

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

Prepared for:

California Department of Fish and Wildlife
1234 E. Shaw Avenue
Fresno, CA 93710
Contact: Gerald Hatler
559/243-4014

Prepared by:

Horizon Water and Environment
180 Grand Avenue, Suite 1405
Oakland, CA 94612
Contact: Michael Stevenson
510/986-1852

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Appendix B	Meeting Transcripts
Appendix C	Meeting Materials
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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

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 22nd, 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 7th, 2013 Notice of Availability of the DEIR or the October 31st, 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

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
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 3rd 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:

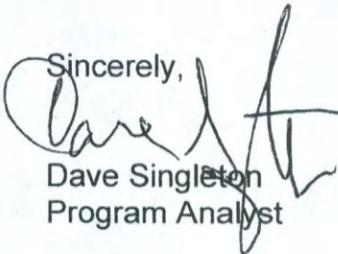
1 | Contact the appropriate Information Center for a record search to determine :If a part or all of the area of project effect (APE) has been previously surveyed for cultural places(s), The NAHC recommends that known traditional cultural resources recorded on or adjacent to the APE be listed in the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

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

Milestone Year	Milestone Name	Period	Minimum Threshold	5-year Running Average Target Adult Returns
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.

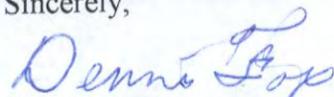
4 Once habitat has been provided, then is the time to do the hard structures. The hatcheries should be separated. No Admittance signs will not work with all people, when in need of something from the other hatchery, and fish are not that literate as to which hatchery they are to occupy.

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 10th 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.

• 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

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.



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

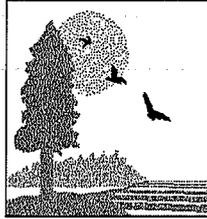
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Public Comment L: Letter from Ed Merlic (November 25, 2013)

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. 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

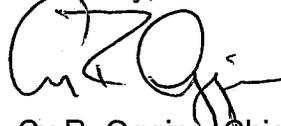
2. Submerged Resources: The DEIR mentions a number of future activities that involve in-water construction or demolition of structures. These activities are analyzed on a program level in the DEIR, since the exact sites of these activities are not currently known. The CSLC maintains a shipwrecks database 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. 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.

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

*Recvd
12/2/2013*

SCARF Draft EIR Comments
1234 E. Shaw Ave.
Fresno, CA 93710
REG4SCARFCEQA@wildlife.ca.gov

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.

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

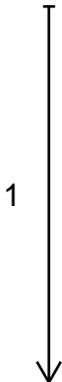
Re: Draft Environmental Impact Report for the San Joaquin River Restoration Program-Salmon Conservation and Research Facility (SCARF) and Related Management Actions Project

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





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



2239 5th Street Berkeley, CA 94710

(916) 214-9731

(510) 528-7880 (fax)

cferrari@tu.org

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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.¹

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

¹ 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 Assessment¹ 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:

¹ Available online: 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
4800 Enterprise Way
Modesto, CA 95356-8718
Tel: (209) 557-6400 FAX: (209) 557-6475

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

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

- ↑
- 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.

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)

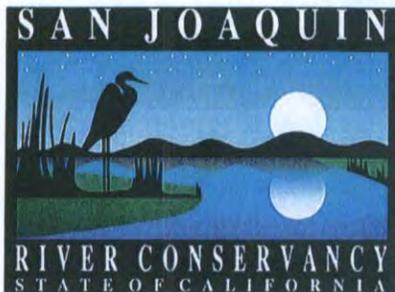
Response to Comment S-1

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



5469 E. Olive Avenue
Fresno, California 93727
Telephone (559) 253-7324
Fax (559) 456-3194
www.sjrc.ca.gov

GOVERNING BOARD

Manuel Nevarez, Chairman
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Department of Finance

Bryn Forhan
Paul Gibson
Carolyn Nolan
Citizen Representatives

Melinda S. Marks
Executive Officer

Edmund G. Brown, Jr.
Governor

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.

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
3

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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

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 projectour 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,

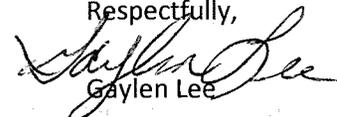
I am a traditional Nim (Mono) from the upper reaches of the San Joaquin River. My great grandfather's fished for Agai (Salmon) in Ewahu (SJR) until the Dams were constructed in the 1940's. The grandfathers lived close to the river at the Exact Center of California to spear salmon on summer to fall runs. 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 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	<p>11/15/2013: Mr. Bill asked the following questions:</p> <ol style="list-style-type: none"> 1. Does the San Joaquin River reach the Delta? 2. Which salmon will be relocated for the Proposed Project? 3. Will tribes still have ceremonial access to the salmon? 4. Will the salmon be able to adapt to living in new parts of the San Joaquin River? 	<ol style="list-style-type: none"> 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. 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. 3. Broodstock collection will not alter the rights the tribes currently have for accessing the salmon for ceremonial purposes. 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.
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"> 1. A paid tribal cultural monitor should be present when ground disturbance activities take place. 2. Is the Proposed Project feasible due to the modifications of the San Joaquin River? 3. After the salmon populations are restored, who will monitor fishing and other human activities that could harm the local environment? 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. 	<ol style="list-style-type: none"> 1. Thank you for your comment. CDFW will coordinate with tribes regarding any site monitors during ground disturbing activities. 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. 3. CDFW Wildlife Officers, and the law enforcement personnel of other agencies, will monitor such activities. 4. Thank you. CDFW has contacted a number of other tribes regarding the Proposed Project.

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 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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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 _x	ROG	CO	SO _x	PM ₁₀ (total)	PM _{2.5} (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_x = nitrogen oxides, PM_{2.5} = fine particulate matter 2.5 micrometers in diameter or smaller, PM₁₀ = inhalable particulate matter 10 micrometers in diameter or smaller, ROG = reactive organic gas, SJVAPCD = San Joaquin Valley Air Pollution Control District, SO_x = 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_x, PM₁₀, PM_{2.5}, CO, and SO_x 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_x, PM₁₀, PM_{2.5}, CO, and SO_x 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_x, PM₁₀, PM_{2.5}, CO, and SO_x 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_x, PM₁₀, PM_{2.5}, CO, and SO_x 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

Organization/Tribe	Name of Contact	Letter Date	Telephone Follow-up Date	Comments
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

Drug or Chemical	Purpose of Application	Expected Method of Application or Treatment
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.

Drug or Chemical	Purpose of Application	Expected Method of Application or Treatment
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.
<p>Notes:</p> <p>cfs = cubic feet per second g = gram IU/ml = international unites per milliliter mg/L = milligrams per liter mg/kg = milligrams per kilogram</p>		

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

Chemical	Treatment Dose ¹	Guidance Concentrations		Hatchery Discharge Concentrations
		Aquatic Toxicity	Drinking Water	
Acetic Acid	335-2,000 mg/L		97 µg/L ²	-
Chloramine-T	10 mg/L	86.3 mg/L ³ 187 mg/L ³	-	-
Copper sulfate	2240 µg/L Cu	77.9 µg/L⁴	1,000 µg/L⁵ 1,300 µg/L⁶	1-122 µg/L Cu (36 samples) ^a
Formalin (37% formaldehyde solution)	225-2,000 mg/L	11.3 mg/L ⁷	0.1 mg/L ⁸ 1.4 mg/L ⁹	<0.005 mg/L (1 sample) ^a ND (3 samples) ^a 1.4/0.55 (1 sample) ^a
Hydrogen peroxide	1100 mg/L	11.3 mg/L ¹⁰	--	0.3-37 mg/L (5 samples) ^a 2.6-3.6 mg/L (2 samples) ^a 0.2-0.8 mg/L (5 samples) ^a 0.0 mg/L (1 sample) ^a 3 mg/L (2 samples) ^a
MS-222/tricane methane sulfonate	550-250 mg/L	770 mg/L ¹⁰	--	0.01 – 0.29 mg/L (3 samples) ^a
Oxytetracycline HCL (Terramycin)	1100 mg/L	440.4 mg/L ¹⁰	--	-
Potassium permanganate	22-3.48 mg/L	0.038 mg/L ¹⁰ 0.20 mg/L ¹⁰ 0.25 mg/L ¹⁰	--	0.1-5.0 mg/L (6 samples) ^a 0.03-0.06 mg/L (25 samples) ^a 0.06-0.36 mg/L (7 samples) ^a 0.004-0.084 mg/L (7 samples) ^a
PVP iodine	1100 mg/L	00.86 mg/L ¹⁰	--	0.00 mg/L (8 samples) ^a ND (5 samples) ^a ND (4 samples) ^a

Chemical	Treatment Dose ¹	Guidance Concentrations		Hatchery Discharge Concentrations
		Aquatic Toxicity	Drinking Water	
<p>Notes:</p> <ul style="list-style-type: none"> - = No data available ND = Not Detected <p>¹ Refer to Table 12-2</p> <p>² Taste and odor thresholds (CVRWQCB 2010)</p> <p>³ 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>⁴ 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>⁵ California Department of Public Health secondary drinking water maximum contaminant level.</p> <p>⁶ California Toxics Rule human health criterion for consumption of water and organisms</p> <p>⁷ Maximum daily limit of 1.3 mg/L based on 96-hour No Observed Effect Level from USEPA (CVRWQCB 2010)</p> <p>⁸ California Department of Public Health Drinking Water Action Level</p> <p>⁹ EPA Integrated Risk Information System dose as a drinking water level</p> <p>¹⁰ 96-hour acute No Observed Effect Level from DFG Pesticide Unit C. <i>dubia</i> test (CVRWQCB 2010)</p> <p>^a 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 & Stokes 2010)</p>				

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
(559) 243-4014

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

California Department of General Services

707 Third Street, Suite 3-401
West Sacramento, CA 95605
(916) 376-1600

Jennifer Parson	Senior Environmental Planner
Michael Siemering	Project Director

Horizon Water and Environment, LLC

180 Grand Avenue, Suite 1405
Oakland, CA 94612
(510) 986-1850

Michael Stevenson	Principal-in-Charge, EIR Manager
Kevin Fisher	Senior Consultant
Jennifer Schulte, Ph.D.	Senior Consultant
Cori Lu	Senior Consultant
Patrick Donaldson	Analyst
Jacob Finkle	Analyst
Beth Duffey	Editor

URS Corporation

2870 Gateway Oaks Drive, Suite 150
Sacramento, CA 95833
(916) 679-2000

Janis Offermann	Senior Cultural Resource Specialist
-----------------	-------------------------------------

Remy Moose Manley, LLP

455 Capitol Mall, Suite 210
Sacramento, CA 95814
(916) 443-2745

Sabrina Teller, JD	Partner
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