prepared. So  
17 what we're doing here is we needed to develop a more  
18 robust document for our purposes to assist with the  
19 proposed actions to reintroduce spring-run Chinook  
20 salmon, in particular, under the project.

21 On the right side, that's showing -- give  
22 you some perspective on the project. But that's the  
23 entire San Joaquin River from the headwater out to the  
24 Delta. It's about 366 miles. The project itself is  
25 mainly focused on the reach -- 136 -- approximately 136

1 mile reach from Friant dam down to the confluence with  
2 the Merced River.

3           There are some broader management  
4 implications looking at -- looking at the San Joaquin  
5 basin tributary set that we've analyzed. And we also  
6 looked at some of the potential impacts with respect to  
7 some of the donor streams up in Northern California.

8           So the restoration program is a result of  
9 a settlement to restore the San Joaquin River. It was a  
10 suit filed primarily by NRDC and a coalition of  
11 environmental groups. They sued the Bureau of  
12 Reclamation and Friant Water Authority. Basically,  
13 Friant -- Friant constructed and operates the dam, and  
14 then the water itself is managed by Friant Water  
15 Authority.

16           And so in 2006 a settlement was reached  
17 to -- really to -- the settlement intended to achieve  
18 two collaborative coequal goals, one to restore the  
19 San Joaquin River and such that it could support  
20 reintroduced runs of Chinook salmon, both spring-run and  
21 fall-run Chinook, and then a water management goal that  
22 would offset those impacts resulting from restoration in  
23 the San Joaquin River and the flows that are called for  
24 in the settlement.

25           Now, the State's role in the restoration

1 project is largely outlined in what we're calling the  
2 State MOU. The State MOU outlines the State's role in  
3 implementing the project. And, you know, it was -- it  
4 was believed that the State should play a major  
5 collaborative role in planning, design, funding, and  
6 implementation of the settlement.

7           And the MOU also acknowledges the State's  
8 authorities, resources, broader resource strategies, and  
9 it also outlines oversight for flows, fish passage and  
10 entrainment, fish reintroduction, fishery monitoring and  
11 evaluation, and the establishment and maintenance of  
12 riparian habitat.

13           So here's -- here's an overview of the  
14 project area associated directly with the salmon  
15 conservation and research facility that we're  
16 proposing. This is Friant Dam right here. Right in  
17 here is the existing San Joaquin trout hatchery. And  
18 the facility itself is adjacent to the hatchery, about  
19 1.1 miles downstream of Friant Dam. Approximately, the  
20 proposed, at least, structural area is probably about  
21 two acres. There's also an access road that goes  
22 through there.

23           And so the facility includes buildings and  
24 residences in the proposed design. Potentially includes  
25 residences. We're still working that out. But we've

1 got a main hatchery building, small production area,  
2 adult captive brooding, and then we've got some water  
3 treatment features associated with it as well.

4           And so the project as described in this  
5 document involves five principle actions. One would be  
6 to construct and operate the conservation facility. The  
7 parties agreed that a hatchery would be necessary to  
8 achieve the fish reintroduction goals. Also, what we've  
9 analyzed is salmon reintroduction, including donor stock  
10 collection, broodstock development. And some of the  
11 sources of broodstock could potentially be streams in  
12 Northern California, the Deer Mill Creek complex,  
13 Butte Creek, Feather River. We're also looking at  
14 spring running -- spring running spring -- fish that  
15 exhibit a spring-run life history characteristic.  
16 Looking at McKelumne. There's spring run in Stanislaus,  
17 Battle Creek, Clear Creek, and/or Yuba Creek, and we're  
18 also looking at utilizing fish from Feather River Fish  
19 Hatchery.

20           And some of those reintroduction  
21 approaches could be direct release fish of river,  
22 translocating fish from one stream or one facility to  
23 another, taking the fish that are produced in the  
24 hatchery, releasing them somewhere else in the river.  
25 And so, you know, there's a broad spectrum of potential

1 actions that we could pursue, and we tried to  
2 sufficiently analyze those as much as possible in this  
3 document.

4 The third principle action would be to  
5 manage the salmon runs in the restoration area in the  
6 context of basin-wide strategies. And that kind of gets  
7 to our State MOU and the State's role in managing our  
8 broader regional resource strategies.

9 In the tributaries we've been managing  
10 fall-run Chinook salmon there for some time. We also  
11 manage salmon in Northern California where some of the  
12 donor stocks could come from. And so there's some  
13 potential implications between all these management  
14 actions and what we'd like to achieve under this  
15 project. And so, you know, there's some analysis of  
16 that.

17 We also have a great deal of work to  
18 pursue both in evaluating baseline conditions for the  
19 restoration program, finding out things about the river,  
20 about the quantity and quality of habitat, and actions  
21 that we think would be necessary to support  
22 reintroduction of spring and fall-run Chinook salmon in  
23 the restoration area. And there's -- and there's a lot  
24 of ongoing monitoring and evaluation that would be  
25 necessary in that.

1                   And then, finally, to manage and support  
2 recreation within the restoration area. You know, and  
3 that's really in the context of the Department's  
4 mission, you know, to manage the State's resources not  
5 only for the ecological value but for the use and  
6 enjoyment by the public.

7                   And that concludes what I wanted to  
8 present. I thank you again for coming.

9                   I really want to encourage you guys to  
10 provide your questions and comments later this evening,  
11 or, you know, provide your comments by the December 2  
12 deadline. We really want to honor your questions and  
13 comments by giving them the fullest possible  
14 consideration by responding appropriately in the final  
15 EIR.

16                   MICHAEL STEVENSON: Thanks, Gerald.

17                   So I'm going to talk a little bit more  
18 about the CEQA process and the Environmental Impact  
19 Report and its contents, how to provide public comment.

20                   So CEQA stands for California  
21 Environmental Quality Act. It's a state law that  
22 requires that all public agencies in the state, whether  
23 those are state or local agencies, consider the  
24 environmental impacts of their discretionary actions.  
25 And depending on the level of impact that's possible,

1 there's different types of documents that may be  
2 prepared.

3 In this case the Department has chosen to  
4 prepare the highest level of environmental  
5 documentation. It's called an Environmental Impact  
6 Report or EIR.

7 And so the purpose of this law is really  
8 to provide for public disclosure of those environmental  
9 impacts to be used by agency decision makers in deciding  
10 whether or not to carry out the actions as they're  
11 described and describe any mitigation measures or  
12 alternatives that could potentially be adopted that  
13 could reduce the impacts of those actions.

14 So Gerald talked a lot about what are the  
15 actions, and now I'm talking -- I'm going to talk a  
16 little bit more about what the impacts of those actions  
17 might be.

18 So in terms of the CEQA process, we  
19 circulated a Notice of Preparation November 2012.  
20 That's the very first step in the CEQA process. That  
21 initiated a 30-day public scoping period. During that  
22 time we received comments from members of the public and  
23 public agencies about what the EIR should address, scope  
24 and contents of the EIR. We had a series of public  
25 meetings, in fact, one at this location, during that

1 time.

2           Following that we considered all those  
3 comments, and we prepared a Draft EIR. And so that  
4 document was released just a few weeks ago, towards the  
5 beginning of last month, and we're now in this 56-day  
6 public review period. And during that time period we're  
7 having a meeting here tonight. We're going to have a  
8 meeting on Wednesday in Sacramento. And then in a  
9 couple weeks we're going to have another public meeting  
10 up in Chico. But those are opportunities for people to  
11 come and provide their comments, learn a little bit more  
12 about the project. We're also encouraging, as Gerald  
13 mentioned, that people submit comments in writing as  
14 well.

15           We will then prepare the final EIR. And  
16 I'll talk a little bit more about what's in the final  
17 EIR. That's anticipated early part of 2014, I think in  
18 the March time frame. And following that there will be  
19 a public notice. And then the Department will consider  
20 whether or not to approve the project and keep moving  
21 forward.

22           The next stage after that would be to  
23 continue the architectural design, engineering design  
24 for the facility.

25           But to finish that, the Department will

1 file what's called findings. They'll adopt findings on  
2 the project and file what's called a Notice of  
3 Determination. And that's the final step in the CEQA  
4 process.

5 In terms of the contents of the Draft EIR,  
6 here's a quick summary of the main sections of it.  
7 There's an Executive Summary. And so if you haven't  
8 read it yet, that's a great place to start. There's a  
9 more detailed information in the project description.  
10 Chapters 3 through 17 contain various topical impact  
11 sections. And I'll talk about those in just a second.  
12 And, also, note we've got alternatives analysis.

13 And so some of those topical sections,  
14 these are all different resource topics that are  
15 mandated by CEQA to be looked at, so it goes everywhere  
16 from aesthetics, air quality emissions, biological  
17 resources. I'm not going to list all these, but you can  
18 see there's a wide range of different topics that CEQA  
19 requires that you look at.

20 So in terms of the findings, I'm going to  
21 provide a very quick overview, and if you're interested  
22 in learning more about the findings in the EIR, do take  
23 a look at it. There's a summary in the "Executive  
24 Summary."

25 First of all, there were a number of

1 impacts that we found would be less than significant.  
2 Or if they were potentially significant, there's  
3 mitigation measures that the Department could implement  
4 that would reduce it to a level of less than  
5 significant. And that includes construction-related  
6 effects, for the most part, could be mitigated, whether  
7 that's noise, dust, air, air emissions, hatchery  
8 operations, broodstock collection from the Feather River  
9 Fish Hatchery, the effects of fish reintroduction on  
10 existing populations, not only of salmon but of other  
11 aquatic life, the effects of the research and monitoring  
12 activities that Gerald was talking about, and just a  
13 number of other topics where we found it was less than  
14 significant or less than significant with mitigation.

15           There were several possible significant  
16 and unavoidable impacts that were identified, and I want  
17 to talk about those briefly.

18           The first one is wild broodstock  
19 collection. Gerald was talking about some of the  
20 locations where spring-run Chinook may be collected for  
21 the purposes of developing a broodstock.

22           Prior to doing that, the Department would  
23 need to obtain a permit from the National Marine Fishery  
24 Service, and the National Marine Fishery Service would  
25 identify measures that would need to be taken to be

1 protective of those spring-run fish. And there are  
2 threatened runs, and the Department doesn't want to take  
3 any actions that could potentially jeopardize those  
4 fish.

5           However, under CEQA you have to have  
6 clearly identified what those measures are at the time  
7 you publish the Draft EIR in order to find that the  
8 impacts might be less than significant. And so because  
9 we don't know yet what the National Marine Fishery  
10 Service permit is going to require of them, we couldn't  
11 say that -- that the impact would necessarily be less  
12 than significant.

13           At the time that such a permit is going to  
14 be issued, it's the Department's plan to conduct  
15 additional CEQA analysis, look at those measures, and  
16 make conclusions related to whether or not the impacts  
17 on those native runs of fish would be significant.

18           But as I mentioned before, the  
19 Department's intent is not to have significant impacts,  
20 but because of CEQA's requirements and the fact that we  
21 don't know what those measures are, we found it as  
22 significant unavoidable.

23           Another area where we had kind of similar  
24 challenges with doing analysis related to greenhouse gas  
25 emissions and the fact that certain of the project

1 components aren't fully defined at this time. For many  
2 of them they are well defined, and we were able to do  
3 greenhouse gas emissions estimates and compare those  
4 against the significance threshold that's been adopted.

5           But for some of those things that may be a  
6 little bit further out such as some of the recreational  
7 enhancements, we didn't know the list of construction  
8 equipment might be needed, how many people might be  
9 using them. And so it's possible that once those are  
10 inventoried in the future, that they would exceed the  
11 threshold or that mitigation may not be feasible. And  
12 so we found that as significant unavoidable as well.

13           And, finally, there are many measures  
14 being taken right now to try to prevent the spread of  
15 aquatic invasive species. I know before this meeting  
16 started, we were talking about zebra mussels.

17           There are standard protocols that are in  
18 place for that, but we recognize that there really  
19 wasn't anything additional that the Department could do  
20 to try and prevent the spread of that beyond what  
21 they're doing already and that it was likely that if  
22 they did construct some of these recreational  
23 enhancements, it's possible that that could lead to the  
24 spread of invasive species. And so once again, to be  
25 conservative, we determined that that was a significant

1 unavoidable impact of the project.

2           So moving on to some of the alternatives  
3 that we considered, CEQA requires that you look at a no  
4 project alternative and evaluate what the possible  
5 consequences would be of not taking the action, and so  
6 we evaluated that. That would involve the Department  
7 not reintroducing fish, not constructing the SCARF.  
8 There are other parties that may very well be involved  
9 in doing some of these actions, and so it's possible  
10 that some of the other entities that Gerald was  
11 mentioning may step up and do some of these things if  
12 the Department weren't to go forward.

13           Some of the other alternatives we  
14 considered included the spring-run-only alternative. So  
15 right now the project contemplates reintroducing both  
16 fall-run Chinook and spring-run Chinook. We considered  
17 the possibility of, well, what if we only reintroduced  
18 spring-run Chinook, actively reintroduced spring-run  
19 Chinook, that maybe the fall-run Chinook might  
20 volitionally recolonize the area and what might the  
21 consequences of that be.

22           We also looked at -- because there's a lot  
23 of concern over possible effects on the native  
24 spring-run fish that could be used to develop a  
25 broodstock, we looked at what the consequences might be

1 if they only used hatchery broodstock from the Feather  
2 River Fish Hatchery.

3 And, finally, we looked at a siting  
4 alternative where we put the SCARF at a different site  
5 and reduced the impacts on that site and whether there'd  
6 be any advantage to that.

7 We looked at -- all these alternatives  
8 were designed to try and reduce some of the identified  
9 significant impacts of the project, and they all would  
10 reduce or avoid certain of those impacts. However, we  
11 did acknowledge in the document that we believed that  
12 the proposed project as it's designed is secure to any  
13 of these alternatives. The environmental benefits of it  
14 outweigh the adverse effects in comparison to these  
15 alternatives.

16 So that's a really brief summary of some  
17 of the key conclusions of the EIR. I do encourage you  
18 to look at the document more.

19 In terms of our next steps and timeline,  
20 the public review period ends on December 2. It's a  
21 Monday. So we do encourage you to provide your comments  
22 within that time frame.

23 The final EIR in the early part of next  
24 year.

25 And then the Department, at least ten days

1 after publishing the final EIR -- they have to wait that  
2 long -- then they would take the final steps of  
3 certifying the EIR, filing the NOD, and adopting the  
4 findings under CEQA.

5           And that final EIR is going to be an  
6 addendum document. So the Drift EIR is the bulk of the  
7 analysis. The final EIR will contain all the comments  
8 received during the public comment period, including  
9 transcripts of these meetings -- we have somebody taking  
10 a transcript right now -- specific responses to all the  
11 comments that have been provided, and then any changes  
12 to the Draft EIR based on those comments and responses,  
13 so any updates that the Department wants to make.

14           So in just a minute we're going to  
15 transition to the public comment portion of this  
16 meeting. And a couple of notes just on effective  
17 commenting. CEQA provides some guidance, actually, in  
18 the CEQA guidelines about how to provide comments. And  
19 one of the things it asks for is that comments should be  
20 substantive and focused on the sufficiency of the EIR  
21 and identifying possible impacts or ways in which they  
22 could be mitigated or alternatives that could avoid the  
23 impacts.

24           Specifically, we really encourage you to  
25 provide -- if you have alternative mitigation measures

1 or alternatives in general, be specific about what those  
2 might be, if they could better avoid or mitigate the  
3 impacts that we've identified.

4 Under CEQA there's what's called the  
5 Substantial Evidence Standard. And all analysis is  
6 supposed to be based on what's called substantial  
7 evidence. So that goes to the same thing for public  
8 comments. If you can provide substantial evidence, that  
9 really helps bolster your comments.

10 And, finally, you can give comments today  
11 verbally or you can provide them on the comment forms  
12 or, really, any time in writing or by E-mail during the  
13 public comment period.

14 Here's a little bit more information the  
15 public -- where to send your comments. And this is also  
16 in the handouts that you received.

17 Here's a couple websites for the project.  
18 Probably most of you are familiar with these. The top  
19 one is the Department's website specifically for this  
20 project, and then the bottom one is more generally  
21 related to the overall San Joaquin River restoration  
22 program.

23 So at this point we're going to transition  
24 into receiving everybody's public comments. Could I get  
25 a show of hands who all wants to give a comment

1 tonight. We have one.

2 Okay. And I believe that we already have  
3 your comment card. So you've got that one? Okay.

4 So what we're going to do -- and if other  
5 folks want to give comments, you're certainly welcome to  
6 do so once he's done.

7 What I'm going to do is bring this  
8 microphone over, and if you can just stand and state  
9 your name for the record, and then we'll have you give  
10 your comments.

11 So this is Richard.

12 RICHARD HAAS: Name's Richard Haas. You  
13 go -- I read in the book there you're going to put that  
14 hatchery on a hundred-year flood plain. Go higher.  
15 I've seen that hundred -- hundred-year flood plain not  
16 work on handicap fishing ramps up at -- on the  
17 San Joaquin River. They wash away.

18 That hatchery, after all the input's in,  
19 start building it in '15?

20 GERALD HATLER: Well, that depends. We've  
21 got a current construction schedule -- we would hope  
22 that we could begin constructing the hatchery, well,  
23 2014, I think. We hope to have it done by 2015.

24 RICHARD HAAS: Okay. Another question.  
25 After this gets going, all those old gravel pits, are

1 you going to plug them up or leave them open? Down  
2 around 41.

3 GERALD HATLER: Well, one of the  
4 settlement goals is to identify the highest priority  
5 mining pits for potential isolation from the San Joaquin  
6 River. So that is one of the major projects that's been  
7 identified in the settlement.

8 RICHARD HAAS: I know a lot of people that  
9 fish, and they're worried about they're going to dry  
10 them up and everything. Up in the Merced River, they're  
11 open up there.

12 That's all I got. Thank you.

13 MICHAEL STEVENSON: Thank you.

14 All right. Do we have anyone else who  
15 would like to give a comment?

16 Okay. Well, if you do want to talk with  
17 any of the staff that are here, we're going to be  
18 sticking around for a little while, so feel free to come  
19 up and talk to us. And if you do have written comments,  
20 we really do encourage you to provide those. So please  
21 get those in by the comment deadline of December 2.

22 And with that, I'll close the meeting.  
23 Thank you very much. Have a good night.

24 (Whereupon, the meeting concluded at  
25 approximately 6:44 p.m.)

1 State of California, )  
2 County of Fresno.) ) ss.

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I, DEVRA L. JOY, a Certified Shorthand Reporter of the State of California, having offices located in Fresno, California, do hereby certify:

THAT said proceedings was reported in shorthand by me at the time and place above stated, and thereafter transcribed under my direction and control.

I FURTHER CERTIFY that I am not interested in the outcome of said action, nor connected with, nor related to any of the parties in said action or to their respective counsel.

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DEVRA L. JOY, C.S.R. No. 6459

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# Sacramento Public Meeting Transcript

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CALIFORNIA DEPARTMENT OF  
FISH AND WILDLIFE

SALMON CONSERVATION AND RESEARCH FACILITY  
OPERATIONS, FISH REINTRODUCTION, AND  
RELATED MANAGEMENT ACTIONS  
DRAFT ENVIRONMENTAL IMPACT REPORT

Public Meeting  
Sacramento, California  
Wednesday, November 6, 2013  
6:00 p.m.

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Reported by: CATHERINE D. LAPLANTE  
CSR License No. 10140

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A P P E A R A N C E S

MICHAEL STEVENSON  
GERALD HATLER

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1           MR. STEVENSON: All right, everybody. We're  
2 going to go ahead and get started here. Thank you very  
3 much for coming to the public meeting on the Draft  
4 Environmental Impact Report, the Salmon Conservation and  
5 Research Facility and Related Management Actions  
6 Project, part of the San Joaquin River Restoration  
7 Program, and the San Joaquin Research Facility, we call  
8 SCARF for short. I'll be referring to SCARF a lot.

9           Here in our audience, looks like we have agency  
10 representatives from the folks who are working directly  
11 on this contract. My name is Michael Stevenson. I'm  
12 with Horizon Water Environment. We are a contractor  
13 assisting with the preparation of the EIR.

14           This is Gerald Hatler. He is the manager on  
15 the CDFW side, Environmental Program Manager involved  
16 with the San Joaquin River Restoration Program. We also  
17 have Shannon Little from the Office of General Council  
18 at CDFW, and also assisting us from Department of  
19 General Services is Jennifer Parson, and then from my  
20 staff, this is Kevin Fisher. He's helped with the EIR  
21 preparation.

22           So we're going to talk probably for about a  
23 half-hour here about the project, the environmental  
24 analysis, the CEQA process, and then we're going to open  
25 it up to receive public comments.

1           So I'm going to briefly discuss the meeting  
2 purpose and the ground rules. Gerald is going to give a  
3 background on the San Joaquin River Restoration Program  
4 and give us a review of the proposed project and any  
5 actions contemplated in the EIR, and then I'll talk  
6 about the CEQA process and the highlights of the  
7 environmental analysis and how to comment during the  
8 public review period, and at that point, we'll turn it  
9 over to receive public comment.

10           So the purpose of this meeting is to allow  
11 members of the public, public agencies the opportunity  
12 to provide comments on the adequacy of the Draft EIR in  
13 evaluating possible environmental impacts of the  
14 proposed action, as well as the ways in which impacts  
15 that are found significant might be reduced or avoided  
16 or mitigated.

17           And so we're here really to hear from you all  
18 who are attending on these topics, ideas that you may  
19 have for alternative mitigation measures or additional  
20 mitigation measures, alternative approaches that should  
21 be considered. Those type of things we're hoping to get  
22 out of this process, and if you do have ideas also, the  
23 more data you can provide us, reference material,  
24 information to support the approach that you're  
25 suggesting, that's really useful.

1           Our public review period is 56 days. Normally  
2           it's a 45-day review period. We had a little glitch  
3           with the e-mail that -- at which we receive our  
4           comments, and so we extended it to account for that.

5           So meeting ground rules. You seem like an  
6           unruly bunch, so I'm going to be watching you.

7           Please silence your cell phone, if you haven't  
8           already, and let's see about some of these others.

9           Actually, you know, I forgot, before I turn  
10          this over to Gerald, I just wanted to call your  
11          attention to some of the materials you would have  
12          gotten.

13          This is the agenda. This is a flyer that has  
14          some information on how to provide your comments.

15          This one is actually a comment form, which  
16          folks can write down their comments if they want to.  
17          Fold it over, place a stamp on it and mail it in. You  
18          are also welcomed to e-mail us comments. There's an  
19          e-mail address, as well as write it on your own  
20          letterhead and also encouraged to submit multiple  
21          comments, if you want to.

22          If you're interested in speaking tonight, we  
23          have speaker cards. What we'll do is have everybody who  
24          wants to talk fill these out, and we'll collect them and  
25          call the folks up who want to give comment. You can

1 also write down some notes in terms of what you want to  
2 talk about; we can give it back to you for that purpose.  
3 If you want to talk, we can get one to you at that point  
4 in the meeting.

5 So with that, I will turn it over to Gerald who  
6 is going to give a background on the San Joaquin  
7 Restoration Program.

8 MR. HATLER: Thank you, Michael. Thank you for  
9 coming tonight.

10 One thing I would like to add to the setting  
11 for the meeting tonight is that I would really want to  
12 encourage people to provide questions and comments. We  
13 want to honor those questions and comments and respond  
14 appropriately, and so we will be waiting to respond to  
15 those comments when we can give them the fullest  
16 consideration in the Final EIR.

17 Also, it's really important that the questions  
18 and comments focus on the project description. It gives  
19 you much more standing for your comments and questions,  
20 and it also makes it easier for us to respond to them.

21 So, again, my name is Gerald Hatler. I  
22 supervise and manage all the staff working on the  
23 restoration program for the Department, as well as  
24 manage the Department's involvement with the restoration  
25 program.

1 I had been on the project pretty much since its  
2 inception, and so I have been involved with all the  
3 fishery and restoration activities on the program for  
4 almost seven years now, and so the activities proposed  
5 in the Draft EIR are -- they're disclosing activities  
6 that the Department seeks to pursue to support  
7 implementation of the San Joaquin River Settlement  
8 Agreement, and the settlement agreement has two  
9 foundational goals, and they're both treated co-equally.

10 One is to restore the San Joaquin River so that  
11 it will support spring and fall-run Chinook Salmon and  
12 other native fish, and the other goal is to reduce or  
13 avoid impact to necessary water supplies as a result of  
14 program implementation.

15 And the Department is one of five primary  
16 implementing agencies on the project that includes the  
17 State Department of Water Resources, National Marine  
18 Fishery Service, the US Fish and Wildlife Service, and  
19 the US Bureau of Reclamation.

20 The State is not a settling party under the  
21 settlement agreement, but our role and commitment to  
22 implement the settlement is set forth under an MOU  
23 between the State and the settling parties.

24 And the MOU also acknowledges that the State  
25 has a significant interest in restoring the San Joaquin

1 River, and, you know, we are a public trust for the  
2 resources associated with the river.

3 It's not really too easy to see.

4 The project itself is a 153-mile reach from  
5 Friant Dam northeast of the City of Fresno all the way  
6 down to the confluence with the Merced River, and the  
7 potential affected area would include tributaries in the  
8 San Joaquin basin and in the Sacramento River basin, as  
9 well as the Delta and the Pacific Ocean connected for  
10 salmon.

11 The proposed site for construction of the  
12 conservation facility is approximately 1.1 miles  
13 downstream from Friant Dam near the town of Friant, and  
14 the proposed hatchery itself, this is -- this is the  
15 proposed site here, and here's the existing State trout  
16 hatchery and the proposed hatchery is probably about  
17 half the size of the existing State trout hatchery.

18 The hatchery itself is largely composed of  
19 smolt and adult production areas, as well a pertinent  
20 water supply and water treatment facilities, and it also  
21 includes a volitional release channel that will release  
22 fish directly into the San Joaquin River.

23 And the principal actions for the project would  
24 include the construction and operation of the  
25 conservation facility as well as reintroduction, which

1 would involve brood stock production within the  
2 conservation facility, the collection of source stock  
3 for reintroduction and potential actions to directly  
4 release Chinook salmon into the San Joaquin River.

5 The State also -- Department Fish and Game --  
6 Fish and Wildlife, I'm sorry, excuse me, still haven't  
7 got that down yet.

8 Department of Fish and Wildlife also  
9 reintroduced Chinook salmon in both the San Joaquin  
10 basin and the Sacramento basins, and so we consider  
11 interactions between the actions that we're pursuing  
12 under the program and those broader resource strategies  
13 that the Department is pursuing.

14 Another important element is the collection of  
15 biological information that will support restoration  
16 actions for the program as well as monitor and success,  
17 and the Department seeks to manage recreational  
18 resources consistent with the Department's mission to  
19 manage natural resources for the use and enjoyment of  
20 the public.

21 And that concludes -- thank you very much for  
22 coming.

23 MR. STEVENSON: All right. Thanks, Gerald.

24 So CEQA is the California Environmental Qualify  
25 Act. It's a law that was passed in the '70s requiring

1 public agencies in California to consider the  
2 environmental impacts of their discretionary action, and  
3 so it's focused on environmental review and public  
4 disclosure.

5 In this case, the Department of Fish and  
6 Wildlife has prepared an Environmental Impact Report.  
7 That's the highest level of environmental documentation  
8 that you can do under CEQA, and the purpose is really  
9 disclose environmental impacts as well as identify  
10 mitigation measures and alternatives that may reduce or  
11 avoid or lessen those impacts.

12 We're in the midst of the process right now.  
13 The notice of preparation was circulated back in  
14 November last year, and that -- that started a 30-day  
15 public scoping period where we had a series of scoping  
16 meetings, one in this very room, where we solicited  
17 information from members of the public and other public  
18 agencies about what we should be looking in this  
19 Environmental Impact Report. What are the key issues?  
20 What are the data sources we should be looking at?

21 From there, we considered all those comments  
22 and other information and prepared a Draft EIR. That  
23 was released in October, and now in the midst of the  
24 56-day public review period.

25 Following the close of that public review

1 period, we will prepare a Final EIR, and I'll talk a  
2 little bit about what's contained in the Final EIR,  
3 probably around March 2014. From there, there's going  
4 to be a public notice process, and the final step in the  
5 CEQA process is the adoption of findings by the  
6 Department on the EIR and filing a Notice of  
7 Determination, which concludes the CEQA process.

8 So that's our general approach in our timeline.

9 In terms of what's in the EIR. There are a  
10 number of different chapters; this summarizes them.  
11 Really the Executive Summary, if you're interested in  
12 learning about the EIR very quickly, that's a good place  
13 to start. Project description has a lot of information  
14 about the proposed actions, and then chapter 3 through  
15 17 are each topical sections, and then there's a couple  
16 of other chapters, other statutory considerations,  
17 alternatives analysis.

18 But the topics range -- are wide ranging based  
19 on what CEQA requires, everything from esthetics and air  
20 quality, very extensive analysis of biological  
21 resources, fisheries. We have gas emissions all the way  
22 through to recreational facilities, et cetera.

23 So some of the key EIR findings, there was a  
24 number of less than significant or impacts -- less than  
25 significant impacts or impacts that were mitigated to a

1 level less than significant.

2 Most of the construction-related effects were  
3 found to be that way, such as, you know, air quality  
4 emissions from construction equipment, dust, noise, the  
5 effects of hatchery operations, collection of brood  
6 stock from the Feather River Fish Hatchery found to be  
7 less than significant. The effects of the  
8 reintroduction of the fish on other salmon population  
9 and other aquatics species. The effects of the Research  
10 and Monitoring Components Program and a number of other  
11 resource topics.

12 There were several possible significant  
13 unavoidable impacts that were found in the environmental  
14 document. I want to talk about those a little bit.

15 The first one relates to wild brood stock  
16 collection, and the Department is proposing as part of  
17 their brood stock development, initially they will be  
18 collecting brood stock from the Feather River Fish  
19 Hatchery, but ultimately they would seek to obtain from  
20 wild brood stock for spring-run Chinook. And as part of  
21 that, they will be required to get a 10A-1A permit from  
22 National Marine Fishery Service.

23 At this time they -- they are -- they begun to  
24 evaluate what would be involved with the spring-run  
25 collection of those native runs, but many of the details

1 have yet to be identified, and some of the specific  
2 requirements that would be in that permit haven't been  
3 finalized.

4 And so we evaluated what the possible  
5 consequences of brood stock collection would be, but  
6 because under CEQA if we did find it is potentially a  
7 significant impact, that there could be damage to these  
8 runs if it was not done properly, CEQA requires in those  
9 cases that you identify very clear and specific  
10 mitigation for how to avoid those things from happening.

11 In this case because this action is dependant  
12 upon future permits that haven't been issued yet, we  
13 couldn't necessarily speculate on exactly what those  
14 requirements would be, so in an abundance of caution, we  
15 concluded those impacts would be significant unavoidable  
16 while at the same time acknowledging it's not the  
17 Department's intent to have significant impacts on those  
18 wild runs, but rather this was a conclusion that we felt  
19 compelled to make because of CEQA'S requirements.

20 So at the time that the Department does seek to  
21 pursue wild brood stock collection, they would obtain a  
22 permit, and they would conduct further CEQA analysis if  
23 necessary to evaluate what the possible impacts would be  
24 and more specific measures would be to avoid those.

25 Another kind of similar CEQA environmental

1       unavoidable impact relates to greenhouse gas emissions.  
2       There's a lot of different components to the projects  
3       that are going to involve. We were pretty clear on  
4       exactly what was going to be involved in constructing  
5       the facility itself, but there are other -- other  
6       construction aspects of the project such as the  
7       development of some of the recreational enhancements,  
8       fishing resources and off-channel ponds and where -- the  
9       designs weren't far enough along, the plans weren't far  
10      enough along that we could conduct a greenhouse gas  
11      inventory.

12               And so while we identified that -- that there  
13      would be mitigation that would likely be feasible to  
14      reduce this impact, we couldn't completely dismiss the  
15      possibility of a greenhouse gas emissions, so we found  
16      out it has a significant unavoidable impact.

17               Finally, the other that we looked at was the  
18      spread of aquatic invasive species. This is a really  
19      big problem. That is really actively being addressed.  
20      There are de-contamination protocols, but we couldn't  
21      entirely rule out the possibility that there would be  
22      some spread, so those are the significant unavoidable  
23      impacts we found in the EIR.

24               CEQA requires that you look at a no project  
25      alternative, which is basically looking at what would be

1 the consequences of not taking this action, and so we  
2 evaluated that.

3 We also looked at several other alternatives  
4 that seek to avoid some of the possible impacts of the  
5 project, and so we looked at a spring-run only  
6 alternative under which there would be only volitional  
7 recolonization of fall-run Chinook salmon, but the  
8 Department only focused on propagating and releasing  
9 spring-run.

10 Right now, the possibility in the project  
11 exists they would do both, so we consider what the  
12 possible impacts of that might be.

13 We looked at possible impacts of only using  
14 hatchery brood stock as opposed to alternating wild  
15 brook stock collection.

16 We also looked into a different sites and  
17 whether or not we can reduce impacts of the project by  
18 moving into a different location.

19 And all of those alternatives we're -- would be  
20 successful in reducing some of the impacts of the  
21 project.

22 We did find that many of those would also have  
23 impacts of their own or may not as fully reach the  
24 project objectives or provide as many environmental  
25 benefits as the proposed project, and so we did

1 determine that the proposed project was environmentally  
2 secure overall compared to the alternatives.

3 That is a really quick summary. I encourage  
4 you to look at the Environmental Impact Report because  
5 there's a lot more detail in it.

6 In terms of our next steps in timeline, the  
7 public review period closes on December 2nd, Monday. We  
8 do ask that you e-mail your comments by 5:00 p.m. on  
9 that day or have them postmarked by that point.

10 We expect the Final EIR to be completed within  
11 three to four months following that, and then from there  
12 the Department will consider whether they want to  
13 certify the EIR, and as I mentioned earlier, file a  
14 determination and adopt CEQA findings.

15 So the Final EIR is going to an addendum  
16 document. What will be contained in that will be a copy  
17 of all the comments that are submitted. We're taking a  
18 transcript tonight, so we will be re-producing the  
19 comments that were provided at the public meetings and  
20 then specific response to each comment that was  
21 received.

22 And if there was a letter that is 20 pages  
23 long, chances are there are numerous comments in there,  
24 and there will be a separate response to each.

25 And then in addition, the Final EIR will

1 contain any changes to the document based on the  
2 comments and responses, and so when you take the Draft  
3 EIR and the Final EIR together, that constitutes the  
4 entire document.

5 Just a couple words on how to comment during  
6 the public review period. This is guidance that is  
7 provided in CEQA.

8 I first want to reiterate what Gerald said,  
9 public input is valued and we want to honor your  
10 comments. We do request the comments be substantive,  
11 really focused on the evaluation that's provided in the  
12 EIR, did we analyze the impacts correctly? Did we  
13 identify the right ones? Did we consider all the  
14 possible mitigation measures or alternatives, and if  
15 there are additional things we should consider, please  
16 suggest them.

17 In addition, CEQA has a substantial evidence  
18 standard in which the analysis needs to be supported by  
19 substantial evidence, so all comments will be more  
20 robust if they have substantial evidence supporting them  
21 as well.

22 We encourage if you have reference data,  
23 information that maybe wasn't included in the EIR that  
24 you have, that's great to provide.

25 So you can give your comments verbally today,

1 and we're going to transition to that part of the  
2 meeting in just a minute, or you can do it on the  
3 comment forms, by e-mail, by letter, and, you know, you  
4 are encouraged if you write a letter and then five days  
5 later you remember there were other things you wanted to  
6 comment on, feel free to provide another one.

7 So this is a little more information on where  
8 to provide those comments.

9 The first website is the Department's website  
10 for this EIR process, and the bottom website is for the  
11 overall San Joaquin River Restoration Program.

12 So with that, we're going to wrap up our  
13 presentation, and move into the public comment portion  
14 of the meeting.

15 Could I have a show of hands who wants to give  
16 public comments today?

17 We've got one. All right.

18 Did you happen to fill out a comment card?

19 MS. REED: I didn't, but -- Rhonda Reed,  
20 R-H-O-N-D-A, R-E-E-D, and I just wanted to say thank you  
21 for extending the comment period. I know it was because  
22 of a glitch, but because we had a furlough, we  
23 appreciate having the extra time.

24 MR. STEVENSON: Great.

25 Any other comments? All right.

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You're making it easy for us today, so with that, we appreciate your coming and attending, we will close the meeting. We'll be here for awhile if you want to keep chatting with us.

Thank you.

MR. HATLER: Thank you for coming.

(Proceedings concluded at 6:41 p.m.)

REPORTER'S CERTIFICATE

I, CATHERINE D. LAPLANTE, a Certified Shorthand Reporter for the State of California, do hereby certify:

That I am a disinterested person herein; that the foregoing was reported in shorthand by me, CATHERINE D. LAPLANTE, a Certified Shorthand Reporter of the State of California, and thereafter transcribed into typewriting; that the foregoing is a true and correct record given.

IN WITNESS WHEREOF, I hereby certify this transcript at my office in the County of Placer, State of California, this 19th day of November, 2013.

  
CATHERINE D. LAPLANTE, CSR #10140



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# Chico Public Meeting Transcript

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CALIFORNIA DEPARTMENT OF  
FISH AND WILDLIFE

SALMON CONSERVATION AND RESEARCH FACILITY  
OPERATIONS, FISH REINTRODUCTION, AND  
RELATED MANAGEMENT ACTIONS  
DRAFT ENVIRONMENTAL IMPACT REPORT

Public Meeting  
Chico, California  
Monday, November 18, 2013  
6:00 p.m.

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Reported by: CATHERINE D. LAPLANTE  
CSR License No. 10140

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A P P E A R A N C E S

MICHAEL STEVENSON

GERALD HATLER

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AGENDA

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Comments by Mr. Stevenson	9
Public Comments	17

1           MR. STEVENSON: First of all, on behalf of the  
2 Department of Fish and Wildlife, I'd like to welcome you  
3 all to the public meeting on the Draft Environmental  
4 Impact Report for the San Joaquin River Restoration  
5 Program, Salmon Conservation Research Facility and  
6 Related Management Actions Draft Environmental Impact  
7 Report.

8           My name is Michael Stevenson. I work with  
9 Horizon Water Environment. We're a contractor that is  
10 supporting the Department of Fish and Wildlife in  
11 conducting this project and preparing the document.

12           I see some familiar faces out here today, so I  
13 apologize if this is a presentation you've seen already.

14           Also here from the Department is Gerald Hatler.  
15 You've all met him before. He's an environmental  
16 program manager with the Department, and he's leading it  
17 up for them, along with Mike Barry, and then Kevin  
18 Fisher and Patrick Donaldson.

19           We're going to start out with a presentation  
20 about -- probably 20, 30 minutes, and then we will open  
21 it up to receive public comment.

22           So some of the topics we'll talk about, I'm  
23 going to give a little bit of an overview, just the  
24 purpose of our meeting.

25           Gerald is going to talk about the background on

1 the San Joaquin River Restoration Program, to provide an  
2 overview of the proposed project.

3 I will then talk a little bit with the CEQA  
4 process, highlights of the Draft EIR and provide some  
5 guidance on how to comment during the public comment  
6 period, and then we'll turn the meeting over to you all.

7 So the purpose of this meeting is to provide  
8 the public and the agencies with an opportunity to  
9 provide comments regarding the efficiency of the Draft  
10 Environmental Impact Report, or EIR, on analyzing and  
11 identifying possible environmental impacts of the  
12 proposal, as well as ways in which these effects where  
13 they're significant can be either mitigated or avoided.

14 We are encouraging folks who want to provide  
15 comments to provide very specific alternatives or  
16 mitigation measures that we can consider incorporating  
17 into the project that further reviews or mitigates any  
18 of the environmental impacts and provide us with  
19 supporting data, reference material to the extent that  
20 you have that.

21 The public review period is a -- normally 45  
22 days under CEQA. We extended it to 56 days, in which we  
23 had our e-mail system during the first part of the  
24 public review period, so we will be running it until  
25 December 2nd.

1                   So with that, I'll turn it over to Gerald.

2                   MR. HATLER: Yeah.

3                   One thing I'd like to add to the setting for  
4 this meeting is we want to encourage everyone to provide  
5 comments and questions, and I really encourage you to do  
6 that either later this evening or in writing by the  
7 December 2nd deadline.

8                   We want to honor comments and questions by  
9 responding to them appropriately so we won't be  
10 responding to questions tonight, but we will respond  
11 after giving them full consideration in the Final EIR.

12                   Also, it's important that you focus your  
13 comments and questions on what's described in the  
14 project that gives you greater legal standing and also  
15 makes it easier for us to respond to your questions and  
16 comments.

17                   So the activities proposed in the Draft EIR  
18 disclose Department activities which seem to support the  
19 implementation San Joaquin River Settlement Agreement.

20                   The Settlement Agreement has two foundational  
21 goals that are treated coequally. One is to restore the  
22 San Joaquin River such that it will support spring and  
23 fall-run Chinook Salmon, as well as other native fish,  
24 and the other is to reduce or avoid water impacts  
25 associated with the implementation of the project.

1           The Department is one of five primary  
2           implementing agencies which includes the State  
3           Departmental Water Resources, the National Marine  
4           Fishery Service, the US Fish and Wildlife Service and  
5           the US Bureau of Reclamation.

6           The Department is not a settling party, but our  
7           role and commitment to support implementation of the  
8           Settlement Agreement is set forth in an MOU between the  
9           State and the settling parties.

10          In the MOU it acknowledges that the State has a  
11          significant interest in restoring the San Joaquin River,  
12          and that we are a public trust for the resources  
13          associated with it.

14          So the project area kind of cuts down low over  
15          here, but it's a 153-mile reach between Friant and  
16          northeast of the city of Fresno down to the confluence  
17          with the Merced River.

18          The potentially affected area includes  
19          tributaries within the Sacramento and the San Joaquin  
20          River watersheds, as well as the Delta and Pacific Ocean  
21          accessible to Salmon.

22          The proposed conservation hatchery site is  
23          approximately 1.1 miles downstream of Friant Dam near  
24          the town of Friant.

25          This is the existing the State trout hatchery,

1 and the area for the proposed conservation hatchery  
2 would occupy an area about half the size of the existing  
3 trout hatchery.

4 So most of the area occupied by this proposed  
5 facility would include smolt and adult production areas,  
6 as well as water treatment and water supply facilities  
7 and includes a volitional release channel that would  
8 release fish directly into the San Joaquin River.

9 The project -- the principal action under the  
10 project would include construction and operation of the  
11 hatchery, fish reproduction, which would involve brood  
12 stock development at the conservation facility,  
13 collection of brook stock and the direct placement of  
14 fish in the San Joaquin River.

15 The Department also manages Chinook Salmon  
16 within the Sacramento and San Joaquin River basins, and  
17 so consideration is given to how the program interacts  
18 with those ongoing broader resource strategies.

19 Another important feature is the collection of  
20 biological information. That information will better  
21 advise restoration actions and also monitor program  
22 success.

23 And then finally the Department seeks to manage  
24 recreational resources consistent with the Department's  
25 mission to manage resources for their use and enjoyment

1 by the public.

2 That's it.

3 MR. STEVENSON: So I'm going to talk a little  
4 bit about CEQA and requirements and talk a little bit  
5 more about the Draft EIR.

6 As I mentioned before, the purpose of CEQA is  
7 to allow for environmental review of the disclosure for  
8 discretionary actions conducted by public agencies.

9 So CEQA was a law that was passed back in the  
10 '70s that requires all public agencies in the State to  
11 consider the effects of their discretionary actions on  
12 the environment and disclose them, and also identify  
13 ways in which those effects may be reduced or mitigated  
14 where they're determined to be significant.

15 Our process on this project started in November  
16 of last year where we circulated the notice of  
17 preparation. That's the first step in the CEQA process.

18 That began a 30-day public scoping period where  
19 we encouraged members of the public to provide us with  
20 comments on what the scope and content of the EIR should  
21 be, what environmental issues we should be looking at,  
22 data sources we should be considering.

23 So we took all that information and utilized it  
24 and then prepared the Draft Environmental Impact Report.  
25 That's the document that's out for public review right

1 now during this public review period.

2 Following the close of the public review  
3 period, we're going to be collecting all those comments,  
4 including the comments that are provided in public  
5 meetings that we've been holding. We held a meeting  
6 down in Fresno and Sacramento prior to this one, and  
7 we'll prepare a Final EIR. Talk a little bit what that  
8 will contain.

9 That is anticipated in the early part of 2014,  
10 and once that is complete, there will be a public notice  
11 process, and the Department will consider whether or not  
12 to certify the EIR, and if they do so, they will adopt  
13 findings on it and file a notice of determination, which  
14 is the final step in the CEQA process.

15 So the structure of the EIR, it's centered  
16 around -- there's a couple introductory tactics. The  
17 executive summary. If you haven't had a chance to look  
18 at the EIR yet, that's a good place to start, and then  
19 the introduction of the project description provides  
20 more detailed information about the project, some of the  
21 background information that Gerald was providing  
22 earlier.

23 The bulk of the document is different chapters  
24 of topical impact analysis, and I'll talk about those  
25 topics in just a second, as well as some other sections

1 in the document, which were required by CEQA, including  
2 alternatives analysis, consideration of what the  
3 possible effects of different approaches might be.

4 So here's the list of topics that were  
5 analyzed. I'm not going to go through the entire list.  
6 You can see these are all different topics that are  
7 suggested by CEQA. There's aesthetics, aesthetics  
8 effects of the project, gas emissions, noise, cumulative  
9 impacts.

10 And in terms of the findings of the EIR, we  
11 found that the majority of the impacts that we looked at  
12 would be either less than significant, a lower  
13 significant threshold or mitigated to a level of less  
14 than significant, and some of those impacts include  
15 construction effects of the hatchery, hatchery  
16 operations, collection of brook stock from the Feather  
17 River Fish Hatchery, which is in the initial source of  
18 brood stock the Department is looking at.

19 The effects of fish reintroduction on Salmon  
20 population, other aquatic species, the effects of  
21 fisheries research and monitoring, and a variety of  
22 other topics. There were several --

23 There were several -- there were several  
24 impacts that we found that potentially would be  
25 significant and unavoidable; meaning, that there were

1 impacts we couldn't find a way to mitigate to a level of  
2 less than significant, and so I wanted to spend just a  
3 minute talking about those.

4 One of those that we found is related to wild  
5 stock, brood stock collection from -- from natural run  
6 of Chinook Salmon. It's the Department's intent that  
7 they will not have adverse effects on these native  
8 species of fish in terms of their brood stock collection  
9 strategy.

10 However, they will need -- before they go and  
11 do that brood stock collection, they will need to obtain  
12 a permit from the National Marine Fishery Service, which  
13 would specify and measures would be implemented to  
14 ensure that those impacts don't happen.

15 That permit hasn't been issued yet, and so it  
16 will be -- at this point to describe what those measures  
17 would be. We have a general sense of what a lot of them  
18 might be. We don't know the specifics, and because we  
19 didn't know those details, under CEQA we couldn't state  
20 that the impacts would necessarily be mitigated to a  
21 level of less than significant as a result of that.

22 So as I mentioned again, the Department is not  
23 intending to do any actions that would have significant  
24 adverse effect on those species, and at such a time the  
25 permits were issued, they would conduct additional CEQA

1 analysis to evaluate possible impacts and conclusions at  
2 that time, but to be conservative at this time, the  
3 Department and CEQA, they found that as significant  
4 unavoidable impact.

5 Another kind of similar aspect to the project  
6 related to greenhouse gas emissions. Many components of  
7 the project are pretty well defined, and we were able to  
8 do an inventory of what the possible emissions might be.  
9 There are other aspects of the project that -- such as  
10 some of the fish barriers that are discussed for -- to  
11 prevent fish from migrating in the false migration  
12 pathways, there's specific locations that haven't been  
13 developed, and so we weren't able to conduct an  
14 efficient inventory.

15 And so we've included mitigation by which the  
16 Department once they have the details will evaluate what  
17 those emissions might be, apply mitigation measures  
18 feasible, but at this point in time, they couldn't  
19 guarantee the impacts would be below the threshold, and  
20 so they found that possible significant unavoidable.

21 Another one, and Gerald spoke a little bit  
22 about some of the recreation enhancements that are  
23 intended to be conducted along the restoration area.

24 One of the concerns associated with that would  
25 be the spread of aquatic invasive species, so there's

1 decontamination protocols that are already in place, but  
2 we did feel -- we couldn't rule out the possibility that  
3 there will be a spread, and so also had that potentially  
4 significant unavoidable.

5 So that's kind of a real brief nutshell of the  
6 key aspects of the Environmental Impact Analysis. Now,  
7 I want to talk a little bit about the alternatives we  
8 considered.

9 And the purposes of these alternatives under  
10 CEQA is to identify alternatives, which may be able to  
11 reduce some of the significant impacts of the project.  
12 One exception to that is the no-project alternative.

13 This is something that CEQA required to be  
14 looked at to determine what would be the consequences of  
15 not taking this action, and so that's something we  
16 looked at.

17 We looked at alternatives where the Department  
18 would focus on only actively propagating or  
19 reintroducing spring-run fish instead of potentially  
20 also looking at incorporating fall-run.

21 We looked at an alternative under which the  
22 Department would only use hatchery brood stock for the  
23 spring-run fish as opposed to all brood stock  
24 collection, and so finally we looked at an alternative  
25 involving different locations for the San Joaquin

1 Conservation Research Facility, Conservation Hatchery to  
2 try to avoid any impacts that would happen at that site.

3 So on the whole, while all these alternatives  
4 would reduce some of the impacts of the project, we did  
5 determine that the project overall, given its  
6 environmental benefits we determined that was the  
7 environmental and superior approach that's with the  
8 Department. Moving forward with that as opposed to one  
9 of these alternatives.

10 So that's just a real brief overview. I  
11 encourage everyone to read the Environmental Impact  
12 Report in detail. I encourage you to provide us with  
13 comments on that during the public review period.

14 As I stated before, the public review period  
15 ends on December 2nd. You can submit your comments by  
16 e-mail, by regular mail, you can send multiple comments  
17 if you want to.

18 As I said before, the Final EIR 2014, and final  
19 steps of certification of the EIR, and finally the -- so  
20 the EIR, Final EIR will contain copies of all comments  
21 received, both transcripts from these public meeting.  
22 Also going to provide specific responses to each of the  
23 comments that were provided.

24 And finally, it's going to contain changes to  
25 the Draft Environment Impact Report based on those

1 comments and the responses that were provided too, so  
2 it's an addendum document which taken with the Draft EIR  
3 is the EIR in its entirety.

4 A couple of notes on effective commenting, and  
5 Gerald also spoke to this a little bit earlier,  
6 obviously public input is best. That's the purpose of  
7 doing this. We do request the comments be focused on  
8 the EIR in evaluating environmental impacts or possible  
9 mitigation measures or alternatives to the proposal.

10 Specific alternatives or mitigation measures  
11 that can better avoid or mitigate the effects are  
12 encouraged, providing those comments, and under CEQA  
13 there's what's called potential evidence standard. All  
14 conclusions shall be concluded with substantial  
15 evidence, so to the extent that we have data, reference  
16 material that can support your comments will strengthen  
17 the gravity of your letter.

18 And you can give your comment today or in  
19 writing on the comment forms that were provided or by  
20 other means that I mentioned, letterhead, send an  
21 e-mail, attachment to the e-mail.

22 Here's the information on where to send those.  
23 You can send them to Gerald at the following address in  
24 Fresno. E-mail to this e-mail address, and this is on  
25 the information that's handed out in the meeting, and do

1 include your contact information so we can keep you  
2 updated on the progress related to this CEQA process, as  
3 well as other aspects of the restoration program.

4 And here are a couple of websites that provide  
5 more information about the project. This is the  
6 Department's website that they have specific to this EIR  
7 process, and this bottom address for the overall San  
8 Joaquin Restoration Program.

9 So with that, we're going to shift gears and  
10 take your public comments, and could I have a show of  
11 hands who want to provide public comment tonight?

12 Anyone? Okay.

13 MR. BROBECK: My comments aren't really  
14 comments on the project, per se, but just general policy  
15 issues that are integrated with Salmon management in the  
16 State.

17 MR. STEVENSON: Okay.

18 MR. BROBECK: I already shared them with two  
19 experts in the room.

20 MR. STEVENSON: Okay. Very good.

21 Are you planning on submitting them in a  
22 written letter as well?

23 MR. BROBECK: I'll consult with my director to  
24 see if we want to pursue that.

25 MR. STEVENSON: Only thing I would say, if some

1 of the things you were talking with Gerald and others  
2 about earlier in the evening, those aren't part of the  
3 public record yet, so if you do want them to be in the  
4 transcript, you may want to just give them again. Up to  
5 you.

6 MR. BROBECK: I will do that and provide some  
7 background information.

8 MR. STEVENSON: Okay. Sounds good.

9 MR. BROBECK: Thank you.

10 MR. STEVENSON: All right. Well, with that  
11 then, we will close the meeting. Appreciate your  
12 attention. Welcome your comments. Have a good night.

13 (Proceedings concluded at 6:49 p.m.)  
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25

1 REPORTER'S CERTIFICATE

2  
3 I, CATHERINE D. LAPLANTE, a Certified Shorthand  
4 Reporter for the State of California, do hereby certify:

5 That I am a disinterested person herein; that  
6 the foregoing was reported in shorthand by me, CATHERINE  
7 D. LAPLANTE, a Certified Shorthand Reporter of the State  
8 of California, and thereafter transcribed into  
9 typewriting; that the foregoing is a true and correct  
10 record given.

11 IN WITNESS WHEREOF, I hereby certify this  
12 transcript at my office in the County of Placer, State  
13 of California, this 3rd day of December, 2013.

14  
15   
16   
17 CATHERINE D. LAPLANTE, CSR #10140

18  
19  
20  
21  
22 ACCURACY-PLUS REPORTING  
23 Certified Shorthand Reporters  
24 3300 Douglas Boulevard, Suite 340  
25 Roseville, California 95661-7980  
(916) 787-4277

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# Appendix C

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## Meeting Materials

## **Appendix C**

# **MEETING MATERIALS**

This appendix contains the materials and handouts associated with the public meetings which were held during the public review period of the DEIR, including the meeting flyer, meeting agenda, sign-in sheets, comment and speaker forms, posters, and PowerPoint presentation.

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# DEIR Public Meeting Flyer

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# CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

## **SALMON CONSERVATION AND RESEARCH FACILITY OPERATIONS, FISH REINTRODUCTION, AND RELATED MANAGEMENT ACTIONS PROJECT**

### ***CEQA Draft EIR Public Review***

Public input is a valued and important component of the California Environmental Quality Act (CEQA) process. Please provide input on the content of the draft environmental impact report.

Per the guidance provided by CEQA, comments should focus on the sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects might be avoided or mitigated. Comments are most helpful when they suggest additional specific alternatives or mitigation measures that would provide better ways to avoid or mitigate the significant environmental effects. The basis for your comments should be explained, including relevant data or references.

All comments received will be considered during preparation of the Final EIR.

#### **COMMENTS DUE:**

**5:00 pm on Monday, December 2, 2013**

#### **MAIL WRITTEN COMMENTS TO:**

California Department of Fish and Wildlife  
Attn: Gerald Hatler  
SCARF Draft EIR Comments  
1234 E. Shaw Avenue  
Fresno, CA 93710

#### **OR EMAIL COMMENTS TO:**

[REG4SCARFCEQA@wildlife.ca.gov](mailto:REG4SCARFCEQA@wildlife.ca.gov)

Include your name, address, contact number, and email address  
for future correspondence related to this CEQA process

Visit our website: <http://www.dfg.ca.gov/regions/4/SanJoaquinRiver/>  
Further information about the San Joaquin River Restoration Program can be found at the  
program website: <http://www.restoresjr.net>



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# DEIR Public Meeting Agenda

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**California Department of Fish and Wildlife**  
**Salmon Conservation and Research Facility &**  
**Related Fisheries Management Actions**  
**Draft Environmental Impact Report**  
*Public Meetings*

**6:00 WELCOME & OPEN HOUSE**

- Opportunity for one-on-one discussion with staff
- Review and discussion of materials at various stations with opportunity for questions and clarifications

**6:25 OPENING REMARKS**

Michael Stevenson, Horizon Water & Environment – Facilitator

- Welcome
- Agenda Review
- Purpose of Meeting
- Meeting Ground Rules

**PROJECT BACKGROUND & OVERVIEW**

Gerald Hatler, Environmental Program Manager, DFW

- Overview of San Joaquin River Restoration Program
- Discussion of the SCARF Project

**CEQA OVERVIEW & HOW TO COMMENT DURING PUBLIC REVIEW PERIOD**

Michael Stevenson

- Background & Overview of CEQA and the EIR Process
- Key findings and conclusions of the Draft EIR
- How to Comment on Draft EIR and Use of Public Meeting Comments
- Summary of Next Steps

**6:45 RECEIPT OF PUBLIC COMMENTS**

- Receive oral comments and questions

**8:00 ADJOURN**

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*FOR MORE INFO, VISIT:*

[HTTP://WWW.DFG.CA.GOV/REGIONS/4/SANJOAQUINRIVER/](http://www.dfg.ca.gov/regions/4/sanjoaquinriver/)

*WRITTEN COMMENTS ACCEPTED UNTIL DECEMBER 2, 2013*

# Meeting Ground Rules

The purpose of this meeting is to solicit input from the public and interested public agencies regarding the analysis of environmental impacts, mitigation measures and project alternatives in the draft Environmental Impact Report (EIR). Additionally, the public meeting provides an opportunity for the Department of Fish and Wildlife to share information regarding the EIR that is being prepared for the SCARF Project. Staff are present to answer relevant questions and to help the public become better informed in order to provide constructive comments on the environmental analysis. Toward that end:

- Please make sure that all cell phones and pagers are on silent.
- Focus your attention on the presentation or response to questions – having side conversations distracts others in the group.
- Do not interrupt the presenter; there will be plenty of time for discussion.
- Try to make your comments clear and succinct. For specific questions that are of personal interest to you, please talk to Department staff before or after the meeting.
- Be respectful of each other and of differing points of view.
- Take personal responsibility for observing these ground rules, and honor our time together by keeping the meeting moving forward positively.
- This is a public meeting, not a formal hearing. Oral comments are being transcribed, and the transcription will be included in the Final EIR. Written comments will also be printed in the Final EIR. Responses to both written and oral comments will be provided in the Final EIR.
- The facilitator may ask individuals who do not abide by these rules to leave the workshop.

# DEIR Public Meeting Sign-in Sheets

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**SCARF and Related Management Actions**  
**Draft EIR Public Meeting Sign In Sheet**  
**November 4<sup>th</sup> – Fresno, CA**

Name	Address	Email Address (optional)	Organization (optional)	Phone Number (optional)
RICHARD A HAAS	4660 E CAMBRIDGE	FRESNO 93703		
Bill Luce	4969 E. McKinley Ave Suite 201, Fresno	w/luce@frontwater.org		
Charyce Hatler	3017 E. Simpson Avenue FRESNO 93703			
Tim Hood	P.O. Box 7203, Visalia CA 93290			
Melinda Marks	SJRC 5469 E OLIVE FRS 93727	Melinda.Marks@ sjrc.ca.gov	SJRC	253-7324





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# DEIR Public Meeting Comment and Speaker Forms

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## Posters Displayed at DEIR Public Meetings

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Welcome to the California  
Department of Fish and Wildlife

SALMON CONSERVATION AND  
RESEARCH FACILITY AND  
RELATED MANAGEMENT  
ACTIONS

Draft Environmental Impact Report  
Public Meeting



# SIGN IN / ORIENTATION

- ❖ All Guests Sign In Here
- ❖ Information, Handouts, and Comment Cards for Tonight's Meeting



Settlement agreement reached through federal court action in NRDC et al. v. Kirk Rodgers et al. in 2006

Two major goals of the SJRRP:

- **Restoration Goal** to restore and maintain fish populations in good condition in the Restoration Area, including naturally reproducing and self-sustaining populations of salmon and other fish
- **Water Management Goal** to reduce or avoid water supply impacts to Friant Division contractors that may result from Interim/Restoration flows provided by the Settlement

Proposed Project purpose is to support the implementation of the Restoration Goal

# SAN JOAQUIN RIVER RESTORATION PROGRAM OVERVIEW



## The Proposed Project involves the following principal actions:

1. Construct and operate the Salmon Conservation and Research Facility (SCARF);
2. Reintroduce Chinook salmon to the Restoration Area, including donor-stock selection, broodstock development, and/or direct translocation;
3. Manage Chinook salmon runs in the Restoration Area;
4. Conduct fisheries research and monitoring in the Restoration Area;
5. Manage and support recreation within the Restoration Area

# PROPOSED ACTIONS



# PUBLIC REVIEW PROCESS



Aesthetics  
Air Quality  
Biological Resources  
Cultural Resources  
Geology, Soils, and Seismicity  
Greenhouse Gases  
Hazards and Hazardous Materials  
Hydrology, Geomorphology, and Water Quality  
Land Use and Planning  
Noise  
Recreation  
Transportation and Traffic  
Utilities and Service Systems  
Cumulative Impacts  
Alternatives

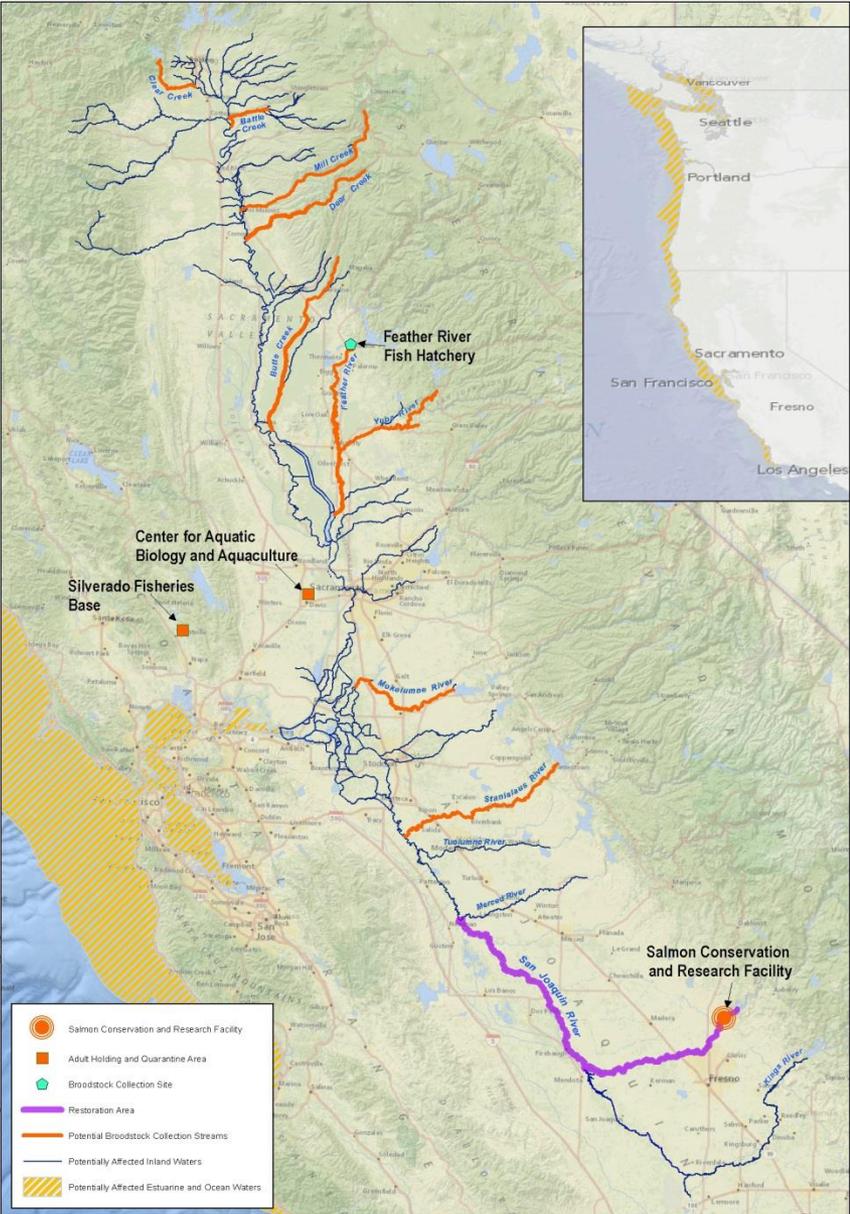
# EIR TOPICS



# PUBLIC MEETING COMMENT SUBMITTAL

- Please provide input regarding the Draft EIR on the comment cards provided.
- Or mail your comment card before the deadline:  
**California Department of Fish and Wildlife**  
**Attn: Gerald Hatler**  
**SCARF Draft EIR Comments**  
**1234 E. Shaw Avenue**  
**Fresno, CA 93710**
- Or Email your comments to: [REG4SCARFCEQA@wildlife.ca.gov](mailto:REG4SCARFCEQA@wildlife.ca.gov)
- Visit the Program Website: [www.restoresjr.net](http://www.restoresjr.net)

**COMMENTS DUE DECEMBER 2<sup>nd</sup>, 2013**



Prepared by:  
  
 Prepared for:  
 California Department of Fish and Wildlife  
 California Department of General Services

N  
 0 15 30  
 Miles  
 Data Sources:  
 Chinook salmon fall late-fall run abundance (CDFW)  
 Central Valley steelhead distribution (NMFS)  
 Central Valley Chinook Ocean Extents (Williams 2006)  
 NHD hydro-layer  
 Base Map: National Geographic

**Figure ES-1: Potentially Affected Area**  
**SCARF and Related Management Actions Project**  
**Draft Environmental Impact Report**



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# PowerPoint Presentation Delivered at DEIR Public Meetings

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California Department of Fish and Wildlife  
San Joaquin River Restoration Program  
Salmon Conservation and Research Facility (SCARF)  
and Related Management Actions

Draft Environmental Impact Report  
CEQA Public Meeting



# Welcome and Opening Remarks



# Meeting Agenda

1. Meeting Purpose and Ground Rules
2. Background on San Joaquin River Restoration Program
3. Overview of Proposed Project
4. Overview of the CEQA Process
5. Highlights of the Draft EIR
6. How to Comment during Public Review Period
7. Receive Public Comments

# Meeting Purpose

Afford the public and agencies an opportunity to provide comments regarding the sufficiency of the Draft EIR in identifying and analyzing:

- ✓ Possible environmental impacts
- ✓ The ways in which significant effects might be avoided or mitigated

Commenters are encouraged to suggest additional specific alternatives or mitigation measures to provide better ways to avoid or mitigate significant environmental effects. The basis for comments should be supported by relevant data or references.

The public review period allows 56 days to review the Draft EIR and provide comments.

# Meeting Ground Rules

- Please silence all cell phones and pagers.
- One person speaks at a time; please do not interrupt a speaker.
- Make clear and succinct comments in order for us to effectively capture the comment in notes.
- Be respectful of each other and of differing points of view.

# San Joaquin River Restoration Program Background

Settlement agreement reached through federal court action in NRDC et al. v. Kirk Rodgers et al. in 2006

Two major goals of the SJRRP:

**Restoration Goal** - to restore and maintain fish populations in good condition in the Restoration Area, including naturally reproducing and self-sustaining populations of salmon and other fish

**Water Management Goal** - to reduce or avoid water supply impacts to Friant Division contractors that may result from Interim/Restoration flows provided for by the Settlement

# San Joaquin River Restoration Program Background

CDFW intends to assist in achieving the Restoration Goal pursuant to an MOU by constructing and operating the SCARF, including collection of broodstock, fish rearing and reintroduction and other management activities.

## MOU Signatories

### *State Agencies*

- California Resources Agency
- Department of Water Resources
- California Department of Fish and Wildlife
- California Environmental Protection Agency

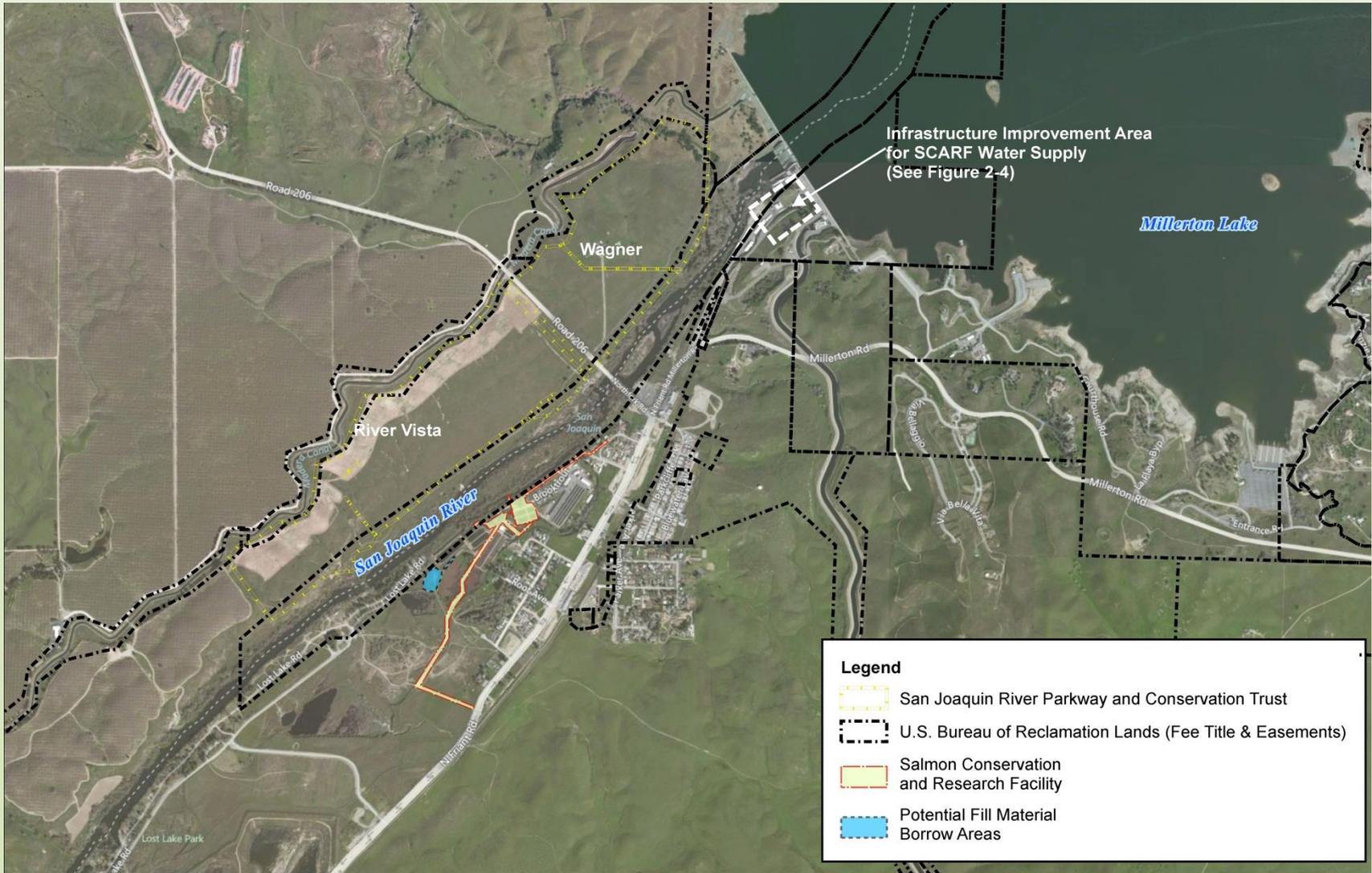
### *Settling Parties*

- Department of the Interior
- Department of Commerce
- Natural Resources Defense Council
- Friant Water Users Authority

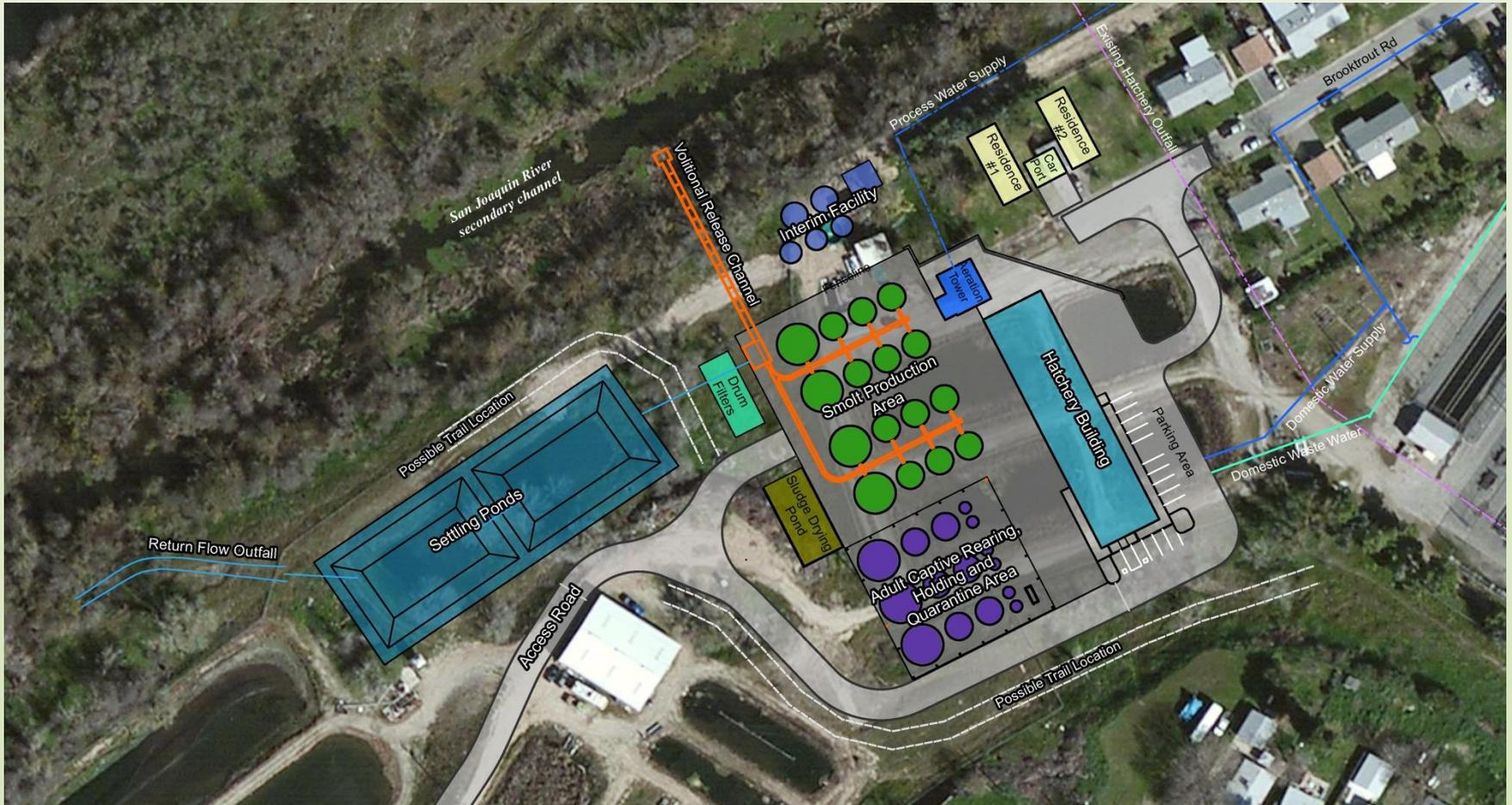


-  Salmon Conservation and Research Facility
-  Adult Holding and Quarantine Area
-  Broodstock Collection Site

# Proposed Project Overview



# Proposed Project Overview



# Proposed Project Actions

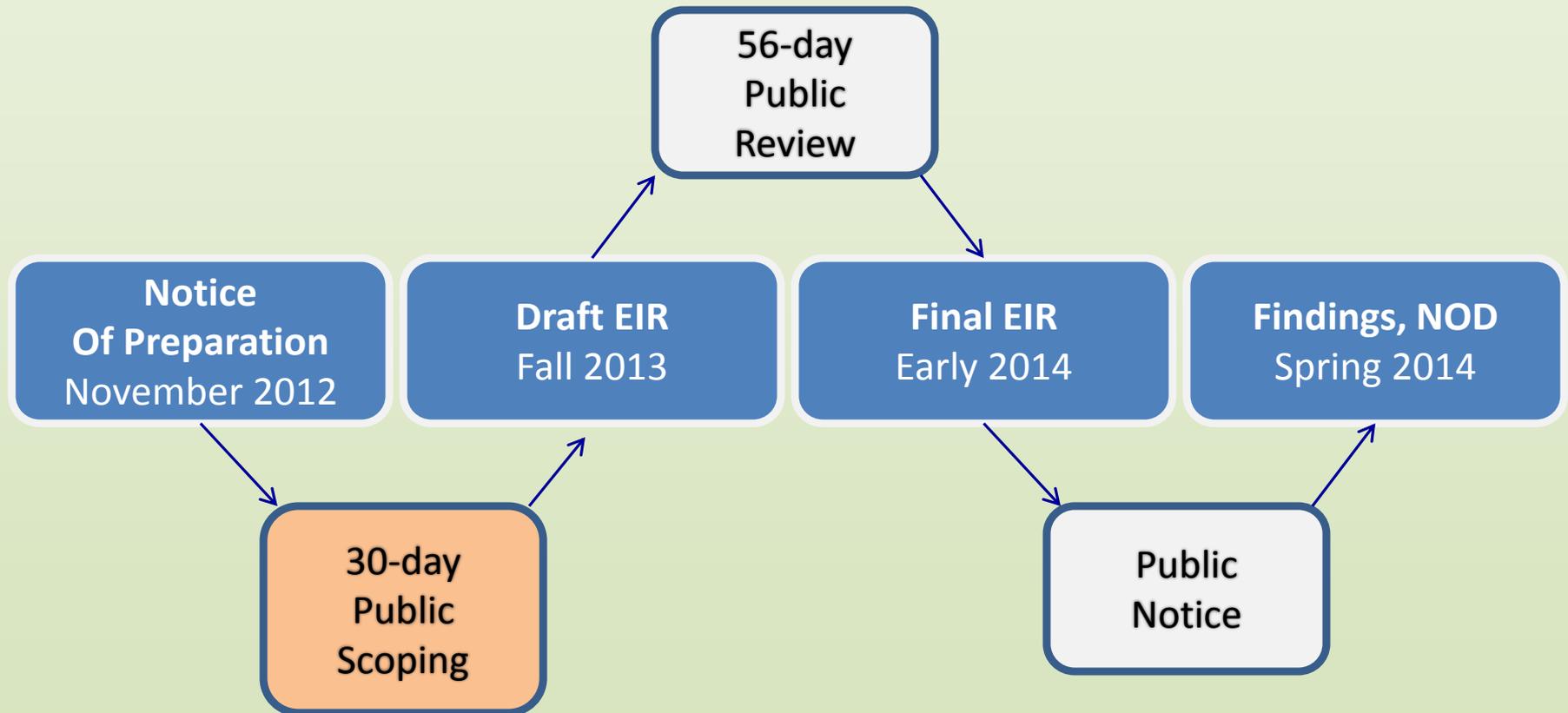
The Proposed Project involves five principal actions:

1. Construct and operate the SCARF;
2. Reintroduce Chinook salmon to the Restoration Area (including donor stock collection, broodstock development, and/or direct translocation);
3. Manage Chinook salmon runs in the Restoration Area within the context of basin-wide conditions and strategies;
4. Conduct fisheries research and monitoring in the Restoration Area; and
5. Manage and support recreation within the Restoration Area.

# CEQA Requirements

- 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

# CEQA Process and Schedule



# Structure of DEIR

Executive Summary

Chapter 1 - Introduction

Chapter 2 – Project Description

Chapters 3 through 17 – Topical Impact Sections

Chapter 18 – Other Statutory Considerations

Chapter 19 – Alternatives Analysis

Appendices

# Topics Analyzed

Aesthetics  
Air Quality  
Biological Resources  
Cultural Resources  
Geology, Soils, and Seismicity  
Greenhouse Gases  
Hazards and Hazardous Materials  
Hydrology, Geomorphology, and Water Quality  
Land Use and Planning  
Noise  
Recreation  
Traffic and Transportation  
Utilities and Service Systems  
Cumulative Impacts  
Alternatives

# Draft EIR Findings

## Numerous less than significant or mitigated impacts:

- ✓ Most construction-related effects (except below)
- ✓ Hatchery operations
- ✓ Broodstock collection from FRFH
- ✓ Effects of fish reintroduction on existing salmon populations and other aquatic species
- ✓ Effects of fisheries research and monitoring
- ✓ Air quality, cultural resources, geology, land use, noise, traffic, utilities

## Several possible significant and unavoidable impacts:

- ✓ Wild broodstock collection
- ✓ Construction-related GHG emissions
- ✓ Spread of AIS from recreation enhancements

# Alternatives Considered

- No Project Alternative
- Spring-Run Only Alternative
- Hatchery Broodstock Only Alternative
- SCARF Siting Alternative

While all alternatives would reduce or avoid certain impacts of the Proposed Project, the Proposed Project was determined to be environmentally superior overall.

# Next Steps and Timeline

Public Review of Draft EIR

October 7<sup>th</sup> – December 2<sup>nd</sup>

Final EIR

Early 2014

Certify EIR, file Notice of  
Determination and CEQA  
Findings

At least 10 days after  
completion of Final EIR

# Contents of the Final EIR

- Copies of all comments received, including a transcript of the public meetings
- Specific responses to each comment
- Changes to DEIR based on the comments and responses

# Effective Commenting

- Public input is valued and important
- Comments should be substantive and focused on sufficiency of the Draft EIR in identifying and analyzing:
  - Possible environmental impacts
  - The ways in which significant effects might be avoided or mitigated
- You are encouraged to suggest additional specific alternatives or mitigation measures that could better avoid or mitigate significant environmental effects

# Effective Commenting

- Basis for comments should be supported by relevant data or references (“substantial evidence”)
- Comments may be given orally today (use speaker cards), in writing on provided comment forms, or in writing/email at any time during the public review period

# How to Comment After Today

- Comments due:

**5:00 pm on December 2<sup>nd</sup>, 2013**

- Send written comments to:

**California Department of Fish and Wildlife**

**Attn: Gerald Hatler**

**1234 E. Shaw Avenue**

**Fresno, CA 93710**

**Email: [REG4SCARFCEQA@wildlife.ca.gov](mailto:REG4SCARFCEQA@wildlife.ca.gov)**

**Subject Line: SCARF Draft EIR Comments**

- Include name, address, contact number and email address for future correspondence related to this CEQA Process

# For More Information

More information regarding the Proposed  
Project:

**[www.dfg.ca.gov/regions/4/sanjoaquinriver](http://www.dfg.ca.gov/regions/4/sanjoaquinriver)**

More information regarding the overall SJRRP:

**[www.restoresjr.net](http://www.restoresjr.net)**

We will now take your comments

**Thank you!**



# Proposed Project Actions

## Proposed SCARF location:

- Adjacent to the San Joaquin River
- Approximately 1.1 miles downstream of Friant Dam
- Immediately west of the existing San Joaquin Fish Hatchery

## Facilities are proposed to include:

- Buildings and Residences
- Smolt Production, Captive Rearing, Holding Facility and Release Channel
- Fish Propagation Water Supply & Treatment System
- Other Infrastructure and Ancillary Improvements

# Proposed Project Actions

## Potential Sources of Spring-Run Broodstock

- Feather River Fish Hatchery
- Feather River
- Mokelumne, Stanislaus, Battle Creek, Clear Creek, and/or Yuba Creek
- Deer/Mill Creek complex
- Butte Creek

## Fish Reintroduction Approaches

- Direct Release
- Off-Site Release
- Translocation

# Proposed Project Actions

## Fish Studies

- Assess quantity of available habitat
- Evaluate condition of habitat
- Analyze impediments to fish migration and survival
- Observe responses to conditions in the Restoration Area

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## Appendix D

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### Mitigation Monitoring and Reporting Plan

## Appendix D

# MITIGATION MONITORING AND REPORTING PLAN

In compliance with Section 21081.6 of the California Environmental Quality Act, the California Department of Fish and Wildlife (CDFW) has prepared this Mitigation Monitoring and Reporting Plan (MMRP) for the Proposed Salmon Conservation and Research Facility (SCARF). Each mitigation measure and the method of monitoring or verifying the completion of the measure are described in the MMRP. CDFW will be the party responsible for verifying implementation of the mitigation measures identified in this MMRP.

The MMRP has been divided into seven separate tables. The first table summarizes all of the mitigation measures and identifies to which category of activity it applies. For the remaining six tables, each is specific to one of the six categories of activities that would be conducted under the Proposed Project. Each table shows just the mitigation measures applicable to that category of activity. By removing the mitigation measures which are not applicable to a particular activity, these tables are intended to streamline use of the MMRP in monitoring and verifying completion of the relevant mitigation measures for each activity.

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Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
AES-CONSTRUCT-3a: Materials and Colors Used in Construction of SCARF Facilities Shall be Compatible with the Surrounding Built and Natural Environments	Department of General Services (DGS), CDFW or the construction contractor shall select materials and colors of the facilities to be compatible with the surrounding developed and natural environments.	X						DGS (if during design); DGS, CDFW and/or Contractor (if during construction)	During design or construction	
AES-CONSTRUCT-3b: Landscaping of SCARF Facilities Shall Consist of Native Vegetation	CDFW or the construction contractor shall use native plants for landscaping in a manner consistent with Mitigation Measure BIO-CONSTRUCT-11a (Minimize Area of Disturbance of Riparian Habitat) and with Mitigation Measure BIO-CONSTRUCT-11b (Develop and Implement Revegetation Plan for Riparian Habitat Disturbed by Construction).	X						DGS (if during design); DGS, CDFW and/or Contractor (if during construction)	During design or construction	
AES-CONSTRUCT-3c: Pipelines and Utilities Serving SCARF Facilities Shall be Installed Underground	DGS, CDFW or the construction contractor shall install pipelines and utilities underground, to the extent feasible.	X						DGS	During design	

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
AES-CONSTRUCT-4: Exterior Construction Security Lighting Shall Be Hooded and Directed Downward	CDFW shall ensure that exterior construction security lighting is hooded and directed downward toward the SCARF, and away from adjacent properties.	X						DGS (if during design); DGS, CDFW and/or Contractor (if during construction)	During design or construction	
AES-OP-2a: Permanent Exterior Lighting Shall Be Designed to Protect the Darkness of Nighttime Skies	CDFW shall ensure that permanent lighting utilizes lights that are low wattage, or incorporates appropriate shielding, and that lighting is directed away from sensitive uses and adjacent properties.		X					DGS (if during design); DGS, CDFW and/or Contractor (if during construction)	During design or construction	
AES-OP-2b: SCARF Structures Shall Be Constructed to Avoid Surface Glare	To reduce glare, CDFW shall ensure that all structures are painted with non-glare surfacing or constructed of materials that do not produce glare.		X					DGS (if during design); DGS, CDFW and/or Contractor (if during construction)	During design or construction	

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
AQ-OP-3: Fish Disposal Limitations	<p>CDFW will implement at least one of the following measures to minimize the likelihood of potential odors from fish disposal activities affecting a substantial number of sensitive receptors:</p> <ul style="list-style-type: none"> <li>Limit fish disposal locations to areas that are at least 1,000 feet from any potential sensitive receptors, including terrestrial recreationists such as hikers.</li> <li>Implement disposal methods that ensure that fish carcasses are weighed down and disposed of within a stream channel instead of on a stream bank.</li> </ul>		X					CDFW	During operation	
AQ-MANAGEMENT-1: Prepare Project-Level Quantitative Analysis of Construction Related Air Quality Emissions, and Implement	As future individual project components are further defined to a level that construction emissions can be estimated, and prior to implementing that component				X		X	CDFW	Prior to implementing a project component or taking actions that commit CDFW	

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
Measures to Cap Emissions	<p>or taking actions that commit CDFW to implementing that component, CDFW will prepare a complete, quantitative project-level air quality analysis for that component.</p> <p>The quantitative construction air quality analyses will be based on the types, locations, numbers, and operations of equipment to be used; the amount and distance of material to be transported; and worker trips required. In addition, the analysis will be based on the projected quantity and frequency of vehicle and/or truck trips, and other activities that generate emissions. The analysis will determine whether the combined emissions of the quantified components' construction activities exceed the SJVAPCD's construction air quality thresholds (see the SJVAPCD thresholds presented in Table 5-5 of the DEIR). In addition, the analysis will evaluate whether the</p>				X		X		to implementing that component	

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
	<p>combined emissions from all project components constitute a significant health risk from diesel fueled equipment.</p> <p>If the analysis determines that construction emissions exceed the air quality significance thresholds, then CDFW will identify and implement appropriate mitigation. As a performance standard, the mitigation shall be sufficient to reduce construction emissions so that the Proposed Project's emissions are below the applicable significance thresholds. Examples of appropriate mitigation may include, but not be limited to, SJVAPCD Regulation VIII, alternative fueled equipment, phasing of material hauling trips, use of chemical additives or after-market devices to reduce emissions on existing equipment, use of electrically powered equipment, reduction in total equipment hours, use of newer equipment models, adopting a vehicle idling policy</p>				X		X			

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
	<p>requiring all vehicles to adhere to a 5 minute idling policy, and sourcing of material from local sources. Actual emissions efficiency for off-road equipment and motor vehicles will be at least as efficient as the most recent CARB fleet average for off-road equipment and motor vehicles for the current calendar year.</p> <p>In the event that the mitigation strategies (either those listed above or others developed to achieve the performance standard) are calculated to be insufficient to reduce construction emissions levels below significance thresholds, then CDFW will enter into a Voluntary Emission Reduction Agreement (VERA) with SJVAPCD. A VERA is a contractual agreement in which the project proponent agrees to mitigate project specific emissions by providing funds for the SJVAPCD's Emission Reduction Incentive Program (ERIP). The funds are</p>				X		X			

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
	<p>disbursed by ERIP in the form of grants for projects that achieve emission reductions. Types of emission reduction projects that have been funded in the past include electrification of stationary internal combustion engines (e.g., agricultural irrigation pumps), replacing old heavy-duty trucks with new, cleaner, more efficient heavy-duty trucks, and replacement of old farm tractors. The VERA will be used to offset the project's increase in emissions so that the Proposed Project would have no increase in construction emissions above the significance threshold.</p> <p>Similarly, if the air quality analysis indicates that the activities pose a significant health risk, then CDFW will identify mitigation measures, which, as a performance standard, will ensure health risks are at a less-than-significant level. Examples of appropriate mitigation may</p>				X		X			

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
	include, but not be limited to, use of alternative fueled equipment, use of aftermarket control devices such as diesel particulate filters, use of electrical equipment where possible, or reduction in number of hours of equipment use with a minimum reduction in diesel particulate matter of 85% compared to a Tier 2 engine or equivalent to 100 trucks per day based on CARB's Air Quality and Land Use Handbook.				X		X			

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
FISH-CONSTRUCT-4a: Relocate Special-Status Fish Species Outside of the Work Area	Prior to commencing instream construction, a barrier will be constructed around the affected area and qualified fisheries biologists shall survey the enclosure by making a minimum of three passes by electrofishing, using protocols developed by NMFS (2000). All fish captured, including special-status species, will be placed into a suitable holding container of cool, aerated stream water and then relocated to a suitable location near the construction area. Construction in the side channel will occur when it is dry or has low flow to the extent feasible; water in the work area will be diverted using coffer dams or similar structures.	X						CFDW and/or Contractor	During construction	

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
FISH-CONSTRUCT-4b: Monitor and Maintain Fish Enclosure	The fish exclusion structure will remain in place during all instream construction activities and will be monitored daily during instream construction to ensure that it is effectively excluding fish. If the fisheries biologist determines that the enclosure has been compromised, instream construction will be stopped until the biologist has repeated <b>Mitigation Measure FISH-CONSTRUCT-4a</b> and the enclosure has been repaired and is deemed effective.	X						CDFW and/or Contractor	During construction	

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
FISH-REINTRO-1: Determine Stream-specific Take Totals	CDFW will confer with USFWS and NMFS to determine stream-specific take totals that incorporate estimates of viable population size, life stage-specific survival, and the maintenance of genetic diversity of the donor stock populations. These take totals will be incorporated as specific permit conditions in a ESA section 10(a)(1)(A) permit, which must be issued prior to broodstock collection. At a minimum, the selected threshold(s) shall ensure that the adverse effects of broodstock collection will not be substantial in the context of the overall population of each spring-run donor stock.			X				CDFW	Prior to conducting wild spring-run broodstock collection	

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
FISH-MANAGEMENT-1: Implement Conservation Measures prior to and during Construction Activities	CDFW shall implement appropriate Conservation Measures from Appendix I, CDFW's Conservation Measures for Biological Resources that May Be Affected by Program-level Actions, prior to and during the construction of fish segregation weirs and barriers. Pre-construction planning shall include a site assessment by a qualified fisheries biologist to determine the potential for special-status species to occur in the vicinity. If the biologist determines that special-status aquatic species may be present, CDFW shall implement the applicable Appendix I avoidance and minimization measures for each species that may be present.				X			CDFW and/or Contractor	Before and during construction	

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
FISH-MANAGEMENT-5a: Monitor Fish Communities in the Vicinity of Segregation Weirs and Traps	If actions described in Impact FISH-MANAGEMENT-5 are used in the Restoration Area, CDFW shall assess the species composition of fish communities within the 500-foot reach both upstream and downstream of each segregation weir or trap, during the time of year that the weir(s) or trap is in place. The monitoring activities shall focus on large bodied special-status fish species such as green sturgeon and steelhead. Monitoring techniques may include the use of visual surveys, rod and reel angling, set lines, fyke nets, DIDSON™, or seines.				X			CDFW	During operation	

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
FISH-MANAGEMENT-5b: Develop and Implement Measures that Allow Special-Status Large Bodied Fishes to Bypass Weirs and Traps	If as a result of <b>Mitigation Measure FISH-MANAGEMENT-5a</b> or through other means, CDFW identifies that, outside of the current seasonal operation of the HFB (September to mid-December), the migration of special-status large bodied fishes could be impeded by the operation of the weir(s) or trap and haul activities, then CDFW shall modify the operation of the weir or implement measures that allow fish to bypass the weir so that movement of large bodied special-status fish species such as green sturgeon and steelhead is not impeded. Such measures may include removal or relocation of the weir(s), or operating a trap(s) to allow for manual selection of fish passing across the barrier.				X			CDFW and/or Contractor	During operation	
FISH-MANAGEMENT-8a: Check Traps Daily and Minimize Handling of Fish	To reduce stress on captured fish, all trapping devices will be checked at least once per day. Untargeted wildlife (e.g., snakes, turtles) caught in traps will be released into suitable habitat for the species. Traps				X			CDFW	During operation	

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
	will be checked more frequently during times when conditions are stressful (e.g., high temperatures, large amounts of debris during high flow events) to reduce the time that fish are subject to trap-related stress. Fish will be carefully handled and given sufficient time to recover (at least 30 minutes) prior to being released back into the river. If rotary screw traps are used, they will be operated in accordance with the USFWS "Draft Rotary Screw Trap Protocol for Estimating Production of Juvenile Chinook Salmon" (USFWS 2008) and/or similar protocols which are at least as protective and developed after conferring with USFWS and, if required, NMFS.				X					

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
FISH-MANAGEMENT-8b: Adaptively Manage Trap Operations	If mortalities greater than 2 fish or 2% of total catch are observed in a given day due to high debris loads, traps will be removed or raised out of the water until conditions are suitable for survival of fish (i.e., reduced winds or streamflow, improved weather conditions). For rotary screw traps, if predation causes such mortality, a structural refuge will be installed inside the trap to reduce predation. This will consist of a perforated plastic box or similar refuge for small fish within the rotary screw trap to prevent predation by larger fish captured in the trap.				X			CDFW	During operation	
FISH-MONITORING-2a: Implement Standard Protocols for Active Sampling of Aquatic Species	When conducting active sampling, CDFW shall adhere to fish handling procedures prescribed in Guidelines for the Use of Fishes in Research (Nickum <i>et al.</i> 2004), or any more current protocols which are considered at least as protective.					X		CDFW	During operation	
FISH-MONITORING-2b: Use Passive Sampling	To reduce impacts associated with active instream					X		CDFW	During operation	

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
Techniques in place of Active Sampling Techniques, When Appropriate	monitoring activity such as electrofishing, seining, and use of jet or propeller motor boats by investigators, the use of passive capture equipment will be used in place of active sampling whenever appropriate and feasible. Passive sampling equipment includes entanglement gear such as gill nets and trammel nets, and entrapment gear such as Fyke nets and rotary screw traps.					X				
FISH-MONITORING-2c: Use Observational Techniques in place of Traditional Capture Techniques, When Appropriate	Wherever possible and appropriate, observational techniques will be used in place of capture techniques to reduce the need to handle organisms.					X	CDFW	During operation		
FISH-MONITORING-2d: Check Rotary Screw Traps Daily	Rotary screw traps will be operated in accordance with the USFWS "Draft Rotary Screw Trap Protocol for Estimating Production of Juvenile Chinook Salmon" (USFWS 2008) and/or similar protocols which are at least as protective and developed after conferring with USFWS and, if required,					X	CDFW	During operation		

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
	NMFS. USFWS (2008) includes several measures, as follows. To reduce stress on captured fish, all trapping devices will be checked at least once per day when in the fishing position. Untargeted wildlife (e.g., snakes, turtles) caught in traps will be released into suitable habitat for the species. Traps will be checked more frequently during times when conditions are stressful (e.g., high temperatures, large amounts of debris during high flow events) to reduce the time that fish are subject to trap-related stress. Fish may need to be anesthetized, which would be done using methods acceptable to USFWS and NMFS before they are handled and given sufficient time to recover (at least 30 minutes) prior to being released back into the river.					X				
FISH-MONITORING-2e: Adaptively Manage Trap Operations	If mortalities greater than two fish or 2% of total catch are observed in a given day due to high debris loads, traps will be raised out of the water until					X	CDFW	During operation		

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
	conditions are suitable for survival of fish (i.e., reduced winds or streamflow, improved weather conditions). If predation causes such mortality, a structural refuge will be installed inside the trap to reduce predation. This will consist of a perforated plastic box or similar refuge for small fish within the rotary screw trap to prevent predation by larger fish captured in the trap.					X				

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
FISH-RECREATION-1: Implement Conservation Measures prior to and during Construction of Recreational Enhancements	CDFW shall implement appropriate conservation measures from Appendix I, CDFW's Conservation Measures for Biological Resources that May Be Affected by Program-level Actions, prior to and during the construction of recreational fishing enhancements. Pre-construction planning shall include a site assessment by a qualified fisheries wildlife biologist to determine the potential for special-status species to occur in the vicinity. If the biologists determine that special-status species may be present, CDFW shall implement the applicable Appendix I avoidance and minimization measures for each species that may be present.						X	CDFW and/or Contractor	Before and during construction	
BIO-CONSTRUCT-1a: Perform Focused Surveys for Special-Status Plant Species	Within one year prior to commencement of ground disturbing activities, a qualified CDFW botanist will perform surveys for special-status plant species with the potential to occur at the SCARF site.	X						CDFW	Before construction	

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
	Floristic surveys will be performed according to the Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (CDFG 2009 or current version). Floristic surveys will include the use of a reference population to increase the likelihood of detection, and will be performed during the appropriate bloom period(s) for each species. If special-status plants are detected within the construction zone or within a 100-foot radius of the construction zone, CDFW will implement <b>Mitigation Measure BIO-CONSTRUCT-1b</b> .	X								
BIO-CONSTRUCT-1b: Avoid or Minimize Impacts to Special-Status Plant Species	If special-status plants are detected within the construction zone or within a 100-foot radius of the construction zone, CDFW will adjust the construction footprint or establish exclusion fencing to avoid impacts to the plants. Locations of special-status plant populations will be	X						CDFW and/or Contractor	During construction	

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
	<p>clearly identified in the field by staking, flagging, or fencing a minimum 100-foot wide buffer around them prior to the commencement of activities that may cause disturbance. No activity will occur within the buffer area.</p> <p>If avoidance is not feasible, then CDFW will implement measures to minimize the impact to the species. Minimization measures may include transplanting perennial species, seed collection and dispersal for annual species, and other conservation strategies that will protect the viability of the local population. If minimization measures are implemented, monitoring of plant populations will be conducted annually for 5 years to assess the mitigation's effectiveness. The performance standard for the mitigation will be no net reduction in the size or viability of the local population.</p>	X								

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
BIO-CONSTRUCT-2a: Perform 2 Years of Surveys for Special Status Vernal Pool Branchiopods	Prior to implementation of construction activities, CDFW biologists will perform surveys for special-status vernal pool branchiopods species in seasonally ponded depression with the potential to be impacted by construction of the SCARF. Surveys will be performed according to the Interim Survey Guidelines to Permittees for Recovery Permits under Section 10(a)(1)(A) of the Endangered Species Act for the Listed Vernal Pool Branchiopods (USFWS 1996 or current version).	X						CDFW	Before construction	

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
BIO-CONSTRUCT-2b: Avoid Impacts to Suitable Vernal Pool Branchiopods Habitat	<p>The Proposed Project will be designed to avoid impacts to suitable vernal pool branchiopods' habitat. Such avoidance measures may include adjusting roadway and pipeline alignments, minimizing the footprint of borrow sites, and locating staging/stockpile areas outside of suitable habitat.</p> <p>If vernal pools are present, a 250-foot no disturbance buffer will be established from the high water mark of the vernal pools and seasonal wetlands that provide suitable habitat for vernal pool crustaceans. Wetland habitat will be delineated by staking, flagging or fencing. This buffer will be established prior to ground-disturbing activities, and it will remain until ground-disturbing activities in that area are completed.</p>	X						DGS and Contractor	During design and construction	

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
BIO-CONSTRUCT-2c: Replace Vernal Pool Branchiopod Habitat	<p>If occupied vernal pool branchiopods habitat cannot be avoided, CDFW will first identify if there are potential wetland mitigation opportunities on-site and will preferentially conserve, restore, or construct new wetland habitat at this location. If habitat cannot be restored on-site or in the immediate vicinity of the disturbance location, replacement at a nearby off-site location will be provided. The replacement of habitat will be equivalent to the nature of the habitat lost, and will be provided at a suitable ratio to ensure that, at a minimum, there is no net loss of habitat acreage or value. The replacement habitat will be set aside in perpetuity for habitat use. Mitigation ratios to achieve the “no net loss” standard will be determined in consultation with the USFWS.</p> <p>If off-site compensation includes dedication of conservation easements,</p>	X						CDFW	Prior to any construction with potential to adversely affect vernal pool branchiopad habitat	

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
	purchase of mitigation credits or other off-site conservation measures, the details of these measures will be developed through consultation with USFWS. The plan will include information on responsible parties for long-term management, holders of conservation easements, long-term management requirements, and other details, as appropriate, for the preservation of long-term viable populations. Any impacts that result in a compensation purchase will be required to do so with an endowment for land management in perpetuity prior to any project groundbreaking activities.	X								

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
BIO-CONSTRUCT-3a: Conduct Protocol-Level Surveys for California Tiger Salamander	CDFW will conduct a minimum of 2 years of surveys to determine the presence/absence of CTS at the SCARF site. Surveys will be conducted in accordance with the Interim Guidance on Site Assessment and Field Surveys for Determining Presence or a Negative Finding of the California Tiger Salamander (USFWS 2003). In consultation with the USFWS, CDFW may modify survey protocols to reflect site conditions and potential utilization of habitat by CTS. If protocol surveys result in negative findings of CTS for 2 consecutive years, then <b>Mitigation Measure BIO-CONSTRUCT-3c</b> would not be implemented.	X						CDFW	Before construction	

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
BIO-CONSTRUCT-3b: Avoid Impacts to Suitable Upland California Tiger Salamander.	To the extent feasible, the Proposed Project will be designed to avoid impacts to suitable upland CTS habitat. Such avoidance measures may include adjusting roadway and pipeline alignments, minimizing the footprint of borrow sites, and locating staging/stockpile areas outside of suitable upland habitat.	X						DGS	During design	
BIO-CONSTRUCT-3c: Minimize Construction-related Impacts to California Tiger Salamander	<p>If CTS are detected during protocol surveys conducted under <b>Mitigation Measure BIO-CONSTRUCT-3a</b>, or in the absence of conducting 2 years of protocol-level surveys, CDFW will implement the following actions during construction to minimize potential impacts to CTS.</p> <ul style="list-style-type: none"> <li>Prior to commencing ground disturbing activities, construction workers will be educated regarding CTS and the measures intended to protect this species.</li> </ul>	X						CDFW and/or Contractor	Before and during construction	

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
	<ul style="list-style-type: none"> <li>When feasible, there will be a 50-foot no-disturbance buffer around burrows that provide suitable upland habitat for CTS. Burrows considered suitable for CTS will be identified by a qualified CDFW biologist. The biologist will delineate and mark the no-disturbance buffer.</li> <li>All suitable burrows directly impacted by construction will be hand excavated under the supervision of a qualified wildlife biologist. If CTS are found, the biologist will relocate the organism to the nearest burrow that is outside of the construction impact area.</li> <li>All ground-disturbing work will occur during daylight hours. In coordination with USFWS, and depending on the level of rainfall and site conditions. CDFW will monitor the National Weather Service 72-hour</li> </ul>	X								

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		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
	forecast for the work area. If a 70% or greater chance of rainfall is predicted within 72 hours of project activity, all activities in areas within 1.3 miles of potential or known CTS breeding sites will cease until no further rain is forecast. If work must continue when rain is forecast, a qualified biologist will survey the project site before construction begins each day rain is forecast. If rain exceeds 0.25 inch during a 24 hour period, work will cease until no further rain is forecast. This restriction is not applicable for areas located greater than 1.3 miles from potential or known CTS breeding sites once they have been encircled with CTS exclusion fencing. However, even after exclusion fencing is installed, this condition would still apply to construction related traffic moving through areas within 1.3 miles of potential or known CTS breeding sites	X								

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
	<p>but outside of the salamander exclusion fencing (e.g. on roads).</p> <ul style="list-style-type: none"> <li>For work conducted during the CTS migration season (November 1 to May 31), exclusionary fencing will be erected around the construction site during ground disturbing activities after hand excavation of burrows has been completed. A biological monitor will visit the site weekly to ensure that the fencing is in good working condition. Fencing material and design will be subject to the approval of USFWS. If exclusionary fencing is not used, a qualified biological monitor will be on-site during all ground disturbance activities. Exclusion fencing will also be placed around all spoils and stockpiles.</li> <li>For work conducted during the CTS migration season</li> </ul>	X								

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
	<p>(November 1 to May 31), a qualified biologist will survey the active work areas (including access roads) in mornings following measurable precipitation events. Construction may commence once the biologist has confirmed that no CTS are in the work area.</p> <ul style="list-style-type: none"> <li>• Prior to beginning work each day, underneath equipment and stored pipes greater than 1.2 inches in diameter will be inspected for CTS. If any are found they will be allowed to move out of the construction area under their own accord.</li> <li>• Trenches and holes will be covered and inspected daily for stranded animals. Trenches and holes deeper than 1 foot will contain escape ramps (maximum slope of 2:1) to allow trapped animals to escape uncovered holes or trenches.</li> </ul>	X								

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
	<p>Holes and trenches will be inspected prior to filling.</p> <ul style="list-style-type: none"> <li>All food and food-related trash will be enclosed in sealed trash containers at the end of each workday and removed completely from the construction site once every three days to avoid attracting wildlife.</li> <li>A speed limit of 15 mph will be maintained on dirt roads.</li> <li>All equipment will be maintained such that there are no leaks of automotive fluids such as fuels, oils, and solvents. Any fuel or oil leaks will be cleaned up immediately and disposed of properly.</li> <li>Plastic monofilament netting (erosion control matting) or similar material will not be used at the project site because CTS may become entangled or trapped. Acceptable substitutes</li> </ul>	X								

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
	<p>include coconut coir matting or tackified hydroseeding compounds.</p> <ul style="list-style-type: none"> <li>Hazardous materials such as fuels, oils, solvents, etc. will be stored in sealable containers in a designated location that is at least 100 feet from wetlands and the San Joaquin River channel. If it is not feasible to store hazardous materials 100 feet from wetlands and the river channel, then spill containment measures will be implemented to prevent the possibility of accidental discharges to wetlands and waters.</li> </ul>	X								
BIO-CONSTRUCT-3d: Minimize Construction-related Impacts to Western Spadefoot	<ul style="list-style-type: none"> <li>Prior to commencing ground disturbing activities, construction workers will be educated regarding western spadefoot, and the measures intended to protect these species.</li> </ul>	X						CDFW and/or Contractor	Before and during construction	

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
	<ul style="list-style-type: none"> <li>For work conducted during the western spadefoot toad migration and breeding season (November 1 to May 31), a qualified biologist will survey the active work areas (including access roads) in mornings following measurable precipitation events. Construction may commence once the biologist has confirmed that no spadefoot toads are in the work area.</li> <li>When feasible, there will be a 50-foot no-disturbance buffer around burrows that provide suitable upland habitat for western spadefoot toad. Burrows considered suitable for spadefoot will be identified by a qualified CDFW biologist. The biologist will delineate and mark the no-disturbance buffer.</li> <li>If western spadefoot is toad is found within the construction footprint, it will</li> </ul>	X								

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
	<p>be allowed to move out of harm's way of its own volition or a qualified biologist will relocate the organism to the nearest burrow that is outside of the construction impact area.</p> <ul style="list-style-type: none"> <li>• Prior to beginning work each day, underneath equipment and stored pipes greater than 1.2 inches (3 cm) in diameter will be inspected for western spadefoot toad. If any are found, they will be allowed to move out of the construction area under their own accord.</li> <li>• Trenches and holes will be covered and inspected daily for stranded animals. Trenches and holes deeper than 1 foot will contain escape ramps (maximum slope of 2:1) to allow trapped animals to escape uncovered holes or trenches.</li> </ul>	X								

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
	Holes and trenches will be inspected prior to filling.	X								
BIO-CONSTRUCT-4: Implement Pre-construction Surveys and Minimization Measures for Western Pond Turtle	<p>Pre-construction surveys for WPT will be conducted by a qualified biologist 14 days before and 24 hours before the start of construction activities where suitable habitat exists (i.e., along riparian areas, ponds and freshwater emergent wetlands). If WPT or their nests are observed during pre-construction surveys, the following measures will be implemented:</p> <ul style="list-style-type: none"> <li>A qualified biologist will be on site to monitor construction in suitable WPT habitat. WPT found within the construction area will be allowed to leave on its own volition or it will be captured by the qualified biologist and relocated out of harm's way to the nearest suitable habitat immediately</li> </ul>	X						CDFW and/or Contractor	Before and during construction	

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
	<p>upstream or downstream from the project site.</p> <ul style="list-style-type: none"> <li>If WPT nests are identified in the work area during pre-construction surveys, a 300-foot no-disturbance buffer will be established between the nest and any areas of potential disturbance. Buffers will be clearly marked with temporary fencing. Construction will not be allowed to commence in the exclusion area until hatchlings have emerged from the nest, or the nest is deemed inactive by a qualified biologist.</li> </ul>	X								
BIO-CONSTRUCT-5: Implement Pre-construction Surveys and Minimization Measures for Burrowing Owls	Prior to initiating ground-disturbing activities, CDFW will conduct surveys for burrowing owls in accordance with protocols established in the Staff Report on Burrowing Owl Mitigation (CDFG 2012 or current version). If ground-disturbing activities are delayed or suspended for more	X						CDFW and/or Contractor	Before and during construction	

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
	<p>than 30 days after the pre-construction survey, the site will be resurveyed. If burrowing owls are detected, disturbance to burrows will be avoided during the nesting season (February 1 through August 31). CDFW will establish buffers around occupied burrows in accordance with guidance provided in the Staff Report on Burrowing Owl Mitigation, and at the discretion of the qualified CDFW wildlife biologist. Buffers around occupied burrows will be a minimum of 656 feet during the breeding season, and 160 feet during the non-breeding season.</p> <p>Outside of the nesting season (February 1 through August 31), passive owl relocation techniques will be implemented. Owls would be excluded from burrows within 160 feet of construction by installing one-way doors in burrow entrances. The work</p>	X								

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
	<p>area will be monitored daily for 1 week to confirm owl departure from burrows prior to any ground-disturbing activities. Where possible burrows will be excavated using hand tools and refilled to prevent reoccupation. Sections of flexible plastic pipe will be inserted into the tunnels during excavation to maintain an escape route for any animals inside the burrow.</p> <p>If occupied burrows cannot be avoided during the non-breeding season, CDFW will enhance or create burrows in adjacent habitat at a 1:1 ratio (burrows destroyed to burrows enhanced or created) one week prior to implementation of passive relocation techniques. If burrowing owl habitat enhancement or creation takes place, CDFW will develop and implement a monitoring and management plan to assess the effectiveness of the mitigation.</p>	X								

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
BIO-CONSTRUCT-6a: Implement Pre-construction Surveys and Minimization Measures for Bald Eagle and Golden Eagle	<p>Surveys for bald and golden eagle nests will be conducted within 2 miles of any construction area supporting suitable nesting habitat and important eagle roost sites and foraging areas. Surveys will be conducted in accordance with the USFWS Interim Golden Eagle Inventory and Monitoring Protocols (USFWS 2010), and CDFW's Bald Eagle Breeding Survey Instructions (CDFG 2010), or current guidance.</p> <p>If an active eagle's nest is found, project disturbance will not occur within 0.5 mile of the active nest site during the breeding season (December 30 through July 1), or in any area that may disturb the nesting birds. The 0.5 mile no-disturbance buffer will be maintained throughout the breeding season or until the young have fledged and are no longer dependent upon the</p>	X						CDFW and/or Contractor	Before and during construction	

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
	nest or parental care for survival.	X								
BIO-CONSTRUCT-6b: Implement Pre-construction Surveys and Minimization Measures for Swainson's Hawk and White-tailed Kite	If construction occurs between February 1 and August 31, CDFW will conduct surveys for nesting raptors, with a focus on Swainson's hawk and white-tailed kite, in accordance with established CDFW raptor survey protocols (e.g., CDFG 2000, or current guidance). Surveys will cover a minimum of a 0.5-mile radius around the construction area. If nesting raptors are detected, CDFW will establish buffers around nests that are sufficient to ensure that breeding is not likely to be disrupted or adversely impacted by construction. Buffers will be maintained until a qualified CDFW biologist has determined that young have fledged and are no longer reliant upon the nest or parental care for survival.	X						CDFW and/or Contractor	Before and during construction	

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
	If potential nesting trees are to be removed during construction activities, removal will take place outside of Swainson's hawk nesting season and CDFW will develop a plan to replace known Swainson's hawk nest trees at a ratio of 3:1. If replacement planting is implemented, monitoring will be conducted annually for 5 years to assess the mitigation's effectiveness. The performance standard for the mitigation will be 65% survival of all replacement plantings.	X								
BIO-CONSTRUCT-6c: Implement Pre-construction Surveys and Minimization Measures for Non-listed Raptors	If construction occurs between February 1 and August 31, CDFW will conduct surveys for nesting raptors in accordance with established CDFW raptor survey protocols. Surveys will cover a minimum of a 0.5-mile radius around the construction area. If nesting raptors are detected, CDFW will establish buffers around nests that are sufficient to ensure that breeding is not likely to be	X						CDFW and/or Contractor)	Before and during construction	

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
	<p>disrupted or adversely impacted by construction. Buffers around active raptor nests will be 500 feet for non-listed raptors, unless a qualified biologist determines that smaller buffers would be sufficient to avoid impacts to nesting raptors. Factors to be considered for determining buffer size will include: the presence of natural buffers provided by vegetation or topography; nest height; locations of foraging territory; and baseline levels of noise and human activity. Buffers will be maintained until a qualified CDFW biologist has determined that young have fledged and are no longer reliant upon the nest or parental care for survival. If potential nesting trees are to be removed during construction activities, removal will take place outside of the raptor nesting season and CDFW will develop a plan to replace known nest trees at a ratio of 3:1. If replacement planting is implemented,</p>	X								

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
	monitoring will be conducted annually for 5 years to assess the mitigation's effectiveness. The performance standard for the mitigation will be 65% survival of all replacement plantings.	X								
BIO-CONSTRUCT-7a: Implement Pre-construction Surveys and Minimization Measures for Special-Status Passerine Species	If construction begins between February 1 and August 31, CDFW will conduct surveys for special-status birds within a 1,000-ft radius of the construction area. Surveys will be conducted by biologists adhering to guidance offered in Western Yellow-billed Cuckoo Natural History Summary and Survey Methodology (Halterman et al. 2009); Least Bell's Vireo Survey Guidelines (USFWS 2001); and/or A Survey Protocol for Willow Flycatcher in California (Bombay et al. 2003). If nests are detected, CDFW will establish buffers around nests that are sufficient to ensure that breeding is not likely to be disrupted or adversely impacted by construction. No-	X						CDFW and/or Contractor	Before and during construction	

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
	disturbance buffers around active nests will be a minimum of 500 feet, unless a qualified CDFW biologist determines that smaller buffers would be sufficient to avoid impacts to nesting birds. Factors to be considered for determining buffer size will include: the presence of natural buffers provided by vegetation or topography; nest height; locations of foraging territory; and baseline levels of noise and human activity. Buffers will be maintained until a qualified CDFW biologist has determined that young have fledged and are no longer reliant upon the nest or parental care for survival.	X								
BIO-CONSTRUCT-7b: Implement Pre-construction Surveys	Whenever possible, impacts to native nesting birds will be avoided by not conducting project activities that involve	X						CDFW and/or Contractor	Before and during construction	

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
for Birds Protected under the MBTA	<p>clearing of vegetation, generation of mechanical noise, or ground disturbance during the typical breeding season (February 1 to September 1), if species covered under the Migratory Bird Treaty Act and Fish and Game Code sections 3503, 3503.5, and/or 3513 are determined to be present.</p> <p>If construction begins between February 1 and August 31, CDFW will conduct surveys for nesting birds within a 1,000-ft radius of the construction area. If nests are detected, CDFW will establish buffers around nests that are sufficient to ensure that breeding is not likely to be disrupted or adversely impacted by construction. Buffers around active nests will be a minimum of 250 feet, unless a qualified CDFW biologist determines that smaller buffers would be sufficient to avoid impacts to nesting birds. Factors to be considered for determining buffer size will include: the</p>	X								

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
	presence of natural buffers provided by vegetation or topography; nest height; locations of foraging territory; and baseline levels of noise and human activity. Buffers will be maintained until young have fledged or the nests become inactive.	X								
BIO-CONSTRUCT-8a: Conduct Pre-construction Surveys for Bat Species	No less than 7 days and no more than 14 days prior to the beginning of ground disturbance and/or construction activities, a qualified CDFW wildlife biologist, or wildlife biologist approved by CDFW, will conduct surveys for special-status bats during the appropriate time of day to maximize detectability to determine if bat species are roosting near the work area. Survey methodology may include visual surveys of bats (observation of presence of bats during foraging period), inspection for suitable habitat or bat sign (guano), or use of ultrasonic detectors (Anabat,	X						CDFW and/or Contractor	Before and during construction	

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
	etc.). Visual surveys may consist of a daytime pedestrian survey looking for evidence of bat use (e.g., guano) and/or an evening emergence survey to note the presence or absence of bats and will include trees within 0.25 mile of project construction activities. The type of survey will depend on the condition of the potential roosting habitat. If no bat roosts are found, then no further study is required. If evidence of bat use is observed, the number and species of bats using the roost will be determined.	X								
BIO-CONSTRUCT-8b: Avoid and Minimize Impacts to Roosting/Breeding Sites	CDFW will avoid disturbance to roosts to the greatest extent feasible. If roosts must be removed, the bats will be excluded from the roosting site before it is removed. A mitigation program addressing compensation, exclusion methods, and roost removal procedures will be developed prior to implementation. Exclusion methods may	X						CDFW and/or Contractor	Before and during construction	

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
	include use of one-way doors at roost entrances (bats may leave, but not reenter), or sealing roost entrances when a site can be confirmed to contain no bats. Exclusion efforts may be restricted during periods of sensitive activity (e.g., during hibernation or while females in maternity colonies are nursing young).	X								

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
BIO-CONSTRUCT-8c: Replace Bat Roosting/Breeding Sites	If roosts cannot be avoided or it is determined that construction activities may cause roost abandonment, such activities may not commence until permanent, elevated bat houses have been installed outside of, but near the construction area. Placement and height will be determined by a qualified CDFW wildlife biologist, but the height of bat house will be at least 15 feet. Bat houses will be multi-chambered and be purchased or constructed in accordance with CDFW standards. The number of bat houses required will be dependent upon the size and number of colonies found, but at least one bat house will be installed for each pair of bats (if occurring individually), or of sufficient number to accommodate each colony of bats to be relocated.	X						CDFW and/or Contractor	Before and during construction	
BIO-CONSTRUCT-9: Conduct Pre-construction Surveys and Minimization	No less than 14 days and no more than 30 days prior to the beginning of ground disturbance and/or	X						CDFW and/or Contractor	Before construction in locations with	

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
Measures for American Badger	construction activities, CDFW will conduct a survey to determine if American badger den sites are present at the SCARF site. If dens are found, they will be monitored for badger activity. If CDFW determines that dens may be active, the entrances of the dens will be blocked with soil, sticks, and debris for three to five days to discourage the use of these dens prior to project disturbance activities. The den entrances will be blocked to an incrementally greater degree over the three to five-day period. After the qualified CDFW biologist determines that badgers have stopped using active dens, the dens will be hand-excavated with a shovel to prevent re-use during construction. No disturbance of active dens will take place when cubs may be present and dependent on parental care, as determined by a qualified CDFW biologist.	X							potential to affect badgers	

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
BIO-CONSTRUCT-10: Conduct Pre-construction Surveys and Minimization Measures for San Joaquin Kit Fox	<p>A qualified biologist will conduct pre-construction surveys no less than 14 days and no more than 30 days before the commencement of construction activities to identify potential dens more than 5 inches in diameter. CDFW will implement USFWS Standardized Recommendations for Protection of San Joaquin Kit Fox Prior to or During Ground Disturbance (USFWS 1999, 2011). CDFW will notify USFWS in writing of the results of the pre-construction survey within 30 days after these activities are completed.</p> <p>If potential dens are located within the proposed work area and cannot be avoided during construction activities, a USFWS-approved biologist will determine if the dens are occupied. If occupied dens are present within the proposed work area, they will be avoided through the use of exclusion zones following the most</p>	X						CDFW and/or Contractor	Before construction in locations with potential to affect San Joaquin Kit Fox	

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
	<p>current USFWS procedures (currently USFWS 1999, 2011). Furthermore, CDFW will notify USFWS immediately if a natal or pupping den is found in the survey area, and will present the results of pre-activity den searches within 5 days after these activities are completed and before the start of construction activities in the area. CDFW, in coordination with USFWS, will determine if SJKF den removal is appropriate. If unoccupied dens need to be removed, the USFWS-approved biologist will remove these dens by hand-excavating them in accordance with USFWS procedures (USFWS 1999, 2011).</p> <p>Additional conservation measures will be coordinated between USFWS and CDFW, and may include replacing dens, installing off-site artificial dens, acquiring compensatory habitat, or other conservation options. Compensation may include dedicating</p>	X								

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		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
	conservation easements, purchasing mitigation credits, or other off-site conservation measures, and the details of these measures will be included in the mitigation plan and must occur with full endowments for management in perpetuity. The plan will include information on responsible parties for long-term management, holders of conservations easements, long-term management requirements, and other details, as appropriate, for the preservation of long-term viable SJKF populations. If conservation measures are implemented, CDFW will monitor their performance annually for 5 years to assess the mitigation’s effectiveness. The performance standard for the mitigation will be no net reduction in the size or viability of the local SJKF population.	X								
BIO-CONSTRUCT-11a: Minimize Area of	The disturbance or removal of vegetation will not exceed the	X						DGS and contractor	During design and construction	

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
Disturbance of Riparian Habitat	minimum necessary to complete construction and will only occur within the defined work area.	X								
BIO-CONSTRUCT-11b: Develop and Implement Revegetation Plan for Riparian Habitat Disturbed by Construction	CDFW will develop a revegetation plan for riparian habitat and sensitive natural communities disturbed by construction. All disturbed soils and new fill in riparian habitat or sensitive natural communities will be revegetated with site-appropriate native species. Any native vegetation 4 inches or greater DBH damaged or removed as result of construction activity will be replaced at a 3:1 ratio; this ratio will increase to 10:1 for native trees of 24 inches DBH and greater. Revegetation areas will be maintained and monitored to ensure a minimum of 65% survival of the plantings after 5 years.	X						CDFW, DGS and/or Contractor	During design and construction	
BIO-CONSTRUCT-12a: Obtain Regulatory	Work within areas defined as waters of the U.S. that includes	X						CDFW and/or Contractor	Before construction	

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
Permits for Work Activities Taking Place in Wetlands and Waters of the United States and the State	<p>placement of fill will require a CWA Section 404 permit from the USACE and Section 401 Water Quality Certification from the RWQCB. All work proposed in jurisdictional waters of the U.S. will be authorized by permits from the USACE and RWQCB.</p> <p>In areas where project activities are temporary in nature, jurisdictional wetland and other waters of the U.S. will be restored to their condition prior to disturbance. In areas where permanent disturbance to jurisdictional waters or wetlands will occur, CDFW will first identify if potential mitigation sites are present within close proximity to the area of disturbance, and will construct new or restore degraded wetlands. If waters or wetlands cannot be restored on-site or in the immediate vicinity of the disturbance location, replacement at a nearby off-site location will be provided. The replacement of</p>	X								

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	waters or wetlands will be equivalent to the nature of the habitat lost, and will be provided at a suitable ratio to ensure that, at a minimum, there is no net loss of habitat acreage or value. The replacement habitat will be set aside in perpetuity for habitat use. Mitigation ratios to achieve the “no net loss” standard will be determined in consultation with the USACE and RWQCB.	X								
BIO-CONSTRUCT-12b: Avoidance of and Mitigation for Incidental Fill	Incidental fill of wetland areas will be minimized wherever possible. Temporary construction fencing will be erected around wetlands areas to reduce the potential of incidental fill. Areas affected by construction will be restored to pre-construction contours and revegetated using a mix of native vegetation in accordance with <b>Mitigation Measure BIO-CONSTRUCT-11b.</b>	X						CDFW, DGS, and/or Contractor	During design and construction	

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BIO-REINTRO-3: Conduct Project-Level Assessment of Activity, and Implement Conservation Measures to Avoid, Minimize, or Mitigate Impacts	When project activities are defined to a level that impacts to biological resources can be evaluated, and prior to implementing that component or taking actions that commit CDFW to implementing that component, CDFW will assess the site to determine the potential for impacts to biological resources. At minimum, the assessment will include a CNDDDB search of the site vicinity (minimum 5-mile radius), and a site visit by a qualified botanist and wildlife biologist to evaluate the potential for special-status species and sensitive habitats to be impacted by the activity. If the biologists determine that special-status species or sensitive habitats may be affected by the activity, CDFW will implement the conservation measures listed in Appendix I, CDFW's Conservation Measures for Biological Resources that May Be Affected by Program-level Actions, for each species and			X				CDFW and/or Contractor	Before and during construction	

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	habitat type that may be affected.			X						
BIO-RECREATION-2: Preserve and Protect Special-Status Plant Populations in the Vicinity of Recreational Enhancement Areas	Prior to developing recreational enhancements, CDFW will implement the <b>Mitigation Measure BIO-REINTRO-3</b> . If the qualified botanist identifies special-status plants species in the vicinity of the recreational enhancements, CDFW will implement measures to minimize potential impacts. Minimization measures may include constructing pathways, fencing, signage, and other strategies to reduce the potential for trampling or matting that will protect the viability of the local plant population and suitable habitat. If minimization measures are implemented, monitoring of plant populations will be conducted annually for 5 years to assess the mitigation's effectiveness. The performance standard for the mitigation will be no net			X			X	CDFW and/or Contractor (and DGS, depending on the selected measures)	During design, construction, and operation	

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	reduction in the size or viability of the local population.			X				X		
CR-CONSTRUCT-1a: Evaluate Cultural Resources for Eligibility for Inclusion in the CRHR, and Implement Appropriate Mitigation Measures for Eligible Resources	CDFW shall ensure that all cultural resources identified prior to or during construction of the various Proposed Project components will be evaluated for eligibility for inclusion in the CRHR. Where implementation of the Proposed Project necessitates ground disturbance at sites besides the SCARF (e.g., sites for recreational enhancements), a records search and pedestrian survey shall be conducted prior to construction. Resource evaluations will be conducted by individuals who meet the U.S. Secretary of Interior's professional standards in archaeology and architectural history. If any of the resources that are identified during this evaluation meet the eligibility criteria identified in PRC section 5024.1, or PRC section 21083.2(g), CDFW will develop and implement mitigation	X							CDFW and/or Contractor	During design and construction

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	<p>measures according to CEQA Guidelines section 15126.4(b) before construction begins or resumes.</p> <p>For resources eligible for listing in the CRHR that would be rendered ineligible by the effects of project construction, CDFW shall implement mitigation measures. Mitigation measures for archaeological resources shall be selected from the following: avoidance; incorporation of sites within parks, greenspace, or other open space; capping the site; deeding the site into a permanent conservation easement; or data recovery excavation. Mitigation measures for archaeological resources shall be developed in consultation with responsible agencies, including but not limited to the State Office of Historic Preservation and, as appropriate, interested parties such as Native American tribes. Mitigation measures for historic architectural resources</p>	X								

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	shall be consistent with the U.S. Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings. Implementation of the approved mitigation would be required before beginning/resuming any construction activities with potential to affect identified eligible resources at the site.	X								
CR-CONSTRUCT-1b: Immediately Halt Construction if Cultural Resources are Discovered	Not all cultural resources are visible on the ground surface. If any cultural resources, such as structural features, unusual amounts of bone or shell, flaked or ground stone artifacts, historic-era artifacts, human remains, or architectural remains are encountered during any project construction activities, work shall be suspended immediately at the location of the find and within an appropriate radius of at least 50 feet. A qualified	X						CDFW and/or Contractor	During construction	

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	archaeologist shall conduct a field investigation of the specific site and recommend mitigation necessary for the protection or recovery of any cultural resource concluded by the archaeologist to represent a historical resource or unique archaeological resource. <b>Mitigation Measure CR-CONSTRUCT-1a</b> would then be implemented.	X								
CR-CONSTRUCT-3: Immediately Halt Construction if Human Remains are Discovered and Implement California Health and Safety Code	If human remains are accidentally discovered during the Proposed Project's construction activities, the requirements of California Health and Human Safety Code section 7050.5 must be followed. Potentially damaging excavation must halt in the area of the remains, with a minimum radius of 50 feet, and the local County Coroner must be notified. The Coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (Health and	X						CDFW and/or Contractor	During construction	

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	Safety Code section 7050.5[b]). If the Coroner determines that the remains are those of a Native American, he or she must contact NAHC by phone within 24 hours of making that determination (Health and Safety Code section 7050[c]). Pursuant to the provisions of PRC section 5097.98, the NAHC shall identify a Most Likely Descendent (MLD). The MLD designated by the NAHC shall have at least 48 hours to inspect the site and propose treatment and disposition of the remains and any associated grave goods.	X								
GEO-CONSTRUCT-1a: Implement Construction Best Management Practices to Minimize Erosion and the Loss of Topsoil	CDFW, DGS, or their contractor(s) shall implement the following measures: <ul style="list-style-type: none"> <li>Implement practices to minimize the contact of construction materials, equipment, and maintenance supplies with storm water.</li> </ul>	X						Contractor	During construction	

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	<ul style="list-style-type: none"> <li>• Limit fueling and other activities involving hazardous materials to use in designated areas only; provide drip pans under equipment and conduct daily checks of vehicle condition.</li> <li>• Implement wildlife-friendly practices to reduce erosion of exposed soil, including stabilization for soil stockpiles, watering for dust control, establishment of perimeter silt fences, and/or placement of fiber rolls.</li> <li>• Implement practices to maintain water quality, including silt fences, stabilized construction entrances, and storm-drain inlet protection.</li> <li>• Develop spill prevention and emergency response plans to handle potential fuel or other spills.</li> </ul>	X								

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		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
	<ul style="list-style-type: none"> <li>Where feasible, limit construction to dry periods.</li> <li>The performance standard for this mitigation measures is use of the best available technology that is economically achievable.</li> </ul>	X								
GEO-CONSTRUCT-1b: Comply with Cal/OSHA Requirements for Excavation Slopes	CDFW, DGS, or their contractor(s) shall ensure that temporary excavation slopes meet Cal/OSHA requirements, as appropriate. Excavation sloping, benching, the use of trench shields, and the placement of trench spoils should conform to the last applicable Cal/OSHA standards. Nearby utilities, structures, and other improvements shall be protected from potential damage by earth movements.	X						DGS and/or Contractor	During design and/or construction	
GEO-CONSTRUCT-1c: Design Cut-and-Fill Slopes to Minimize Erosion	CDFW, DGS, or their contractor(s) shall implement the following measures:	X						DGS and/or Contractor	During design and/or construction	

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	<ul style="list-style-type: none"> <li>Construction methods will incorporate appropriate erosion-prevention actions. This may include, but will not be limited to, reducing slope steepness as much as possible, re-vegetating slopes as appropriate, and directing surface drainage away from the tops of slopes. Actions shall be taken to compact fill soils uniformly.</li> <li>The guidance from the Geocon 2012 Geotechnical Investigation Report (Geocon 2012) shall be used for erosion-prevention techniques, modified if necessary depending on actual field conditions.</li> </ul>	X								
GEO-CONSTRUCT-2a: Test Fill for Recommended Compaction and Moisture Content, and Apply Appropriate Measures to Reach	<p>CDFW, DGS, or their contractor(s) shall implement the following measures:</p> <ul style="list-style-type: none"> <li>All earthwork operations should be observed by a qualified inspector who is a</li> </ul>	X						CDFW and/or Contractor	During construction	

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Desired Content When Necessary	<p>California licensed Professional Geologist and is also a California Certified Engineering Geologist. A test fill will be constructed to determine the suitability of fill material for use at the site. The results of the test fill will be used to determine the appropriate method for conditioning, placement and compaction of fill material necessary at the site to ensure stable foundation conditions are achieved. Within the existing effluent detention pond area, existing fill and loose alluvium should be removed down to competent granite bedrock. The removal should extend at least 5 feet laterally beyond the footprint of the proposed hatchery compound, including the parking area.</p> <ul style="list-style-type: none"> <li>Over-excavation bottoms, areas to receive fill or areas left at-grade should be thoroughly scarified to a</li> </ul>	X								

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	minimum depth of 8 inches, uniformly moisture-conditioned at or near optimum moisture content, and compacted to at least 90% relative compaction. Scarification in exposed, hard bedrock areas is not required.	X								
GEO-CONSTRUCT-2b: Ensure Fill Soils Contain Adequate Binder	<p>CDFW, DGS, or their contractor(s) shall implement the following measures:</p> <ul style="list-style-type: none"> <li>• If fill soils consist of sand and gravel mixtures with silt or clay binder, these soils should be blended with other soils containing sufficient fines to provide adequate binder (usually 10–15% fines by dry weight).</li> <li>• If pond-bottom sediment is used, it should be dried and sufficiently blended with other soils such that the resulting fill does not</li> </ul>	X					CDFW and/or Contractor	During construction		

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	<p>contain organics in excess of 3% by dry weight.</p> <ul style="list-style-type: none"> <li>Imported fill material should be primarily granular with a "very low" expansion potential (Expansion Index less than 20) and a Plasticity Index less than 15. Imported fill material should also contain sufficient binder and be free of organic material and construction debris; it should not contain rocks/cementations larger than 6 inches in their greatest dimension.</li> </ul>	X								
GEO-CONSTRUCT-3: Accommodate Shallow Groundwater and Potential Perched Groundwater and Seepage throughout the Project Excavation Sites	<p>CDFW, DGS, or their contractor(s) shall implement the following measures:</p> <ul style="list-style-type: none"> <li>Drain the settling ponds several weeks prior to grading, and perform earthwork and grading operations during the summer, if possible.</li> </ul>	X						CDFW and/or Contractor	During construction	

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	<ul style="list-style-type: none"> <li>• Be prepared to accommodate potential perched groundwater and seepage in deeper project excavations, such as the pond removal excavations. Depending on the extent of perched groundwater at the time of grading, temporary dewatering measures, such as wellpoints or trench drains, may be required. Some form of subgrade stabilization may be necessary where wet, unstable soils are exposed.</li> <li>• Depending on conditions found at the time of construction, mitigation alternatives, such as over-excavation and replacement with gravel wrapped in geosynthetic fabric, may be necessary to provide a stable bottom.</li> </ul>	X								

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GEO-CONSTRUCT-4: Take Recommended Grading and Fill Actions to Maximize Foundation Stability	<p>CDFW, DGS, or their contractor(s) shall implement the following measures:</p> <ul style="list-style-type: none"> <li>• Foundation design will incorporate appropriate measures to maximize long-term stability. This may address, but will not be limited to, footings and reinforcement specifications, the use of aggregate base and compacted fill or native soils, and methods to permit drainage for areas below the design flood elevation.</li> <li>• The Geocon 2012 Geotechnical Investigation Report (Geocon 2012) may be used as guidance, but final design and implementation will depend on actual field conditions, and modifications will be made as necessary.</li> <li>• A qualified geotechnical engineer will oversee onsite</li> </ul>	X						DGS, CDFW and/or Contractor	During design and construction	

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		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
	field investigations and approved final design.	X								
GEO-OP-1: Conduct and Additional Investigation into the Flow Capacity of Impacted Channels and Implement the Investigation's Recommendations	<p>Due to the increased flow through the return flow outfall channel, CDFW, DGS, or their contractor(s) shall conduct an investigation into the capacity of the channel and its connection to the San Joaquin River to verify that the channel and connection point have the capacity to support potential increased flows. Similarly, the volitional release channel would require the same investigation. The geotechnical investigation would be conducted by a qualified hydrologist(s) or hydraulic engineer(s) (or team of such experts) and detailed in a technical report.</p> <p>If the geotechnical investigation results indicate that the flow capacities of the affected channels would not be sufficient to accommodate the Proposed Project's flows,</p>		X					CDFW, DGS and/or Contractor	During design and construction	

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	recommended actions will be included in the report. CDFW will implement the report's recommended actions. Potential recommendations may include but not be limited to: expansion and/or reinforcement of the existing outfall and volitional release channels, a reduction of flow rates to a level that can be supported by the existing channels, and/or an investigation into and development of alternative channels to support peak flows. As a performance standard, in no case shall the return flows from the outfall or the volitional release channel cause channel instability or erosion and sedimentation downstream.		X							

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GEO-MANAGEMENT-1a: Stabilize Soils to Avoid Increasing Erosion on Streambanks	Project activities will be done in such a manner as to not increase erosion within the banks of the river during or immediately following rainfall events. All disturbed soils at project activity sites will be stabilized to reduce erosion potential, both during and following installation of equipment (e.g., weirs, fyke nets, traps, etc.). After removal of such equipment, soils shall be stabilized and recontoured, as necessary.				X			Contractor	During construction	
GEO-MANAGEMENT-1b: Use Energy Dissipaters to Minimize Turbidity at the Point of Discharge	Water deposited back into the river following Chinook salmon transport shall be done at a rate to minimize water turbidity and erosion. As necessary at each site, temporary energy dissipaters such as rip rap shall be placed at the point of discharge to moderate the return of water to the channel.				X			CDFW	During operation	

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GEO-RECREATION-1: Conduct a Geotechnical Investigation and Incorporate Report Recommendations into the Design and Construction of any Future Recreation Management Roads or Facilities	A geotechnical investigation must be conducted by a qualified geotechnical engineer (or team of geotechnical engineers) to evaluate subsurface soil and geologic conditions at future sites of recreation management roads and facilities. The investigation report should provide conclusions and recommendations relative to the geotechnical aspects of designing and constructing the recreation management roads and facilities, which are yet to be determined. Recommendations should address site and geologic conditions, including soil, groundwater, and corrosion. They should also address geologic hazards, such as regional active faults, ground shaking, liquefaction, and flooding. The report should provide seismic design criteria; excavation and cut-and-fill characteristics; criteria for foundations, retaining walls, and pavement; and any other design criteria appropriate for						X	CDFW and/or Contractor	During design, before construction	

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		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
	<p>the Proposed Project such that the facilities remain stable.</p> <p>The proposed recreation management activities will incorporate all recommendations put forth by the Geotechnical Investigation Report into the design and construction of the Proposed Project.</p>									
GHG-MANAGEMENT-1: Prepare Project-Level Quantitative Analysis of Construction-Related GHG Emissions, and Implement Measures to Reduce and/or Offset Emissions	<p>As future individual Proposed Project components are further defined to a level that construction emissions can be estimated, and prior to implementing that component or taking actions that commit CDFW to implementing that component, CDFW will prepare a complete, quantitative project-level GHG emissions analysis for that component.</p> <p>The GHG emissions analysis will be based on the types, locations, numbers, and operations of equipment to be used; the amount and distance</p>				X		X	CDFW and/or Contractor	Prior to implementing a project component or taking actions that commit CDFW to implementing that component	

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
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	<p>of material to be transported; and worker trips required. The analysis will determine whether the combined emissions of the various quantified components' construction activities exceed the construction thresholds (230 metric tons CO<sub>2</sub>e/year amortized or district approved BPS).</p> <p>If the analysis determines that construction emissions will exceed the construction thresholds, CDFW will first implement all feasible, applicable GHG emission reduction measures and propose these as BPS for the project, up to a 29% reduction from a defined business-as-usual baseline or 1,100 metric tons CO<sub>2</sub>e per year. Potential GHG emission reduction measures to be considered include, but are not limited to the following:</p> <ul style="list-style-type: none"> <li>Utilize alternative fueled vehicles such as electric or</li> </ul>				X		X			

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	<p>biodiesel for equipment and vehicles.</p> <ul style="list-style-type: none"> <li>Utilize newer, more fuel efficient equipment and vehicles for construction.</li> <li>Increase employee vanpool share (2% of vanpool mode share).</li> <li>Utilize locally sourced material.</li> </ul> <p>In the event that the mitigation measures are insufficient to reduce construction emissions to be equal to or less than the significance thresholds, then CDFW shall purchase sufficient GHG emission credits to offset the Proposed Project's construction net increase in emissions above the thresholds. These may include GHG credits that have been banked under SJVAPCD Rule 2301 or other GHG credits that</p>				X		X			

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	are considered acceptable by SJVAPCD.				X		X			
HAZ-CONSTRUCT-3: Implement a Construction Management Plan to Minimize Interference with Emergency Response	CDFW, DGS, or the construction contractor, in consultation with the County, will prepare and implement a Traffic Management Plan (TMP). CDFW will be responsible for ensuring that the plan is adequately developed and implemented. CDFW will provide the TMP to the Fresno County Public Works and Planning Department and Caltrans. The TMP will include recommended traffic-control and traffic-reduction measures as identified in the Transportation Management Plan Guidelines issued by the Division of Traffic Operations Office of System Management Operations (Caltrans 2009). CDFW will implement all traffic-control or traffic-reduction measures described in the TMP. In addition, to the extent feasible, construction-related traffic and any	X						CDFW, DGS, or Contractor	Before and during construction	

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		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
	<p>temporary road closures shall be scheduled during non-peak traffic periods.</p> <p>The measures included in the TMP shall be consistent with any applicable guidelines outlined in the Standard Specifications for Public Works Construction, the U.S. Department of Transportation’s Manual on Uniform Traffic Control Devices, and the Work Area Traffic Control Handbook. The plan will include the following items:</p> <ul style="list-style-type: none"> <li>• Defined location and timing of any temporary lane closures;</li> <li>• Identification and provision for circumstances requiring the use of temporary traffic control measures, flag persons, warning signs, lights, barricades, and cones, etc. to provide safe work areas in the vicinity of the project site or along the haul</li> </ul>	X								

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	<p>routes, including for those roadway segments that have substandard width (less than 18 feet), and to warn, control, protect, and expedite vehicular and pedestrian traffic and access by emergency responders;</p> <ul style="list-style-type: none"> <li>• Implementation of comprehensive traffic control measures, including scheduling of major truck trips and deliveries to avoid peak-hour traffic, placement of detour signs (if required), lane closure procedures (if required), flaggers (if required), placement of cones for drivers, and designated construction access routes and access points;</li> <li>• Notification to adjacent property owners and public safety personnel regarding when major deliveries, detours, and lane closures will occur;</li> </ul>	X								

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	<ul style="list-style-type: none"> <li>Address the potential for construction-related traffic to impede emergency response vehicles and present a specific training and information program for construction workers to ensure awareness of emergency procedures from project-related accidents;</li> <li>Identification of haul routes for movement of construction vehicles that will minimize impacts on vehicular and pedestrian traffic and circulation and safety, and provision for monitoring surface streets used for haul routes so that any damage and debris attributable to the haul trucks can be identified and corrected by CDFW and/or DGS in coordination with the construction contractor;</li> <li>Development of a process for responding to and tracking complaints pertaining to construction</li> </ul>	X								

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	activity, including identification of an onsite complaint manager; and <ul style="list-style-type: none"> <li>Documentation of road pavement conditions for all routes that would be used by construction vehicles both before and after project construction. Roads damaged by construction vehicles will be repaired to the level at which they existed before project construction.</li> </ul>	X								
HAZ-MANAGEMENT-3: Prepare Project-Level Quantitative Analysis of Site-specific Current and Historical Hazardous Materials, Implement Recommendations in the Phase I Environmental Site Assessment, and Comply with all Applicable Regulations	CDFW will implement the following measures to assess and minimize potential hazards on sites selected for the construction or removal of fish segregation weirs. CDFW will have a qualified expert perform a Phase 1 Environmental Site Assessment and hazardous-site records search for the Proposed Project sites. This process will include the identification of potential				X			CDFW, DGS, and/or Contractor	Before construction	

Mitigation Measure Title	Mitigation Measure Description	Applicable Activity (X = applicable)						Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
		SCARF Construction	SCARF Operations	Fish Reintroduction	Fisheries Management	Fisheries Research and Monitoring	Recreation Management			
	hazards within the project sites and identification of nearby sensitive receptors. The assessment will determine whether hazards and hazardous materials are present and, if so, their potential impact on workers and nearby sensitive receptors. The analysis will also include recommendations to reduce potential risks from identified hazards and hazardous materials. CDFW will implement recommendations provided in the Phase 1 Environmental Site Assessment and comply with all applicable regulations. Compliance with these regulations will include preparation of a hazardous materials business plan, which would include a training program for employees and an emergency plan (Cal EMA 2012). CDFW will implement applicable provisions of the EPA, OSHA, Cal/OSHA, Cal/EPA, Cal EMA, and CUPA permitting processes, and any applicable county general plan				X					

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	policies. Should the site have unmitigatable hazardous conditions, or mitigation is not feasible, CDFW shall choose an alternate site.				X					

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HAZ-RECREATION-3: Research and Consult Applicable Comprehensive Airport Land Use Plans before Construction Activities	<p>As stated in the California Code of Regulations, Title 14, Division 6, Chapter 3, Section 15154, CDFW shall ensure that the design and construction will comply with all applicable comprehensive airport land use plans within which boundaries the Project falls.</p> <p>If a comprehensive airport land use plan has not been adopted for a project within 2 nautical miles of a public airport or public-use airport, the Airport Land Use Planning Handbook published by the California Department of Transportation's Division of Aeronautics (Caltrans 2011) will serve as the guide for the design and construction of the Proposed Project with regard to potential airport-related safety hazards and noise problems.</p>						X	CDFW	During design	
HYD-CONSTRUCT-6: Perform Flood Analysis and Conform to	Prior to finalizing the SCARF design, CDFW will conduct an analysis of pre- and post-	X						CDFW and DGS	During design	

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Standards in Fresno County Code	project flood conditions in the SCARF area. The analysis will include an assessment of the potential change in velocity, floodplain storage and Base Flood Elevation (BFE) for the pre- and post-project conditions. If the analysis determines that the SCARF would significantly decrease floodplain storage or result in a significant increase in the BFE, velocity, or cause erosion, then measures will be designed and implemented to reduce these potential effects to an acceptable level. This could include bank stabilization measures at erosional locations, development of increased floodplain storage, redesign to avoid increases in the BFE, etc. As a performance standard, the design and construction shall conform to the standards contained in the most current version of Fresno County Code Chapter 15.48; such standards are considered	X								

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	by CDFW to reduce this impact to a less-than-significant level.	X								
LU-MANAGEMENT 1: Ensure Consistency of Land Use	As part of the design for removal or relocation of the two fish weirs, DGS, CDFW or the contractor shall investigate land uses at and adjacent to potential sites, along with relevant plans, policies and regulations. The weirs, fish traps and other equipment shall not be sited in locations that create land use incompatibilities.				X			CDFW and/or Contractor	During design	
LU-RECREATION-2: Avoid Locations with Land Use Conflicts	As part of the selection of recreational enhancement sites, CDFW shall investigate land uses at and adjacent to potential sites, along with relevant plans, policies and regulations. CDFW will choose locations for enhancement of recreational fishing that would not conflict with existing or planned land uses and/or local land use policies.						X	CDFW and/or Contractor	During design	

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NOISE-OP-1: Implement Noise Control Measures to Reduce Noise Generated by Mechanical Equipment	To reduce potential noise impacts from mechanical equipment, CDFW shall locate mechanical rooftop equipment for HVAC and refrigeration units as far from residential homes as possible. If such functioning rooftop equipment were unavoidably as close as 150 feet to the nearest sensitive receptor, then equipment will be selected that features lower-speed rotating components (e.g., fans, pumps, compressors), factory-approved acoustically-insulated housings or enclosures, and other typical means of noise control or sound abatement so that its resulting sound pressure level at a distance of 150 feet does not exceed the Fresno County threshold of 45 dBA L50 as shown in Table 14-2 in the DEIR.		X					DGS	During design	
NOISE-MANAGEMENT-1: Implement Noise Control Measures for Construction Activities	Before engaging in noise-generating activity associated with the construction of weirs, structural modification of the				X			CDFW and Contractor	Before and during construction	

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	<p>Hill's Ferry Barrier, or other construction activity, CDFW will evaluate how close sensitive receptors are located to the construction site, and whether the construction activity would exceed applicable noise thresholds. This evaluation will utilize the same FTA-based general assessment methodology that was used to predict the noise that would be generated during SCARF construction. Should the noise levels be anticipated to exceed the threshold for any sensitive receptors, CDFW will implement specific noise control measures to mitigate impacts associated with construction. These measures may include but are not limited to the following:</p> <ul style="list-style-type: none"> <li>a. Best available noise control techniques (including factory-approved mufflers, intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds) will be</li> </ul>				X					

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	<p>used for all equipment and trucks to minimize construction noise impacts.</p> <p>b. If impact equipment (e.g., concrete/rock breaker, rock drill) is used during project construction, hydraulic- or electric-powered equipment will be used to avoid the noise associated with compressed-air exhaust from pneumatically powered tools. However, where use of pneumatically powered tools is unavoidable, an exhaust muffler on the compressed-air exhaust will be used (a muffler can lower noise levels from the exhaust by up to 10 dBA). External jackets on the tools themselves will be used, which could achieve a reduction of 5 dBA. Where considered practical, quieter procedure alternatives, such as drilling or vibratory methods, will be used</p>				X					

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	<p>instead of impact equipment.</p> <p>c. Stationary noise sources will be located away from sensitive receptors. If the sources must be located near sensitive receptors, adequate sound abatement (with enclosures and mufflers, where appropriate) will be used to ensure performance standards are met. Enclosure openings or vents will face away from sensitive receptors. If any stationary equipment (e.g., pumps, ventilation fans, generators) is operated beyond the ordinance time limits, this equipment will conform to the affected jurisdiction’s noise limits.</p> <p>In addition, CDFW will designate a project liaison to be responsible for responding to noise complaints during construction. The name and phone number of the liaison will be conspicuously posted at</p>				X					

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	construction areas and on all advanced notifications. The liaison will take steps to resolve complaints, including the arrangement of periodic noise monitoring, if necessary. Results of noise monitoring will be presented at regular project meetings with the project contractor, and the liaison will coordinate with the contractor to modify any construction activities that generate excessive noise levels.				X					
REC-CONSTRUCT-1a: Reroute the Trail during Construction	CDFW will coordinate construction activities with the San Joaquin River Conservancy to minimize to the extent and duration of rerouting of the newly built San Joaquin Hatchery Public Access and Trail during construction of the SCARF.	X						CDFW	Before and during construction	

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REC-CONSTRUCT-1b: Provide Signage during Construction	CDFW or its contractor shall provide signage during construction of the SCARF to notify those using the San Joaquin Hatchery Public Access and Trail of trail and access disruptions.	X						CDFW	During construction	
REC-CONSTRUCT-1c: Rebuild the Trail if Damaged during Construction	If the San Joaquin Hatchery Public Access and Trail becomes damaged during construction of the SCARF, CDFW or its contractor shall re-construct damaged trail and public access points within 2 years of the damage.	X						CDFW or Contractor	Following construction	

## MITIGATION MEASURES, ARRANGED BY ACTIVITY

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SCARF Construction Mitigation Measure Title	Mitigation Measure Description	Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
AES-CONSTRUCT-3a: Materials and Colors Used in Construction of SCARF Facilities Shall be Compatible with the Surrounding Built and Natural Environments	Department of General Services (DGS), CDFW or the construction contractor shall select materials and colors of the facilities to be compatible with the surrounding developed and natural environments.	DGS (if during design); DGS, CDFW and/or Contractor (if during construction)	During design or construction	
AES-CONSTRUCT-3b: Landscaping of SCARF Facilities Shall Consist of Native Vegetation	CDFW or the construction contractor shall use native plants for landscaping in a manner consistent with Mitigation Measure BIO-CONSTRUCT-11a (Minimize Area of Disturbance of Riparian Habitat) and with Mitigation Measure BIO-CONSTRUCT-11b (Develop and Implement Revegetation Plan for Riparian Habitat Disturbed by Construction).	DGS (if during design); DGS, CDFW and/or Contractor (if during construction)	During design or construction	
AES-CONSTRUCT-3c: Pipelines and Utilities Serving SCARF Facilities Shall be Installed Underground	DGS, CDFW or the construction contractor shall install pipelines and utilities underground, to the extent feasible.	DGS	During design	
AES-CONSTRUCT-4: Exterior Construction Security Lighting Shall Be Hooded and Directed Downward	CDFW shall ensure that exterior construction security lighting is hooded and directed downward toward the SCARF, and away from adjacent properties.	DGS (if during design); DGS, CDFW and/or Contractor (if during construction)	During design or construction	
FISH-CONSTRUCT-4a: Relocate Special-Status Fish Species Outside of the Work Area	Prior to commencing instream construction, a barrier will be constructed around the affected area and qualified fisheries biologists shall survey the enclosure by making a minimum of three passes by electrofishing, using protocols developed by NMFS (2000). All fish captured, including special-status species, will be placed into a suitable holding container of cool, aerated stream water and then relocated to a suitable location near the construction area. Construction in the side channel will occur when it is dry or has low flow to the extent feasible; water in the work area will be diverted using coffer dams or similar structures.	CDFW and/or Contractor	During construction	

SCARF Construction Mitigation Measure Title	Mitigation Measure Description	Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
FISH-CONSTRUCT-4b: Monitor and Maintain Fish Enclosure	The fish exclusion structure will remain in place during all instream construction activities and will be monitored daily during instream construction to ensure that it is effectively excluding fish. If the fisheries biologist determines that the enclosure has been compromised, instream construction will be stopped until the biologist has repeated <b>Mitigation Measure FISH-CONSTRUCT-4a</b> and the enclosure has been repaired and is deemed effective.	CDFW and/or Contractor	During construction	
BIO-CONSTRUCT-1a: Perform Focused Surveys for Special-Status Plant Species	Within one year prior to commencement of ground disturbing activities, a qualified CDFW botanist will perform surveys for special-status plant species with the potential to occur at the SCARF site. Floristic surveys will be performed according to the Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (CDFG 2009 or current version). Floristic surveys will include the use of a reference population to increase the likelihood of detection, and will be performed during the appropriate bloom period(s) for each species. If special-status plants are detected within the construction zone or within a 100-foot radius of the construction zone, CDFW will implement <b>Mitigation Measure BIO-CONSTRUCT-1b</b> .	CDFW	Before construction	

SCARF Construction Mitigation Measure Title	Mitigation Measure Description	Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
<p>BIO-CONSTRUCT-1b: Avoid or Minimize Impacts to Special-Status Plant Species</p>	<p>If special-status plants are detected within the construction zone or within a 100-foot radius of the construction zone, CDFW will adjust the construction footprint or establish exclusion fencing to avoid impacts to the plants. Locations of special-status plant populations will be clearly identified in the field by staking, flagging, or fencing a minimum 100-foot wide buffer around them prior to the commencement of activities that may cause disturbance. No activity will occur within the buffer area.</p> <p>If avoidance is not feasible, then CDFW will implement measures to minimize the impact to the species. Minimization measures may include transplanting perennial species, seed collection and dispersal for annual species, and other conservation strategies that will protect the viability of the local population. If minimization measures are implemented, monitoring of plant populations will be conducted annually for 5 years to assess the mitigation’s effectiveness. The performance standard for the mitigation will be no net reduction in the size or viability of the local population.</p>	<p>CDFW and/or Contractor</p>	<p>During construction</p>	
<p>BIO-CONSTRUCT-2a: Perform 2 Years of Surveys for Special Status Vernal Pool Branchiopods</p>	<p>Prior to implementation of construction activities, CDFW biologists will perform surveys for special-status vernal pool branchiopods species in seasonally ponded depression with the potential to be impacted by construction of the SCARF. Surveys will be performed according to the Interim Survey Guidelines to Permittees for Recovery Permits under Section 10(a)(1)(A) of the Endangered Species Act for the Listed Vernal Pool Branchiopods (USFWS 1996 or current version).</p>	<p>CDFW</p>	<p>Before construction</p>	

SCARF Construction Mitigation Measure Title	Mitigation Measure Description	Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
<p>BIO-CONSTRUCT-2b: Avoid Impacts to Suitable Vernal Pool Branchiopods Habitat</p>	<p>The Proposed Project will be designed to avoid impacts to suitable vernal pool branchiopods' habitat. Such avoidance measures may include adjusting roadway and pipeline alignments, minimizing the footprint of borrow sites, and locating staging/stockpile areas outside of suitable habitat.</p> <p>If vernal pools are present, a 250-foot no disturbance buffer will be established from the high water mark of the vernal pools and seasonal wetlands that provide suitable habitat for vernal pool crustaceans. Wetland habitat will be delineated by staking, flagging or fencing. This buffer will be established prior to ground-disturbing activities, and it will remain until ground-disturbing activities in that area are completed.</p>	<p>DGS and Contractor</p>	<p>During design and construction</p>	

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<p>BIO-CONSTRUCT-2c: Replace Vernal Pool Branchiopod Habitat</p>	<p>If occupied vernal pool branchiopods habitat cannot be avoided, CDFW will first identify if there are potential wetland mitigation opportunities on-site and will preferentially conserve, restore, or construct new wetland habitat at this location. If habitat cannot be restored on-site or in the immediate vicinity of the disturbance location, replacement at a nearby off-site location will be provided. The replacement of habitat will be equivalent to the nature of the habitat lost, and will be provided at a suitable ratio to ensure that, at a minimum, there is no net loss of habitat acreage or value. The replacement habitat will be set aside in perpetuity for habitat use. Mitigation ratios to achieve the “no net loss” standard will be determined in consultation with the USFWS.</p> <p>If off-site compensation includes dedication of conservation easements, purchase of mitigation credits or other off-site conservation measures, the details of these measures will be developed through consultation with USFWS. The plan will include information on responsible parties for long-term management, holders of conservation easements, long-term management requirements, and other details, as appropriate, for the preservation of long-term viable populations. Any impacts that result in a compensation purchase will be required to do so with an endowment for land management in perpetuity prior to any project groundbreaking activities.</p>	<p>CDFW</p>	<p>Prior to any construction with potential to adversely affect vernal pool branchiopod habitat</p>	

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<p>BIO-CONSTRUCT-3a: Conduct Protocol-Level Surveys for California Tiger Salamander</p>	<p>CDFW will conduct a minimum of 2 years of surveys to determine the presence/absence of CTS at the SCARF site. Surveys will be conducted in accordance with the Interim Guidance on Site Assessment and Field Surveys for Determining Presence or a Negative Finding of the California Tiger Salamander (USFWS 2003). In consultation with the USFWS, CDFW may modify survey protocols to reflect site conditions and potential utilization of habitat by CTS. If protocol surveys result in negative findings of CTS for 2 consecutive years, then <b>Mitigation Measure BIO-CONSTRUCT-3c</b> would not be implemented.</p>	<p>CDFW</p>	<p>Before construction</p>	
<p>BIO-CONSTRUCT-3b: Avoid Impacts to Suitable Upland California Tiger Salamander.</p>	<p>To the extent feasible, the Proposed Project will be designed to avoid impacts to suitable upland CTS habitat. Such avoidance measures may include adjusting roadway and pipeline alignments, minimizing the footprint of borrow sites, and locating staging/stockpile areas outside of suitable upland habitat.</p>	<p>DGS</p>	<p>During design</p>	
<p>BIO-CONSTRUCT-3c: Minimize Construction-related Impacts to California Tiger Salamander</p>	<p>If CTS are detected during protocol surveys conducted under <b>Mitigation Measure BIO-CONSTRUCT-3a</b>, or in the absence of conducting 2 years of protocol-level surveys, CDFW will implement the following actions during construction to minimize potential impacts to CTS.</p> <ul style="list-style-type: none"> <li>• Prior to commencing ground disturbing activities, construction workers will be educated regarding CTS and the measures intended to protect this species.</li> <li>• When feasible, there will be a 50-foot no-disturbance buffer</li> </ul>	<p>CDFW and/or Contractor</p>	<p>Before and during construction</p>	

SCARF Construction Mitigation Measure Title	Mitigation Measure Description	Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
	<p>around burrows that provide suitable upland habitat for CTS. Burrows considered suitable for CTS will be identified by a qualified CDFW biologist. The biologist will delineate and mark the no-disturbance buffer.</p> <ul style="list-style-type: none"> <li>• All suitable burrows directly impacted by construction will be hand excavated under the supervision of a qualified wildlife biologist. If CTS are found, the biologist will relocate the organism to the nearest burrow that is outside of the construction impact area.</li> <li>• All ground-disturbing work will occur during daylight hours. In coordination with USFWS, and depending on the level of rainfall and site conditions. CDFW will monitor the National Weather Service 72-hour forecast for the work area. If a 70% or greater chance of rainfall is predicted within 72 hours of project activity, all activities in areas within 1.3 miles of potential or known CTS breeding sites will cease until no further rain is forecast. If work must continue when rain is forecast, a qualified biologist will survey the project site before construction begins each day rain is forecast. If rain exceeds 0.25 inch during a 24 hour period, work will cease until no further rain is forecast. This restriction is not applicable for areas located greater than 1.3 miles from potential or known CTS breeding sites once they have been encircled with CTS exclusion fencing. However, even after exclusion fencing is installed, this condition would still apply to construction related traffic moving through</li> </ul>			

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	<p>areas within 1.3 miles of potential or known CTS breeding sites but outside of the salamander exclusion fencing (e.g. on roads).</p> <ul style="list-style-type: none"> <li>• For work conducted during the CTS migration season (November 1 to May 31), exclusionary fencing will be erected around the construction site during ground disturbing activities after hand excavation of burrows has been completed. A biological monitor will visit the site weekly to ensure that the fencing is in good working condition. Fencing material and design will be subject to the approval of USFWS. If exclusionary fencing is not used, a qualified biological monitor will be on-site during all ground disturbance activities. Exclusion fencing will also be placed around all spoils and stockpiles.</li> <li>• For work conducted during the CTS migration season (November 1 to May 31), a qualified biologist will survey the active work areas (including access roads) in mornings following measurable precipitation events. Construction may commence once the biologist has confirmed that no CTS are in the work area.</li> <li>• Prior to beginning work each day, underneath equipment and stored pipes greater than 1.2 inches in diameter will be inspected for CTS. If any are found they will be allowed to move out of the construction area under their own accord.</li> </ul>			

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	<ul style="list-style-type: none"> <li>• Trenches and holes will be covered and inspected daily for stranded animals. Trenches and holes deeper than 1 foot will contain escape ramps (maximum slope of 2:1) to allow trapped animals to escape uncovered holes or trenches. Holes and trenches will be inspected prior to filling.</li> <li>• All food and food-related trash will be enclosed in sealed trash containers at the end of each workday and removed completely from the construction site once every three days to avoid attracting wildlife.</li> <li>• A speed limit of 15 mph will be maintained on dirt roads.</li> <li>• All equipment will be maintained such that there are no leaks of automotive fluids such as fuels, oils, and solvents. Any fuel or oil leaks will be cleaned up immediately and disposed of properly.</li> <li>• Plastic monofilament netting (erosion control matting) or similar material will not be used at the project site because CTS may become entangled or trapped. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds.</li> </ul> <p>Hazardous materials such as fuels, oils, solvents, etc. will be stored in sealable containers in a designated location that is at least 100 feet from wetlands and the San Joaquin River channel. If it is not feasible to store hazardous materials 100 feet from wetlands and the river channel, then spill containment measures will be</p>			

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	<p>implemented to prevent the possibility of accidental discharges to wetlands and waters.</p>			
<p>BIO-CONSTRUCT-3d: Minimize Construction-related Impacts to Western Spadefoot</p>	<ul style="list-style-type: none"> <li>• Prior to commencing ground disturbing activities, construction workers will be educated regarding western spadefoot, and the measures intended to protect these species.</li> <li>• For work conducted during the western spadefoot toad migration and breeding season (November 1 to May 31), a qualified biologist will survey the active work areas (including access roads) in mornings following measurable precipitation events. Construction may commence once the biologist has confirmed that no spadefoot toads are in the work area.</li> <li>• When feasible, there will be a 50-foot no-disturbance buffer around burrows that provide suitable upland habitat for western spadefoot toad. Burrows considered suitable for spadefoot will be identified by a qualified CDFW biologist. The biologist will delineate and mark the no-disturbance buffer.</li> <li>• If western spadefoot is toad is found within the construction footprint, it will be allowed to move out of harm's way of its own volition or a qualified biologist will relocate the organism to the nearest burrow that is outside of the construction impact area.</li> <li>• Prior to beginning work each day, underneath equipment and stored pipes greater than 1.2 inches (3 cm) in diameter will</li> </ul>	<p>CDFW and/or Contractor</p>	<p>Before and during construction</p>	

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	<p>be inspected for western spadefoot toad. If any are found, they will be allowed to move out of the construction area under their own accord.</p> <p>Trenches and holes will be covered and inspected daily for stranded animals. Trenches and holes deeper than 1 foot will contain escape ramps (maximum slope of 2:1) to allow trapped animals to escape uncovered holes or trenches. Holes and trenches will be inspected prior to filling.</p>			

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<p>BIO-CONSTRUCT-4: Implement Pre-construction Surveys and Minimization Measures for Western Pond Turtle</p>	<p>Pre-construction surveys for WPT will be conducted by a qualified biologist 14 days before and 24 hours before the start of construction activities where suitable habitat exists (i.e., along riparian areas, ponds and freshwater emergent wetlands). If WPT or their nests are observed during pre-construction surveys, the following measures will be implemented:</p> <ul style="list-style-type: none"> <li>• A qualified biologist will be on site to monitor construction in suitable WPT habitat. WPT found within the construction area will be allowed to leave on its own volition or it will be captured by the qualified biologist and relocated out of harm's way to the nearest suitable habitat immediately upstream or downstream from the project site.</li> </ul> <p>If WPT nests are identified in the work area during pre-construction surveys, a 300-foot no-disturbance buffer will be established between the nest and any areas of potential disturbance. Buffers will be clearly marked with temporary fencing. Construction will not be allowed to commence in the exclusion area until hatchlings have emerged from the nest, or the nest is deemed inactive by a qualified biologist.</p>	<p>CDFW and/or Contractor</p>	<p>Before and during construction</p>	
<p>BIO-CONSTRUCT-5: Implement Pre-construction Surveys and Minimization Measures for Burrowing Owls</p>	<p>Prior to initiating ground-disturbing activities, CDFW will conduct surveys for burrowing owls in accordance with protocols established in the Staff Report on Burrowing Owl Mitigation (CDFG 2012 or current version). If ground-disturbing activities are delayed or suspended for more than 30 days after the pre-construction survey, the site will be resurveyed. If</p>	<p>CDFW and/or Contractor</p>	<p>Before and during construction</p>	

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	<p>burrowing owls are detected, disturbance to burrows will be avoided during the nesting season (February 1 through August 31). CDFW will establish buffers around occupied burrows in accordance with guidance provided in the Staff Report on Burrowing Owl Mitigation, and at the discretion of the qualified CDFW wildlife biologist. Buffers around occupied burrows will be a minimum of 656 feet during the breeding season, and 160 feet during the non-breeding season.</p> <p>Outside of the nesting season (February 1 through August 31), passive owl relocation techniques will be implemented. Owls would be excluded from burrows within 160 feet of construction by installing one-way doors in burrow entrances. The work area will be monitored daily for 1 week to confirm owl departure from burrows prior to any ground-disturbing activities. Where possible burrows will be excavated using hand tools and refilled to prevent reoccupation. Sections of flexible plastic pipe will be inserted into the tunnels during excavation to maintain an escape route for any animals inside the burrow.</p> <p>If occupied burrows cannot be avoided during the non-breeding season, CDFW will enhance or create burrows in adjacent habitat at a 1:1 ratio (burrows destroyed to burrows enhanced or created) one week prior to implementation of passive relocation techniques. If burrowing owl habitat enhancement or creation takes place, CDFW will develop and implement a monitoring and management plan to assess the effectiveness of the mitigation.</p>			

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<p>BIO-CONSTRUCT-6a: Implement Pre-construction Surveys and Minimization Measures for Bald Eagle and Golden Eagle</p>	<p>Surveys for bald and golden eagle nests will be conducted within 2 miles of any construction area supporting suitable nesting habitat and important eagle roost sites and foraging areas. Surveys will be conducted in accordance with the USFWS Interim Golden Eagle Inventory and Monitoring Protocols (USFWS 2010), and CDFW’s Bald Eagle Breeding Survey Instructions (CDFG 2010), or current guidance.</p> <p>If an active eagle’s nest is found, project disturbance will not occur within 0.5 mile of the active nest site during the breeding season (December 30 through July 1), or in any area that may disturb the nesting birds. The 0.5 mile no-disturbance buffer will be maintained throughout the breeding season or until the young have fledged and are no longer dependent upon the nest or parental care for survival.</p>	<p>CDFW and/or Contractor</p>	<p>Before and during construction</p>	

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<p>BIO-CONSTRUCT-6b: Implement Pre-construction Surveys and Minimization Measures for Swainson’s Hawk and White-tailed Kite</p>	<p>If construction occurs between February 1 and August 31, CDFW will conduct surveys for nesting raptors, with a focus on Swainson’s hawk and white-tailed kite, in accordance with established CDFW raptor survey protocols (e.g., CDFG 2000, or current guidance). Surveys will cover a minimum of a 0.5-mile radius around the construction area. If nesting raptors are detected, CDFW will establish buffers around nests that are sufficient to ensure that breeding is not likely to be disrupted or adversely impacted by construction. Buffers will be maintained until a qualified CDFW biologist has determined that young have fledged and are no longer reliant upon the nest or parental care for survival.</p> <p>If potential nesting trees are to be removed during construction activities, removal will take place outside of Swainson’s hawk nesting season and CDFW will develop a plan to replace known Swainson’s hawk nest trees at a ratio of 3:1. If replacement planting is implemented, monitoring will be conducted annually for 5 years to assess the mitigation’s effectiveness. The performance standard for the mitigation will be 65% survival of all replacement plantings.</p>	<p>CDFW and/or Contractor</p>	<p>Before and during construction</p>	

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<p>BIO-CONSTRUCT-6c: Implement Pre-construction Surveys and Minimization Measures for Non-listed Raptors</p>	<p>If construction occurs between February 1 and August 31, CDFW will conduct surveys for nesting raptors in accordance with established CDFW raptor survey protocols. Surveys will cover a minimum of a 0.5-mile radius around the construction area. If nesting raptors are detected, CDFW will establish buffers around nests that are sufficient to ensure that breeding is not likely to be disrupted or adversely impacted by construction. Buffers around active raptor nests will be 500 feet for non-listed raptors, unless a qualified biologist determines that smaller buffers would be sufficient to avoid impacts to nesting raptors. Factors to be considered for determining buffer size will include: the presence of natural buffers provided by vegetation or topography; nest height; locations of foraging territory; and baseline levels of noise and human activity. Buffers will be maintained until a qualified CDFW biologist has determined that young have fledged and are no longer reliant upon the nest or parental care for survival. If potential nesting trees are to be removed during construction activities, removal will take place outside of the raptor nesting season and CDFW will develop a plan to replace known nest trees at a ratio of 3:1. If replacement planting is implemented, monitoring will be conducted annually for 5 years to assess the mitigation's effectiveness. The performance standard for the mitigation will be 65% survival of all replacement plantings.</p>	<p>CDFW and/or Contractor)</p>	<p>Before and during construction</p>	

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<p>BIO-CONSTRUCT-7a: Implement Pre-construction Surveys and Minimization Measures for Special-Status Passerine Species</p>	<p>If construction begins between February 1 and August 31, CDFW will conduct surveys for special-status birds within a 1,000-ft radius of the construction area. Surveys will be conducted by biologists adhering to guidance offered in Western Yellow-billed Cuckoo Natural History Summary and Survey Methodology (Halterman et al. 2009); Least Bell’s Vireo Survey Guidelines (USFWS 2001); and/or A Survey Protocol for Willow Flycatcher in California (Bombay et al. 2003). If nests are detected, CDFW will establish buffers around nests that are sufficient to ensure that breeding is not likely to be disrupted or adversely impacted by construction. No-disturbance buffers around active nests will be a minimum of 500 feet, unless a qualified CDFW biologist determines that smaller buffers would be sufficient to avoid impacts to nesting birds. Factors to be considered for determining buffer size will include: the presence of natural buffers provided by vegetation or topography; nest height; locations of foraging territory; and baseline levels of noise and human activity. Buffers will be maintained until a qualified CDFW biologist has determined that young have fledged and are no longer reliant upon the nest or parental care for survival.</p>	<p>CDFW and/or Contractor</p>	<p>Before and during construction</p>	

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<p>BIO-CONSTRUCT-7b: Implement Pre-construction Surveys for Birds Protected under the MBTA</p>	<p>Whenever possible, impacts to native nesting birds will be avoided by not conducting project activities that involve clearing of vegetation, generation of mechanical noise, or ground disturbance during the typical breeding season (February 1 to September 1), if species covered under the Migratory Bird Treaty Act and Fish and Game Code sections 3503, 3503.5, and/or 3513 are determined to be present.</p> <p>If construction begins between February 1 and August 31, CDFW will conduct surveys for nesting birds within a 1,000-ft radius of the construction area. If nests are detected, CDFW will establish buffers around nests that are sufficient to ensure that breeding is not likely to be disrupted or adversely impacted by construction. Buffers around active nests will be a minimum of 250 feet, unless a qualified CDFW biologist determines that smaller buffers would be sufficient to avoid impacts to nesting birds. Factors to be considered for determining buffer size will include: the presence of natural buffers provided by vegetation or topography; nest height; locations of foraging territory; and baseline levels of noise and human activity. Buffers will be maintained until young have fledged or the nests become inactive.</p>	<p>CDFW and/or Contractor</p>	<p>Before and during construction</p>	

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<p>BIO-CONSTRUCT-8a:                      Conduct Pre-construction Surveys for Bat Species</p>	<p>No less than 7 days and no more than 14 days prior to the beginning of ground disturbance and/or construction activities, a qualified CDFW wildlife biologist, or wildlife biologist approved by CDFW, will conduct surveys for special-status bats during the appropriate time of day to maximize detectability to determine if bat species are roosting near the work area. Survey methodology may include visual surveys of bats (observation of presence of bats during foraging period), inspection for suitable habitat or bat sign (guano), or use of ultrasonic detectors (Anabat, etc.). Visual surveys may consist of a daytime pedestrian survey looking for evidence of bat use (e.g., guano) and/or an evening emergence survey to note the presence or absence of bats and will include trees within 0.25 mile of project construction activities. The type of survey will depend on the condition of the potential roosting habitat. If no bat roosts are found, then no further study is required. If evidence of bat use is observed, the number and species of bats using the roost will be determined.</p>	<p>CDFW and/or Contractor</p>	<p>Before and during construction</p>	

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<p>BIO-CONSTRUCT-8b: Avoid and Minimize Impacts to Roosting/Breeding Sites</p>	<p>CDFW will avoid disturbance to roosts to the greatest extent feasible. If roosts must be removed, the bats will be excluded from the roosting site before it is removed. A mitigation program addressing compensation, exclusion methods, and roost removal procedures will be developed prior to implementation. Exclusion methods may include use of one-way doors at roost entrances (bats may leave, but not reenter), or sealing roost entrances when a site can be confirmed to contain no bats. Exclusion efforts may be restricted during periods of sensitive activity (e.g., during hibernation or while females in maternity colonies are nursing young).</p>	<p>CDFW and/or Contractor</p>	<p>Before and during construction</p>	
<p>BIO-CONSTRUCT-8c: Replace Bat Roosting/Breeding Sites</p>	<p>If roosts cannot be avoided or it is determined that construction activities may cause roost abandonment, such activities may not commence until permanent, elevated bat houses have been installed outside of, but near the construction area. Placement and height will be determined by a qualified CDFW wildlife biologist, but the height of bat house will be at least 15 feet. Bat houses will be multi-chambered and be purchased or constructed in accordance with CDFW standards. The number of bat houses required will be dependent upon the size and number of colonies found, but at least one bat house will be installed for each pair of bats (if occurring individually), or of sufficient number to accommodate each colony of bats to be relocated.</p>	<p>CDFW and/or Contractor</p>	<p>Before and during construction</p>	

SCARF Construction Mitigation Measure Title	Mitigation Measure Description	Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
<p>BIO-CONSTRUCT-9: Conduct Pre-construction Surveys and Minimization Measures for American Badger</p>	<p>No less than 14 days and no more than 30 days prior to the beginning of ground disturbance and/or construction activities, CDFW will conduct a survey to determine if American badger den sites are present at the SCARF site. If dens are found, they will be monitored for badger activity. If CDFW determines that dens may be active, the entrances of the dens will be blocked with soil, sticks, and debris for three to five days to discourage the use of these dens prior to project disturbance activities. The den entrances will be blocked to an incrementally greater degree over the three to five-day period. After the qualified CDFW biologist determines that badgers have stopped using active dens, the dens will be hand-excavated with a shovel to prevent re-use during construction. No disturbance of active dens will take place when cubs may be present and dependent on parental care, as determined by a qualified CDFW biologist.</p>	<p>CDFW and/or Contractor</p>	<p>Before construction in locations with potential to affect badgers</p>	
<p>BIO-CONSTRUCT-10: Conduct Pre-construction Surveys and Minimization Measures for San Joaquin Kit Fox</p>	<p>A qualified biologist will conduct pre-construction surveys no less than 14 days and no more than 30 days before the commencement of construction activities to identify potential dens more than 5 inches in diameter. CDFW will implement USFWS Standardized Recommendations for Protection of San Joaquin Kit Fox Prior to or During Ground Disturbance (USFWS 1999, 2011). CDFW will notify USFWS in writing of the results of the pre-construction survey within 30 days after these activities are completed.</p> <p>If potential dens are located within the proposed work area and cannot be avoided during construction activities, a USFWS-</p>	<p>CDFW and/or Contractor</p>	<p>Before construction in locations with potential to affect San Joaquin Kit Fox</p>	

SCARF Construction Mitigation Measure Title	Mitigation Measure Description	Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
	<p>approved biologist will determine if the dens are occupied. If occupied dens are present within the proposed work area, they will be avoided through the use of exclusion zones following the most current USFWS procedures (currently USFWS 1999, 2011). Furthermore, CDFW will notify USFWS immediately if a natal or pupping den is found in the survey area, and will present the results of pre-activity den searches within 5 days after these activities are completed and before the start of construction activities in the area. CDFW, in coordination with USFWS, will determine if SJKF den removal is appropriate. If unoccupied dens need to be removed, the USFWS-approved biologist will remove these dens by hand-excavating them in accordance with USFWS procedures (USFWS 1999, 2011).</p> <p>Additional conservation measures will be coordinated between USFWS and CDFW, and may include replacing dens, installing off-site artificial dens, acquiring compensatory habitat, or other conservation options. Compensation may include dedicating conservation easements, purchasing mitigation credits, or other off-site conservation measures, and the details of these measures will be included in the mitigation plan and must occur with full endowments for management in perpetuity. The plan will include information on responsible parties for long-term management, holders of conservations easements, long-term management requirements, and other details, as appropriate, for the preservation of long-term viable SJKF populations. If conservation measures are</p>			

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	<p>implemented, CDFW will monitor their performance annually for 5 years to assess the mitigation’s effectiveness. The performance standard for the mitigation will be no net reduction in the size or viability of the local SJKF population.</p>			
<p>BIO-CONSTRUCT-11a: Minimize Area of Disturbance of Riparian Habitat</p>	<p>The disturbance or removal of vegetation will not exceed the minimum necessary to complete construction and will only occur within the defined work area.</p>	<p>DGS and contractor</p>	<p>During design and construction</p>	
<p>BIO-CONSTRUCT-11b: Develop and Implement Revegetation Plan for Riparian Habitat Disturbed by Construction</p>	<p>CDFW will develop a revegetation plan for riparian habitat and sensitive natural communities disturbed by construction. All disturbed soils and new fill in riparian habitat or sensitive natural communities will be revegetated with site-appropriate native species. Any native vegetation 4 inches or greater DBH damaged or removed as result of construction activity will be replaced at a 3:1 ratio; this ratio will increase to 10:1 for native trees of 24 inches DBH and greater. Revegetation areas will be maintained and monitored to ensure a minimum of 65% survival of the plantings after 5 years.</p>	<p>CDFW, DGS and/or Contractor</p>	<p>During design and construction</p>	

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<p>BIO-CONSTRUCT-12a: Obtain Regulatory Permits for Work Activities Taking Place in Wetlands and Waters of the United States and the State</p>	<p>Work within areas defined as waters of the U.S. that includes placement of fill will require a CWA Section 404 permit from the USACE and Section 401 Water Quality Certification from the RWQCB. All work proposed in jurisdictional waters of the U.S. will be authorized by permits from the USACE and RWQCB.</p> <p>In areas where project activities are temporary in nature, jurisdictional wetland and other waters of the U.S. will be restored to their condition prior to disturbance. In areas where permanent disturbance to jurisdictional waters or wetlands will occur, CDFW will first identify if potential mitigation sites are present within close proximity to the area of disturbance, and will construct new or restore degraded wetlands. If waters or wetlands cannot be restored on-site or in the immediate vicinity of the disturbance location, replacement at a nearby off-site location will be provided. The replacement of waters or wetlands will be equivalent to the nature of the habitat lost, and will be provided at a suitable ratio to ensure that, at a minimum, there is no net loss of habitat acreage or value. The replacement habitat will be set aside in perpetuity for habitat use. Mitigation ratios to achieve the “no net loss” standard will be determined in consultation with the USACE and RWQCB.</p>	<p>CDFW and/or Contractor</p>	<p>Before construction</p>	

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<p>BIO-CONSTRUCT-12b: Avoidance of and Mitigation for Incidental Fill</p>	<p>Incidental fill of wetland areas will be minimized wherever possible. Temporary construction fencing will be erected around wetlands areas to reduce the potential of incidental fill. Areas affected by construction will be restored to pre-construction contours and revegetated using a mix of native vegetation in accordance with <b>Mitigation Measure BIO-CONSTRUCT-11b.</b></p>	<p>CDFW, DGS, and/or Contractor</p>	<p>During design and construction</p>	
<p>CR-CONSTRUCT-1a: Evaluate Cultural Resources for Eligibility for Inclusion in the CRHR, and Implement Appropriate Mitigation Measures for Eligible Resources</p>	<p>CDFW shall ensure that all cultural resources identified prior to or during construction of the various Proposed Project components will be evaluated for eligibility for inclusion in the CRHR. Where implementation of the Proposed Project necessitates ground disturbance at sites besides the SCARF (e.g., sites for recreational enhancements), a records search and pedestrian survey shall be conducted prior to construction. Resource evaluations will be conducted by individuals who meet the U.S. Secretary of Interior’s professional standards in archaeology and architectural history. If any of the resources that are identified during this evaluation meet the eligibility criteria identified in PRC section 5024.1, or PRC section 21083.2(g), CDFW will develop and implement mitigation measures according to CEQA Guidelines section 15126.4(b) before construction begins or resumes. For resources eligible for listing in the CRHR that would be rendered ineligible by the effects of project construction, CDFW shall implement mitigation measures. Mitigation measures for archaeological resources shall be selected from the following: avoidance; incorporation of sites within parks, greenspace, or other open space; capping the</p>	<p>CDFW and/or Contractor</p>	<p>During design and construction</p>	

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	<p>site; deeding the site into a permanent conservation easement; or data recovery excavation. Mitigation measures for archaeological resources shall be developed in consultation with responsible agencies, including but not limited to the State Office of Historic Preservation and, as appropriate, interested parties such as Native American tribes. Mitigation measures for historic architectural resources shall be consistent with the U.S. Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings. Implementation of the approved mitigation would be required before beginning/resuming any construction activities with potential to affect identified eligible resources at the site.</p>			

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<p>CR-CONSTRUCT-1b: Immediately Halt Construction if Cultural Resources are Discovered</p>	<p>Not all cultural resources are visible on the ground surface. If any cultural resources, such as structural features, unusual amounts of bone or shell, flaked or ground stone artifacts, historic-era artifacts, human remains, or architectural remains are encountered during any project construction activities, work shall be suspended immediately at the location of the find and within an appropriate radius of at least 50 feet. A qualified archaeologist shall conduct a field investigation of the specific site and recommend mitigation necessary for the protection or recovery of any cultural resource concluded by the archaeologist to represent a historical resource or unique archaeological resource. <b>Mitigation Measure CR-CONSTRUCT-1a</b> would then be implemented.</p>	<p>CDFW and/or Contractor</p>	<p>During construction</p>	

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<p>CR-CONSTRUCT-3: Immediately Halt Construction if Human Remains are Discovered and Implement California Health and Safety Code</p>	<p>If human remains are accidentally discovered during the Proposed Project's construction activities, the requirements of California Health and Human Safety Code section 7050.5 must be followed. Potentially damaging excavation must halt in the area of the remains, with a minimum radius of 50 feet, and the local County Coroner must be notified. The Coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (Health and Safety Code section 7050.5[b]). If the Coroner determines that the remains are those of a Native American, he or she must contact NAHC by phone within 24 hours of making that determination (Health and Safety Code section 7050[c]). Pursuant to the provisions of PRC section 5097.98, the NAHC shall identify a Most Likely Descendent (MLD). The MLD designated by the NAHC shall have at least 48 hours to inspect the site and propose treatment and disposition of the remains and any associated grave goods.</p>	<p>CDFW and/or Contractor</p>	<p>During construction</p>	
<p>GEO-CONSTRUCT-1a: Implement Construction Best Management Practices to Minimize Erosion and the Loss of Topsoil</p>	<p>CDFW, DGS, or their contractor(s) shall implement the following measures:</p> <ul style="list-style-type: none"> <li>• Implement practices to minimize the contact of construction materials, equipment, and maintenance supplies with storm water.</li> <li>• Limit fueling and other activities involving hazardous materials to use in designated areas only; provide drip pans under equipment and conduct</li> </ul>	<p>Contractor</p>	<p>During construction</p>	

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	<p>daily checks of vehicle condition.</p> <ul style="list-style-type: none"> <li>• Implement wildlife-friendly practices to reduce erosion of exposed soil, including stabilization for soil stockpiles, watering for dust control, establishment of perimeter silt fences, and/or placement of fiber rolls.</li> <li>• Implement practices to maintain water quality, including silt fences, stabilized construction entrances, and storm-drain inlet protection.</li> <li>• Develop spill prevention and emergency response plans to handle potential fuel or other spills.</li> <li>• Where feasible, limit construction to dry periods.</li> </ul> <p>The performance standard for this mitigation measures is use of the best available technology that is economically achievable.</p>			
<p>GEO-CONSTRUCT-1b: Comply with Cal/OSHA Requirements for Excavation Slopes</p>	<p>CDFW, DGS, or their contractor(s) shall ensure that temporary excavation slopes meet Cal/OSHA requirements, as appropriate. Excavation sloping, benching, the use of trench shields, and the placement of trench spoils should conform to the last applicable Cal/OSHA standards. Nearby utilities, structures, and other improvements shall be protected from potential damage by earth movements.</p>	<p>DGS and/or Contractor</p>	<p>During design and/or construction</p>	

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<p>GEO-CONSTRUCT-1c: Design Cut-and-Fill Slopes to Minimize Erosion</p>	<p>CDFW, DGS, or their contractor(s) shall implement the following measures:</p> <ul style="list-style-type: none"> <li>• Construction methods will incorporate appropriate erosion-prevention actions. This may include, but will not be limited to, reducing slope steepness as much as possible, re-vegetating slopes as appropriate, and directing surface drainage away from the tops of slopes. Actions shall be taken to compact fill soils uniformly.</li> </ul> <p>The guidance from the Geocon 2012 Geotechnical Investigation Report (Geocon 2012) shall be used for erosion-prevention techniques, modified if necessary depending on actual field conditions.</p>	<p>DGS and/or Contractor</p>	<p>During design and/or construction</p>	

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<p>GEO-CONSTRUCT-2a: Test Fill for Recommended Compaction and Moisture Content, and Apply Appropriate Measures to Reach Desired Content When Necessary</p>	<p>CDFW, DGS, or their contractor(s) shall implement the following measures:</p> <ul style="list-style-type: none"> <li>All earthwork operations should be observed by a qualified inspector who is a California licensed Professional Geologist and is also a California Certified Engineering Geologist. A test fill will be constructed to determine the suitability of fill material for use at the site. The results of the test fill will be used to determine the appropriate method for conditioning, placement and compaction of fill material necessary at the site to ensure stable foundation conditions are achieved. Within the existing effluent detention pond area, existing fill and loose alluvium should be removed down to competent granite bedrock. The removal should extend at least 5 feet laterally beyond the footprint of the proposed hatchery compound, including the parking area.</li> </ul> <p>Over-excavation bottoms, areas to receive fill or areas left at-grade should be thoroughly scarified to a minimum depth of 8 inches, uniformly moisture-conditioned at or near optimum moisture content, and compacted to at least 90% relative compaction. Scarification in exposed, hard bedrock areas is not required.</p>	<p>CDFW and/or Contractor</p>	<p>During construction</p>	

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<p>GEO-CONSTRUCT-2b: Ensure Fill Soils Contain Adequate Binder</p>	<p>CDFW, DGS, or their contractor(s) shall implement the following measures:</p> <ul style="list-style-type: none"> <li>• If fill soils consist of sand and gravel mixtures with silt or clay binder, these soils should be blended with other soils containing sufficient fines to provide adequate binder (usually 10–15% fines by dry weight).</li> <li>• If pond-bottom sediment is used, it should be dried and sufficiently blended with other soils such that the resulting fill does not contain organics in excess of 3% by dry weight.</li> </ul> <p>Imported fill material should be primarily granular with a “very low” expansion potential (Expansion Index less than 20) and a Plasticity Index less than 15. Imported fill material should also contain sufficient binder and be free of organic material and construction debris; it should not contain rocks/cementations larger than 6 inches in their greatest dimension.</p>	<p>CDFW and/or Contractor</p>	<p>During construction</p>	

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<p>GEO-CONSTRUCT-3: Accommodate Shallow Groundwater and Potential Perched Groundwater and Seepage throughout the Project Excavation Sites</p>	<p>CDFW, DGS, or their contractor(s) shall implement the following measures:</p> <ul style="list-style-type: none"> <li>• Drain the settling ponds several weeks prior to grading, and perform earthwork and grading operations during the summer, if possible.</li> <li>• Be prepared to accommodate potential perched groundwater and seepage in deeper project excavations, such as the pond removal excavations. Depending on the extent of perched groundwater at the time of grading, temporary dewatering measures, such as wellpoints or trench drains, may be required. Some form of subgrade stabilization may be necessary where wet, unstable soils are exposed.</li> </ul> <p>Depending on conditions found at the time of construction, mitigation alternatives, such as over-excavation and replacement with gravel wrapped in geosynthetic fabric, may be necessary to provide a stable bottom.</p>	<p>CDFW and/or Contractor</p>	<p>During construction</p>	

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<p>GEO-CONSTRUCT-4: Take Recommended Grading and Fill Actions to Maximize Foundation Stability</p>	<p>CDFW, DGS, or their contractor(s) shall implement the following measures:</p> <ul style="list-style-type: none"> <li>• Foundation design will incorporate appropriate measures to maximize long-term stability. This may address, but will not be limited to, footings and reinforcement specifications, the use of aggregate base and compacted fill or native soils, and methods to permit drainage for areas below the design flood elevation.</li> <li>• The Geocon 2012 Geotechnical Investigation Report (Geocon 2012) may be used as guidance, but final design and implementation will depend on actual field conditions, and modifications will be made as necessary.</li> </ul> <p>A qualified geotechnical engineer will oversee onsite field investigations and approved final design.</p>	<p>DGS, CDFW and/or Contractor</p>	<p>During design and construction</p>	
<p>HAZ-CONSTRUCT-3: Implement a Construction Management Plan to Minimize Interference with Emergency Response</p>	<p>CDFW, DGS, or the construction contractor, in consultation with the County, will prepare and implement a Traffic Management Plan (TMP). CDFW will be responsible for ensuring that the plan is adequately developed and implemented. CDFW will provide the TMP to the Fresno County Public Works and Planning Department and Caltrans. The TMP will include recommended traffic-control and traffic-reduction measures as identified in the Transportation Management Plan Guidelines issued by the Division of Traffic Operations Office of System Management Operations (Caltrans 2009). CDFW will implement all traffic-control or</p>	<p>CDFW, DGS, or Contractor</p>	<p>Before and during construction</p>	

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	<p>traffic-reduction measures described in the TMP. In addition, to the extent feasible, construction-related traffic and any temporary road closures shall be scheduled during non-peak traffic periods.</p> <p>The measures included in the TMP shall be consistent with any applicable guidelines outlined in the Standard Specifications for Public Works Construction, the U.S. Department of Transportation’s Manual on Uniform Traffic Control Devices, and the Work Area Traffic Control Handbook. The plan will include the following items:</p> <ul style="list-style-type: none"> <li>• Defined location and timing of any temporary lane closures;</li> <li>• Identification and provision for circumstances requiring the use of temporary traffic control measures, flag persons, warning signs, lights, barricades, and cones, etc. to provide safe work areas in the vicinity of the project site or along the haul routes, including for those roadway segments that have substandard width (less than 18 feet), and to warn, control, protect, and expedite vehicular and pedestrian traffic and access by emergency responders;</li> <li>• Implementation of comprehensive traffic control measures, including scheduling of major truck trips and deliveries to avoid peak-hour traffic, placement of detour signs (if required), lane closure procedures (if required), flaggers (if required), placement of cones for drivers, and designated construction</li> </ul>			

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	<p>access routes and access points;</p> <ul style="list-style-type: none"> <li>• Notification to adjacent property owners and public safety personnel regarding when major deliveries, detours, and lane closures will occur;</li> <li>• Address the potential for construction-related traffic to impede emergency response vehicles and present a specific training and information program for construction workers to ensure awareness of emergency procedures from project-related accidents;</li> <li>• Identification of haul routes for movement of construction vehicles that will minimize impacts on vehicular and pedestrian traffic and circulation and safety, and provision for monitoring surface streets used for haul routes so that any damage and debris attributable to the haul trucks can be identified and corrected by CDFW and/or DGS in coordination with the construction contractor;</li> <li>• Development of a process for responding to and tracking complaints pertaining to construction activity, including identification of an onsite complaint manager; and</li> </ul> <p>Documentation of road pavement conditions for all routes that would be used by construction vehicles both before and after project construction. Roads damaged by construction vehicles will be repaired to the level at which they existed before project construction.</p>			

SCARF Construction Mitigation Measure Title	Mitigation Measure Description	Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
HYD-CONSTRUCT-6: Perform Flood Analysis and Conform to Standards in Fresno County Code	Prior to finalizing the SCARF design, CDFW will conduct an analysis of pre- and post-project flood conditions in the SCARF area. The analysis will include an assessment of the potential change in velocity, floodplain storage and Base Flood Elevation (BFE) for the pre- and post-project conditions. If the analysis determines that the SCARF would significantly decrease floodplain storage or result in a significant increase in the BFE, velocity, or cause erosion, then measures will be designed and implemented to reduce these potential effects to an acceptable level. This could include bank stabilization measures at erosional locations, development of increased floodplain storage, redesign to avoid increases in the BFE, etc. As a performance standard, the design and construction shall conform to the standards contained in the most current version of Fresno County Code Chapter 15.48; such standards are considered by CDFW to reduce this impact to a less-than-significant level.	CDFW and DGS	During design	
REC-CONSTRUCT-1a: Reroute the Trail during Construction	CDFW will coordinate construction activities with the San Joaquin River Conservancy to minimize to the extent and duration of rerouting of the newly built San Joaquin Hatchery Public Access and Trail during construction of the SCARF.	CDFW	Before and during construction	
REC-CONSTRUCT-1b: Provide Signage during Construction	CDFW or its contractor shall provide signage during construction of the SCARF to notify those using the San Joaquin Hatchery Public Access and Trail of trail and access disruptions.	CDFW	During construction	

<b>SCARF Construction Mitigation Measure Title</b>	<b>Mitigation Measure Description</b>	<b>Implementing Party</b>	<b>Implementation Timing</b>	<b>Verification Sign-off (initials and date)</b>
REC-CONSTRUCT-1c: Rebuild the Trail if Damaged during Construction	If the San Joaquin Hatchery Public Access and Trail becomes damaged during construction of the SCARF, CDFW or its contractor shall re-construct damaged trail and public access points within 2 years of the damage.	CDFW or Contractor	Following construction	

SCARF Operations Mitigation Measure Title	Mitigation Measure Description	Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
AES-OP-2a: Permanent Exterior Lighting Shall Be Designed to Protect the Darkness of Nighttime Skies	CDFW shall ensure that permanent lighting utilizes lights that are low wattage, or incorporates appropriate shielding, and that lighting is directed away from sensitive uses and adjacent properties.	DGS (if during design); DGS, CDFW and/or Contractor (if during construction)	During design or construction	
AES-OP-2b: SCARF Structures Shall Be Constructed to Avoid Surface Glare	To reduce glare, CDFW shall ensure that all structures are painted with non-glare surfacing or constructed of materials that do not produce glare.	DGS (if during design); DGS, CDFW and/or Contractor (if during construction)	During design or construction	
AQ-OP-3: Fish Disposal Limitations	<p>CDFW will implement at least one of the following measures to minimize the likelihood of potential odors from fish disposal activities affecting a substantial number of sensitive receptors:</p> <ul style="list-style-type: none"> <li>• Limit fish disposal locations to areas that are at least 1,000 feet from any potential sensitive receptors, including terrestrial recreationists such as hikers.</li> </ul> <p>Implement disposal methods that ensure that fish carcasses are weighed down and disposed of within a stream channel instead of on a stream bank.</p>	CDFW	During operation	

SCARF Operations Mitigation Measure Title	Mitigation Measure Description	Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
<p>GEO-OP-1: Conduct and Additional Investigation into the Flow Capacity of Impacted Channels and Implement the Investigation's Recommendations</p>	<p>Due to the increased flow through the return flow outfall channel, CDFW, DGS, or their contractor(s) shall conduct an investigation into the capacity of the channel and its connection to the San Joaquin River to verify that the channel and connection point have the capacity to support potential increased flows. Similarly, the volitional release channel would require the same investigation. The geotechnical investigation would be conducted by a qualified hydrologist(s) or hydraulic engineer(s) (or team of such experts) and detailed in a technical report.</p> <p>If the geotechnical investigation results indicate that the flow capacities of the affected channels would not be sufficient to accommodate the Proposed Project's flows, recommended actions will be included in the report. CDFW will implement the report's recommended actions. Potential recommendations may include but not be limited to: expansion and/or reinforcement of the existing outfall and volitional release channels, a reduction of flow rates to a level that can be supported by the existing channels, and/or an investigation into and development of alternative channels to support peak flows. As a performance standard, in no case shall the return flows from the outfall or the volitional release channel cause channel instability or erosion and sedimentation downstream.</p>	<p>CDFW, DGS and/or Contractor</p>	<p>During design and construction</p>	

SCARF Operations Mitigation Measure Title	Mitigation Measure Description	Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
NOISE-OP-1: Implement Noise Control Measures to Reduce Noise Generated by Mechanical Equipment	To reduce potential noise impacts from mechanical equipment, CDFW shall locate mechanical rooftop equipment for HVAC and refrigeration units as far from residential homes as possible. If such functioning rooftop equipment were unavoidably as close as 150 feet to the nearest sensitive receptor, then equipment will be selected that features lower-speed rotating components (e.g., fans, pumps, compressors), factory-approved acoustically-insulated housings or enclosures, and other typical means of noise control or sound abatement so that its resulting sound pressure level at a distance of 150 feet does not exceed the Fresno County threshold of 45 dBA L50 as shown in Table 14-2 in the DEIR.	DGS	During design	

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SCARF Fish Reintroduction Mitigation Measure Title	Mitigation Measure Description	Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
<p>FISH-REINTRO-1: Determine Stream-specific Take Totals</p>	<p>CDFW will confer with USFWS and NMFS to determine stream-specific take totals that incorporate estimates of viable population size, life stage-specific survival, and the maintenance of genetic diversity of the donor stock populations. These take totals will be incorporated as specific permit conditions in a ESA section 10(a)(1)(A) permit, which must be issued prior to broodstock collection. At a minimum, the selected threshold(s) shall ensure that the adverse effects of broodstock collection will not be substantial in the context of the overall population of each spring-run donor stock.</p>	<p>CDFW</p>	<p>Prior to conducting wild spring-run broodstock collection</p>	
<p>BIO-REINTRO-3: Conduct Project-Level Assessment of Activity, and Implement Conservation Measures to Avoid, Minimize, or Mitigate Impacts</p>	<p>When project activities are defined to a level that impacts to biological resources can be evaluated, and prior to implementing that component or taking actions that commit CDFW to implementing that component, CDFW will assess the site to determine the potential for impacts to biological resources. At minimum, the assessment will include a CNDDB search of the site vicinity (minimum 5-mile radius), and a site visit by a qualified botanist and wildlife biologist to evaluate the potential for special-status species and sensitive habitats to be impacted by the activity. If the biologists determine that special-status species or sensitive habitats may be affected by the activity, CDFW will implement the conservation measures listed in Appendix I, CDFW's Conservation Measures for Biological Resources that May Be Affected by Program-level Actions, for each species and habitat type that may be affected.</p>	<p>CDFW and/or Contractor</p>	<p>Before and during construction</p>	

SCARF Fish Reintroduction Mitigation Measure Title	Mitigation Measure Description	Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
<p>BIO-RECREATION-2: Preserve and Protect Special-Status Plant Populations in the Vicinity of Recreational Enhancement Areas</p>	<p>Prior to developing recreational enhancements, CDFW will implement the <b>Mitigation Measure BIO-REINTRO-3</b>. If the qualified botanist identifies special-status plants species in the vicinity of the recreational enhancements, CDFW will implement measures to minimize potential impacts. Minimization measures may include constructing pathways, fencing, signage, and other strategies to reduce the potential for trampling or matting that will protect the viability of the local plant population and suitable habitat. If minimization measures are implemented, monitoring of plant populations will be conducted annually for 5 years to assess the mitigation’s effectiveness. The performance standard for the mitigation will be no net reduction in the size or viability of the local population.</p>	<p>CDFW and/or Contractor (and DGS, depending on the selected measures)</p>	<p>During design, construction, and operation</p>	

SCARF Fisheries Management Mitigation Measure Title	Mitigation Measure Description	Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
<p>AQ-MANAGEMENT-1: Prepare Project-Level Quantitative Analysis of Construction Related Air Quality Emissions, and Implement Measures to Cap Emissions</p>	<p>As future individual project components are further defined to a level that construction emissions can be estimated, and prior to implementing that component or taking actions that commit CDFW to implementing that component, CDFW will prepare a complete, quantitative project-level air quality analysis for that component.</p> <p>The quantitative construction air quality analyses will be based on the types, locations, numbers, and operations of equipment to be used; the amount and distance of material to be transported; and worker trips required. In addition, the analysis will be based on the projected quantity and frequency of vehicle and/or truck trips, and other activities that generate emissions. The analysis will determine whether the combined emissions of the quantified components' construction activities exceed the SJVAPCD's construction air quality thresholds (see the SJVAPCD thresholds presented in Table 5-5 of the DEIR). In addition, the analysis will evaluate whether the combined emissions from all project components constitute a significant health risk from diesel fueled equipment.</p> <p>If the analysis determines that construction emissions exceed the air quality significance thresholds, then CDFW will identify and implement appropriate mitigation. As a performance standard, the mitigation shall be sufficient to reduce construction emissions so that the Proposed Project's</p>	<p>CDFW</p>	<p>Prior to implementing a project component or taking actions that commit CDFW to implementing that component</p>	

SCARF Fisheries Management Mitigation Measure Title	Mitigation Measure Description	Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
	<p>emissions are below the applicable significance thresholds. Examples of appropriate mitigation may include, but not be limited to, SJVAPCD Regulation VIII, alternative fueled equipment, phasing of material hauling trips, use of chemical additives or after-market devices to reduce emissions on existing equipment, use of electrically powered equipment, reduction in total equipment hours, use of newer equipment models, adopting a vehicle idling policy requiring all vehicles to adhere to a 5 minute idling policy, and sourcing of material from local sources. Actual emissions efficiency for off-road equipment and motor vehicles will be at least as efficient as the most recent CARB fleet average for off-road equipment and motor vehicles for the current calendar year.</p> <p>In the event that the mitigation strategies (either those listed above or others developed to achieve the performance standard) are calculated to be insufficient to reduce construction emissions levels below significance thresholds, then CDFW will enter into a Voluntary Emission Reduction Agreement (VERA) with SJVAPCD. A VERA is a contractual agreement in which the project proponent agrees to mitigate project specific emissions by providing funds for the SJVAPCD's Emission Reduction Incentive Program (ERIP). The funds are disbursed by ERIP in the form of grants for projects that achieve emission reductions. Types of emission reduction projects that have been funded in the past include</p>			

SCARF Fisheries Management Mitigation Measure Title	Mitigation Measure Description	Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
	<p>electrification of stationary internal combustion engines (e.g., agricultural irrigation pumps), replacing old heavy-duty trucks with new, cleaner, more efficient heavy-duty trucks, and replacement of old farm tractors. The VERA will be used to offset the project's increase in emissions so that the Proposed Project would have no increase in construction emissions above the significance threshold.</p> <p>Similarly, if the air quality analysis indicates that the activities pose a significant health risk, then CDFW will identify mitigation measures, which, as a performance standard, will ensure health risks are at a less-than-significant level. Examples of appropriate mitigation may include, but not be limited to, use of alternative fueled equipment, use of aftermarket control devices such as diesel particulate filters, use of electrical equipment where possible, or reduction in number of hours of equipment use with a minimum reduction in diesel particulate matter of 85% compared to a Tier 2 engine or equivalent to 100 trucks per day based on CARB's Air Quality and Land Use Handbook.</p>			

SCARF Fisheries Management Mitigation Measure Title	Mitigation Measure Description	Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
<p>FISH-MANAGEMENT-1: Implement Conservation Measures prior to and during Construction Activities</p>	<p>CDFW shall implement appropriate Conservation Measures from Appendix I, CDFW's Conservation Measures for Biological Resources that May Be Affected by Program-level Actions, prior to and during the construction of fish segregation weirs and barriers. Pre-construction planning shall include a site assessment by a qualified fisheries biologist to determine the potential for special-status species to occur in the vicinity. If the biologist determines that special-status aquatic species may be present, CDFW shall implement the applicable Appendix I avoidance and minimization measures for each species that may be present.</p>	<p>CDFW and/or Contractor</p>	<p>Before and during construction</p>	
<p>FISH-MANAGEMENT-5a: Monitor Fish Communities in the Vicinity of Segregation Weirs and Traps</p>	<p>If actions described in Impact FISH-MANAGEMENT-5 are used in the Restoration Area, CDFW shall assess the species composition of fish communities within the 500-foot reach both upstream and downstream of each segregation weir or trap, during the time of year that the weir(s) or trap is in place. The monitoring activities shall focus on large bodied special-status fish species such as green sturgeon and steelhead. Monitoring techniques may include the use of visual surveys, rod and reel angling, set lines, fyke nets, DIDSON™, or seines.</p>	<p>CDFW</p>	<p>During operation</p>	

SCARF Fisheries Management Mitigation Measure Title	Mitigation Measure Description	Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
<p>FISH-MANAGEMENT-5b: Develop and Implement Measures that Allow Special-Status Large Bodied Fishes to Bypass Weirs and Traps</p>	<p>If as a result of <b>Mitigation Measure FISH-MANAGEMENT-5a</b> or through other means, CDFW identifies that, outside of the current seasonal operation of the HFB (September to mid-December), the migration of special-status large bodied fishes could be impeded by the operation of the weir(s) or trap and haul activities, then CDFW shall modify the operation of the weir or implement measures that allow fish to bypass the weir so that movement of large bodied special-status fish species such as green sturgeon and steelhead is not impeded. Such measures may include removal or relocation of the weir(s), or operating a trap(s) to allow for manual selection of fish passing across the barrier.</p>	<p>CDFW and/or Contractor</p>	<p>During operation</p>	

SCARF Fisheries Management Mitigation Measure Title	Mitigation Measure Description	Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
FISH-MANAGEMENT-8a: Check Traps Daily and Minimize Handling of Fish	To reduce stress on captured fish, all trapping devices will be checked at least once per day. Untargeted wildlife (e.g., snakes, turtles) caught in traps will be released into suitable habitat for the species. Traps will be checked more frequently during times when conditions are stressful (e.g., high temperatures, large amounts of debris during high flow events) to reduce the time that fish are subject to trap-related stress. Fish will be carefully handled and given sufficient time to recover (at least 30 minutes) prior to being released back into the river. If rotary screw traps are used, they will be operated in accordance with the USFWS "Draft Rotary Screw Trap Protocol for Estimating Production of Juvenile Chinook Salmon" (USFWS 2008) and/or similar protocols which are at least as protective and developed after conferring with USFWS and, if required, NMFS.	CDFW	During operation	
FISH-MANAGEMENT-8b: Adaptively Manage Trap Operations	If mortalities greater than 2 fish or 2% of total catch are observed in a given day due to high debris loads, traps will be removed or raised out of the water until conditions are suitable for survival of fish (i.e., reduced winds or streamflow, improved weather conditions). For rotary screw traps, if predation causes such mortality, a structural refuge will be installed inside the trap to reduce predation. This will consist of a perforated plastic box or similar refuge for small fish within the rotary screw trap to prevent predation by larger fish captured in the trap.	CDFW	During operation	

SCARF Fisheries Management Mitigation Measure Title	Mitigation Measure Description	Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
GEO-MANAGEMENT-1a: Stabilize Soils to Avoid Increasing Erosion on Streambanks	Project activities will be done in such a manner as to not increase erosion within the banks of the river during or immediately following rainfall events. All disturbed soils at project activity sites will be stabilized to reduce erosion potential, both during and following installation of equipment (e.g., weirs, fyke nets, traps, etc.). After removal of such equipment, soils shall be stabilized and recontoured, as necessary.	Contractor	During construction	
GEO-MANAGEMENT-1b: Use Energy Dissipaters to Minimize Turbidity at the Point of Discharge	Water deposited back into the river following Chinook salmon transport shall be done at a rate to minimize water turbidity and erosion. As necessary at each site, temporary energy dissipaters such as rip rap shall be placed at the point of discharge to moderate the return of water to the channel.	CDFW	During operation	
GHG-MANAGEMENT-1: Prepare Project-Level Quantitative Analysis of Construction-Related GHG Emissions, and Implement Measures to Reduce and/or Offset Emissions	<p>As future individual Proposed Project components are further defined to a level that construction emissions can be estimated, and prior to implementing that component or taking actions that commit CDFW to implementing that component, CDFW will prepare a complete, quantitative project-level GHG emissions analysis for that component.</p> <p>The GHG emissions analysis will be based on the types, locations, numbers, and operations of equipment to be used; the amount and distance of material to be transported; and worker trips required. The analysis will determine whether the combined emissions of the various</p>	CDFW and/or Contractor	Prior to implementing a project component or taking actions that commit CDFW to implementing that component	

SCARF Fisheries Management Mitigation Measure Title	Mitigation Measure Description	Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
	<p>quantified components' construction activities exceed the construction thresholds (230 metric tons CO<sub>2</sub>e/year amortized or district approved BPS).</p> <p>If the analysis determines that construction emissions will exceed the construction thresholds, CDFW will first implement all feasible, applicable GHG emission reduction measures and propose these as BPS for the project, up to a 29% reduction from a defined business-as-usual baseline or 1,100 metric tons CO<sub>2</sub>e per year. Potential GHG emission reduction measures to be considered include, but are not limited to the following:</p> <ul style="list-style-type: none"> <li>• Utilize alternative fueled vehicles such as electric or biodiesel for equipment and vehicles.</li> <li>• Utilize newer, more fuel efficient equipment and vehicles for construction.</li> <li>• Increase employee vanpool share (2% of vanpool mode share).</li> <li>• Utilize locally sourced material.</li> </ul> <p>In the event that the mitigation measures are insufficient to reduce construction emissions to be equal to or less than the significance thresholds, then CDFW shall purchase sufficient GHG emission credits to offset the Proposed Project's construction net increase in emissions above the thresholds. These may include</p>			

SCARF Fisheries Management Mitigation Measure Title	Mitigation Measure Description	Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
	GHG credits that have been banked under SJVAPCD Rule 2301 or other GHG credits that are considered acceptable by SJVAPCD.			
HAZ-MANAGEMENT-3: Prepare Project-Level Quantitative Analysis of Site-specific Current and Historical Hazardous Materials, Implement Recommendations in the Phase I Environmental Site Assessment, and Comply with all Applicable Regulations	CDFW will implement the following measures to assess and minimize potential hazards on sites selected for the construction or removal of fish segregation weirs. CDFW will have a qualified expert perform a Phase 1 Environmental Site Assessment and hazardous-site records search for the Proposed Project sites. This process will include the identification of potential hazards within the project sites and identification of nearby sensitive receptors. The assessment will determine whether hazards and hazardous materials are present and, if so, their potential impact on workers and nearby sensitive receptors. The analysis will also include recommendations to reduce potential risks from identified hazards and hazardous materials. CDFW will implement recommendations provided in the Phase 1 Environmental Site Assessment and comply with all applicable regulations. Compliance with these regulations will include preparation of a hazardous materials business plan, which would include a training program for employees and an emergency plan (Cal EMA 2012). CDFW will implement applicable provisions of the EPA, OSHA, Cal/OSHA, Cal/EPA, Cal EMA, and CUPA permitting processes, and any applicable county general plan policies. Should the site have unmitigatable hazardous	CDFW, DGS, and/or Contractor	Before construction	

SCARF Fisheries Management Mitigation Measure Title	Mitigation Measure Description	Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
	conditions, or mitigation is not feasible, CDFW shall choose an alternate site.			
LU-MANAGEMENT 1: Ensure Consistency of Land Use	As part of the design for removal or relocation of the two fish weirs, DGS, CDFW or the contractor shall investigate land uses at and adjacent to potential sites, along with relevant plans, policies and regulations. The weirs, fish traps and other equipment shall not be sited in locations that create land use incompatibilities.	CDFW and/or Contractor	During design	
NOISE-MANAGEMENT-1: Implement Noise Control Measures for Construction Activities	<p>Before engaging in noise-generating activity associated with the construction of weirs, structural modification of the Hill's Ferry Barrier, or other construction activity, CDFW will evaluate how close sensitive receptors are located to the construction site, and whether the construction activity would exceed applicable noise thresholds. This evaluation will utilize the same FTA-based general assessment methodology that was used to predict the noise that would be generated during SCARF construction. Should the noise levels be anticipated to exceed the threshold for any sensitive receptors, CDFW will implement specific noise control measures to mitigate impacts associated with construction. These measures may include but are not limited to the following:</p> <p>a. Best available noise control techniques (including factory-approved mufflers, intake silencers, ducts, engine enclosures, and acoustically attenuating</p>	CDFW and Contractor	Before and during construction	

SCARF Fisheries Management Mitigation Measure Title	Mitigation Measure Description	Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
	<p>shields or shrouds) will be used for all equipment and trucks to minimize construction noise impacts.</p> <p>b. If impact equipment (e.g., concrete/rock breaker, rock drill) is used during project construction, hydraulic- or electric-powered equipment will be used to avoid the noise associated with compressed-air exhaust from pneumatically powered tools. However, where use of pneumatically powered tools is unavoidable, an exhaust muffler on the compressed-air exhaust will be used (a muffler can lower noise levels from the exhaust by up to 10 dBA). External jackets on the tools themselves will be used, which could achieve a reduction of 5 dBA. Where considered practical, quieter procedure alternatives, such as drilling or vibratory methods, will be used instead of impact equipment.</p> <p>c. Stationary noise sources will be located away from sensitive receptors. If the sources must be located near sensitive receptors, adequate sound abatement (with enclosures and mufflers, where appropriate) will be used to ensure performance standards are met. Enclosure openings or vents will face away from sensitive receptors. If any stationary equipment (e.g., pumps, ventilation fans, generators) is operated beyond the ordinance time limits, this equipment will conform to the affected jurisdiction's noise limits.</p>			

SCARF Fisheries Management Mitigation Measure Title	Mitigation Measure Description	Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
	<p>In addition, CDFW will designate a project liaison to be responsible for responding to noise complaints during construction. The name and phone number of the liaison will be conspicuously posted at construction areas and on all advanced notifications. The liaison will take steps to resolve complaints, including the arrangement of periodic noise monitoring, if necessary. Results of noise monitoring will be presented at regular project meetings with the project contractor, and the liaison will coordinate with the contractor to modify any construction activities that generate excessive noise levels.</p>			

SCARF Fisheries Research and Monitoring Mitigation Measure Title	Mitigation Measure Description	Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
FISH-MONITORING-2a: Implement Standard Protocols for Active Sampling of Aquatic Species	When conducting active sampling, CDFW shall adhere to fish handling procedures prescribed in Guidelines for the Use of Fishes in Research (Nickum <i>et al.</i> 2004), or any more current protocols which are considered at least as protective.	CDFW	During operation	
FISH-MONITORING-2b: Use Passive Sampling Techniques in place of Active Sampling Techniques, When Appropriate	To reduce impacts associated with active instream monitoring activity such as electrofishing, seining, and use of jet or propeller motor boats by investigators, the use of passive capture equipment will be used in place of active sampling whenever appropriate and feasible. Passive sampling equipment includes entanglement gear such as gill nets and trammel nets, and entrapment gear such as Fyke nets and rotary screw traps.	CDFW	During operation	
FISH-MONITORING-2c: Use Observational Techniques in place of Traditional Capture Techniques, When Appropriate	Wherever possible and appropriate, observational techniques will be used in place of capture techniques to reduce the need to handle organisms.	CDFW	During operation	

SCARF Fisheries Research and Monitoring Mitigation Measure Title	Mitigation Measure Description	Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
FISH-MONITORING-2d: Check Rotary Screw Traps Daily	Rotary screw traps will be operated in accordance with the USFWS "Draft Rotary Screw Trap Protocol for Estimating Production of Juvenile Chinook Salmon" (USFWS 2008) and/or similar protocols which are at least as protective and developed after conferring with USFWS and, if required, NMFS. USFWS (2008) includes several measures, as follows. To reduce stress on captured fish, all trapping devices will be checked at least once per day when in the fishing position. Untargeted wildlife (e.g., snakes, turtles) caught in traps will be released into suitable habitat for the species. Traps will be checked more frequently during times when conditions are stressful (e.g., high temperatures, large amounts of debris during high flow events) to reduce the time that fish are subject to trap-related stress. Fish may need to be anesthetized, which would be done using methods acceptable to USFWS and NMFS before they are handled and given sufficient time to recover (at least 30 minutes) prior to being released back into the river.	CDFW	During operation	
FISH-MONITORING-2e: Adaptively Manage Trap Operations	If mortalities greater than two fish or 2% of total catch are observed in a given day due to high debris loads, traps will be raised out of the water until conditions are suitable for survival of fish (i.e., reduced winds or streamflow, improved weather conditions). If predation causes such mortality, a structural refuge will be installed inside the trap to reduce predation. This will consist of a perforated plastic box or similar refuge for small fish within the rotary screw trap to prevent predation by larger fish captured in the trap.	CDFW	During operation	

SCARF Recreation Mitigation Measure Title	Mitigation Measure Description	Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
<p>AQ-MANAGEMENT-1: Prepare Project-Level Quantitative Analysis of Construction Related Air Quality Emissions, and Implement Measures to Cap Emissions</p>	<p>As future individual project components are further defined to a level that construction emissions can be estimated, and prior to implementing that component or taking actions that commit CDFW to implementing that component, CDFW will prepare a complete, quantitative project-level air quality analysis for that component.</p> <p>The quantitative construction air quality analyses will be based on the types, locations, numbers, and operations of equipment to be used; the amount and distance of material to be transported; and worker trips required. In addition, the analysis will be based on the projected quantity and frequency of vehicle and/or truck trips, and other activities that generate emissions. The analysis will determine whether the combined emissions of the quantified components' construction activities exceed the SJVAPCD's construction air quality thresholds (see the SJVAPCD thresholds presented in Table 5-5 of the DEIR). In addition, the analysis will evaluate whether the combined emissions from all project components constitute a significant health risk from diesel fueled equipment.</p> <p>If the analysis determines that construction emissions exceed the air quality significance thresholds, then CDFW will identify and implement appropriate mitigation. As a performance standard, the mitigation shall be sufficient to reduce construction emissions so that the Proposed Project's emissions are below the</p>	<p>CDFW</p>	<p>Prior to implementing a project component or taking actions that commit CDFW to implementing that component</p>	

SCARF Recreation Mitigation Measure Title	Mitigation Measure Description	Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
	<p>applicable significance thresholds. Examples of appropriate mitigation may include, but not be limited to, SJVAPCD Regulation VIII, alternative fueled equipment, phasing of material hauling trips, use of chemical additives or after-market devices to reduce emissions on existing equipment, use of electrically powered equipment, reduction in total equipment hours, use of newer equipment models, adopting a vehicle idling policy requiring all vehicles to adhere to a 5 minute idling policy, and sourcing of material from local sources. Actual emissions efficiency for off-road equipment and motor vehicles will be at least as efficient as the most recent CARB fleet average for off-road equipment and motor vehicles for the current calendar year.</p> <p>In the event that the mitigation strategies (either those listed above or others developed to achieve the performance standard) are calculated to be insufficient to reduce construction emissions levels below significance thresholds, then CDFW will enter into a Voluntary Emission Reduction Agreement (VERA) with SJVAPCD. A VERA is a contractual agreement in which the project proponent agrees to mitigate project specific emissions by providing funds for the SJVAPCD's Emission Reduction Incentive Program (ERIP). The funds are disbursed by ERIP in the form of grants for projects that achieve emission reductions. Types of emission reduction projects that have been funded in the past include electrification of stationary internal combustion engines</p>			

SCARF Recreation Mitigation Measure Title	Mitigation Measure Description	Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
	<p>(e.g., agricultural irrigation pumps), replacing old heavy-duty trucks with new, cleaner, more efficient heavy-duty trucks, and replacement of old farm tractors. The VERA will be used to offset the project's increase in emissions so that the Proposed Project would have no increase in construction emissions above the significance threshold.</p> <p>Similarly, if the air quality analysis indicates that the activities pose a significant health risk, then CDFW will identify mitigation measures, which, as a performance standard, will ensure health risks are at a less-than-significant level. Examples of appropriate mitigation may include, but not be limited to, use of alternative fueled equipment, use of aftermarket control devices such as diesel particulate filters, use of electrical equipment where possible, or reduction in number of hours of equipment use with a minimum reduction in diesel particulate matter of 85% compared to a Tier 2 engine or equivalent to 100 trucks per day based on CARB's Air Quality and Land Use Handbook.</p>			

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<p>FISH-RECREATION-1: Implement Conservation Measures prior to and during Construction of Recreational Enhancements</p>	<p>CDFW shall implement appropriate conservation measures from Appendix I, CDFW's Conservation Measures for Biological Resources that May Be Affected by Program-level Actions, prior to and during the construction of recreational fishing enhancements. Pre-construction planning shall include a site assessment by a qualified fisheries wildlife biologist to determine the potential for special-status species to occur in the vicinity. If the biologists determine that special-status species may be present, CDFW shall implement the applicable Appendix I avoidance and minimization measures for each species that may be present.</p>	<p>CDFW and/or Contractor</p>	<p>Before and during construction</p>	
<p>BIO-RECREATION-2: Preserve and Protect Special-Status Plant Populations in the Vicinity of Recreational Enhancement Areas</p>	<p>Prior to developing recreational enhancements, CDFW will implement the <b>Mitigation Measure BIO-REINTRO-3</b>. If the qualified botanist identifies special-status plants species in the vicinity of the recreational enhancements, CDFW will implement measures to minimize potential impacts. Minimization measures may include constructing pathways, fencing, signage, and other strategies to reduce the potential for trampling or matting that will protect the viability of the local plant population and suitable habitat. If minimization measures are implemented, monitoring of plant populations will be conducted annually for 5 years to assess the mitigation's effectiveness. The performance standard for the mitigation will be no net reduction in the size or viability of the local population.</p>	<p>CDFW and/or Contractor (and DGS, depending on the selected measures)</p>	<p>During design, construction, and operation</p>	

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<p>GEO-RECREATION-1: Conduct a Geotechnical Investigation and Incorporate Report Recommendations into the Design and Construction of any Future Recreation Management Roads or Facilities</p>	<p>A geotechnical investigation must be conducted by a qualified geotechnical engineer (or team of geotechnical engineers) to evaluate subsurface soil and geologic conditions at future sites of recreation management roads and facilities. The investigation report should provide conclusions and recommendations relative to the geotechnical aspects of designing and constructing the recreation management roads and facilities, which are yet to be determined. Recommendations should address site and geologic conditions, including soil, groundwater, and corrosion. They should also address geologic hazards, such as regional active faults, ground shaking, liquefaction, and flooding. The report should provide seismic design criteria; excavation and cut-and-fill characteristics; criteria for foundations, retaining walls, and pavement; and any other design criteria appropriate for the Proposed Project such that the facilities remain stable.</p> <p>The proposed recreation management activities will incorporate all recommendations put forth by the Geotechnical Investigation Report into the design and construction of the Proposed Project.</p>	<p>CDFW and/or Contractor</p>	<p>During design, before construction</p>	
<p>GHG-MANAGEMENT-1: Prepare Project-Level Quantitative Analysis of Construction-Related GHG Emissions, and Implement Measures to Reduce and/or Offset Emissions</p>	<p>As future individual Proposed Project components are further defined to a level that construction emissions can be estimated, and prior to implementing that component or taking actions that commit CDFW to implementing that component, CDFW will prepare</p>	<p>CDFW and/or Contractor</p>	<p>Prior to implementing a project component or taking actions that commit CDFW to implementing that component</p>	

SCARF Recreation Mitigation Measure Title	Mitigation Measure Description	Implementing Party	Implementation Timing	Verification Sign-off (initials and date)
	<p>a complete, quantitative project-level GHG emissions analysis for that component.</p> <p>The GHG emissions analysis will be based on the types, locations, numbers, and operations of equipment to be used; the amount and distance of material to be transported; and worker trips required. The analysis will determine whether the combined emissions of the various quantified components' construction activities exceed the construction thresholds (230 metric tons CO<sub>2</sub>e/year amortized or district approved BPS).</p> <p>If the analysis determines that construction emissions will exceed the construction thresholds, CDFW will first implement all feasible, applicable GHG emission reduction measures and propose these as BPS for the project, up to a 29% reduction from a defined business-as-usual baseline or 1,100 metric tons CO<sub>2</sub>e per year. Potential GHG emission reduction measures to be considered include, but are not limited to the following:</p> <ul style="list-style-type: none"> <li>• Utilize alternative fueled vehicles such as electric or biodiesel for equipment and vehicles.</li> <li>• Utilize newer, more fuel efficient equipment and vehicles for construction.</li> <li>• Increase employee vanpool share (2% of vanpool mode share).</li> </ul>			

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	<ul style="list-style-type: none"> <li>Utilize locally sourced material.</li> </ul> <p>In the event that the mitigation measures are insufficient to reduce construction emissions to be equal to or less than the significance thresholds, then CDFW shall purchase sufficient GHG emission credits to offset the Proposed Project's construction net increase in emissions above the thresholds. These may include GHG credits that have been banked under SJVAPCD Rule 2301 or other GHG credits that are considered acceptable by SJVAPCD.</p>			
HAZ-RECREATION-3: Research and Consult Applicable Comprehensive Airport Land Use Plans before Construction Activities	<p>As stated in the California Code of Regulations, Title 14, Division 6, Chapter 3, Section 15154, CDFW shall ensure that the design and construction will comply with all applicable comprehensive airport land use plans within which boundaries the Project falls.</p> <p>If a comprehensive airport land use plan has not been adopted for a project within 2 nautical miles of a public airport or public-use airport, the Airport Land Use Planning Handbook published by the California Department of Transportation's Division of Aeronautics (Caltrans 2011) will serve as the guide for the design and construction of the Proposed Project with regard to potential airport-related safety hazards and noise problems.</p>	CDFW	During design	

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LU-RECREATION-2: Avoid Locations with Land Use Conflicts	As part of the selection of recreational enhancement sites, CDFW shall investigate land uses at and adjacent to potential sites, along with relevant plans, policies and regulations. CDFW will choose locations for enhancement of recreational fishing that would not conflict with existing or planned land uses and/or local land use policies.	CDFW and/or Contractor	During design	

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