CALENDAR ITEM
C91

A 5, 21, 23, 31 12/18/15
PRC 9173.9
S 12, 14, 16 R. Collins

RESCISSION OF APPROVAL OF A GENERAL LEASE – PUBLIC AGENCY USE; ADOPTION OF A MITIGATION MONITORING PROGRAM AND STATEMENT OF FINDINGS; ISSUANCE OF A GENERAL LEASE – PUBLIC AGENCY USE

APPLICANT:
California Department of Fish and Wildlife
San Joaquin River Restoration Program
1234 E. Shaw Avenue
Fresno, CA 93710

AREA, LAND TYPE, AND LOCATION:
Sovereign land at 51 locations in the San Joaquin River between Friant Dam and Hills Ferry, in Fresno, Madera, Merced, and Stanislaus Counties.

AUTHORIZED USE:
Temporary seasonal placement, use, and maintenance of fish trapping, holding, and monitoring equipment.

LEASE TERM:
10 years, beginning December 18, 2015.

CONSIDERATION:
The public benefit; with the State reserving the right at any time to set a monetary rent if the Commission finds such action to be in the State's best interests.

BACKGROUND INFORMATION:
The San Joaquin River Restoration Program (Program) is working to reintroduce Chinook salmon to the San Joaquin River. This multi-year study will evaluate juvenile salmon migration behavior and survival, spawning success and the feasibility of using fish trapping structures such as rotary screw traps (RSTs) and fyke nets to trap and transport juvenile salmon from December to July, trap and transport adult salmon from October to August, and enhance fish survival. The study will include the release of marked juveniles for mark-recapture survival calculations.

In order to capture juvenile salmon the Applicant will place the fish trapping structures in various locations in the San Joaquin River between Friant Dam and Hills Ferry. The RSTs in this study measure 10 to 12 feet by 22 feet by 4 feet and will be positioned within the river thalweg to catch the maximum amount of flow. Guidance panels may be used to direct more flow and fish into RSTs, may be up to 100 feet in length, and will be anchored by t-posts. RSTs will be anchored to large, permanent structures on the bank (e.g., large trees, boulders, or bridge pillars, etc.) or t-posts. Overhead cables will be high enough as to not impact boater traffic (10 feet high), and safety cables will be anchored to one side of the river bank, thereby allowing passage near the opposing shore. Fyke nets will be constructed of two nylon wing walls up to 300 feet in length funneling fish into a 6 foot by 6 foot collection box. Nets will be held in place with anchored t-posts.

All wing walls, wires, and cables anchoring the RSTs will be marked with brightly colored flagging and flashing lights to be easily seen. Signage and/or buoys will be placed both upstream and downstream of the structures to instruct boaters on how to safely avoid the fish collection structures. Wing walls will span only three-fourths of the river width to provide for safe boat passage.

Fish collection boxes will be checked for fish and weirs cleaned of debris daily. Any fish species other than fall-run Chinook salmon that may be incidentally trapped will be released immediately downstream of the collection structures. Captured fall-run Chinook salmon will be transported by truck to release sites downstream.

Translocated fish will also be held in temporary net pens to acclimate for a period of three to seven days. The net pen structure will consist of two repurposed rotary screw trap pontoons, a center walkway, and braces supporting mesh netting (10 feet wide by 10 feet long by 6 feet deep) that will contain the fish.

Fish monitoring equipment consisting of single channel receivers (receivers) will be placed in the San Joaquin River between Friant Dam and Hills Ferry. The receivers will be placed strategically in the river to identify coded transmitter tags embedded in the juvenile fish. The receivers will be moored using stainless steel cable anchored to the bank and weighted to the bottom using flat weights or cement blocks. Receivers will be suspended using a boat buoy to keep the receiver vertical in the water column. All work in the river will be done using hand tools.

OTHER PERTINENT INFORMATION:

1. Applicant has the right to use the upland adjoining the lease premises.

2. On December 17, 2014, the Commission authorized issuance of a General Lease – Public Agency Use to the California Department of Fish and Wildlife (CDFW) for the temporary placement, use, and maintenance of 10 parcels of land in the San Joaquin River for fish collection structures and 30 parcels of land for fish monitoring equipment. The Lease was never executed. Subsequent to authorizing the lease, CDFW notified Commission staff of the need to add 11 additional parcels of land, requested larger lease areas to provide CDFW field personnel the flexibility in the physical placement of improvements and the type of improvement (fish trapping, holding, or monitoring equipment), and requested clarification of certain lease terms. The CDFW is now applying for a new General Lease – Public Agency Use. Staff recommends rescinding the prior Commission authorization and authorizing issuance of a new lease.

3. Proposed lease provisions would allow CDFW field personnel to place either fish trapping, fish holding, or fish monitoring equipment at any of the 51 parcels of land designated in the lease. The lease parcels have also been expanded from a 100-foot radius to a 500-foot radius to allow CDFW field personnel flexibility in the physical placement of improvements.

4. The equipment used for trap and haul activities under the Project would be moved between the 51 parcels of land designated in the lease, and would follow the salmon as they migrate. Juvenile salmon would be captured from December through July and adult salmon would be captured from October through August. The sites would not all contain equipment simultaneously. The activities proposed on the sites were considered in the Project's Environmental Impact Report (EIR), which is discussed below. The EIR considered the activities initially proposed as well as an expansion of fish collection activities into other reaches of the San Joaquin River.

5. Rescission of the lease authorization is not a project as defined by the California Environmental Quality Act (CEQA) because it is an administrative action that will not result in direct or indirect physical changes in the environment.

   Authority: Public Resources Code section 21065 and California Code of Regulations, Title 14, section 15378, subdivision (b)(5).

6. **Authorization of New Lease:** An EIR, State Clearinghouse No. 2012111083, was prepared for this Project by the California Department of Fish and Wildlife and certified on June 4, 2014. The California State Lands Commission staff has reviewed such document and Mitigation Monitoring Program prepared pursuant to the provisions of the CEQA (Pub. Resources Code, § 21081.6) and adopted by the lead agency.

   Findings made in conformance with the State CEQA Guidelines (Cal. Code Regs., tit. 14, §§ 15091 and 15096, subd. (h)), are contained in Exhibit D, attached hereto.

7. This activity involves lands identified as possessing significant environmental values pursuant to Public Resources Code section 6370 et seq., but such activity will not affect those significant lands. Based upon the staff's consultation with the persons nominating such lands and through the CEQA review process, it is the staff's opinion that the project, as proposed, is consistent with its use classification.

EXHIBITS:

A. Land Description
B-1. Site and Location Map (Parcels 1-14)
B-2. Site and Location Map (Parcels 15-37)
B-3. Site and Location Map (Parcels 38-51)
C. Mitigation Monitoring Plan
D. Findings

RECOMMENDED ACTION:

It is recommended that the Commission:

CEQA FINDING:

Authorization of New Lease: Find that an EIR, State Clearinghouse No. 2012111083, was prepared for this Project by the California Department of Fish and Wildlife and certified on June 4, 2014 and that the Commission has reviewed and considered the information contained therein.

Adopt the Mitigation Monitoring Program, as contained in Exhibit C, attached hereto.

Adopt the Findings, made in conformance with California Code of Regulations, Title 14, sections 15091 and 15096, subdivision (h), as contained in Exhibit D, attached hereto.

Determine that the Project, as approved, will not have a significant effect on the environment.

SIGNIFICANT LANDS INVENTORY FINDING:

Find that this activity is consistent with the use classification designated by the Commission for the land pursuant to Public Resources Code section 6370 et seq.

AUTHORIZATION:

1. Rescind authorization to issue Lease No. PRC 9173.9, a General Lease – Public Agency Use, approved at the December 17, 2014 meeting.

2. Authorize issuance of a General Lease – Public Agency Use to the California Department of Fish and Wildlife beginning December 18, 2015, for a term of 10 years, for the temporary seasonal placement, use, and maintenance of fish trapping, holding, and monitoring equipment at 51 locations in the San Joaquin River as described in Exhibit A and as shown on Exhibit B (for reference purposes only), attached and by this reference made a part hereof; consideration to be the public benefit, with the State reserving the right at any time to set a monetary rent if the Commission finds such action to be in the State's best interests.

EXHIBIT A

PRC 9173.9

LAND DESCRIPTION

Fifty parcels of sovereign land situate in the bed of the San Joaquin River, Counties of Fresno, Madera, Merced and Stanislaus, State of California and more particularly described as follows:

PARCEL 1 (Hills Ferry Barrier Site)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 37.347417° North Latitude, 120.974989° West Longitude.

PARCEL 2 (Casey Property Site)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 37.344176° North Latitude, 120.976154° West Longitude.

PARCEL 3 (China Island Site)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 37.335432° North Latitude, 120.964331° West Longitude.

PARCEL 4 (Great Valley Grasslands)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 37.310630° North Latitude, 120.938013° West Longitude.

PARCEL 5 (SR 140 Bridge)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 37.310000° North Latitude, 120.930556° West Longitude.

PARCEL 6 (SR 165 Bridge)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 37.295364° North Latitude, 120.851181° West Longitude.

PARCEL 7 (Van Clief Road Site)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 37.281995° North Latitude, 120.833372° West Longitude.

PARCEL 8 (San Luis Wildlife Area)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 37.236111° North Latitude, 120.814722° West Longitude.

PARCEL 9 (Sack Dam Site)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 36.983855° North Latitude, 120.500187° West Longitude.

PARCEL 10 (Sack Dam Upstream)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 36.982203° North Latitude, 120.499776° West Longitude.

PARCEL 11 (Firebaugh)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 36.858333° North Latitude, 120.448889° West Longitude.

PARCEL 12 (Lower Mendota Pool)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 36.792842° North Latitude, 120.371911° West Longitude.

PARCEL 13 (Mowray Bridge RM 205.0)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 36° 46' 55.49" North Latitude, 120° 22' 08.90" West Longitude

PARCEL 14 (Upper Mendota Pool RM 205.5)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 36° 47' 09.24" North Latitude, 120° 21' 44.88" West Longitude.

PARCEL 15 (Downstream San Mateo Site)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 36.782101° North Latitude, 120.312864° West Longitude.

PARCEL 16 (DS CBS RM 216.0)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 36° 46' 23.73" North Latitude, 120° 17' 00.08" West Longitude.

PARCEL 17 (Bifurcation Structure Site)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 36.773250° North Latitude, 120.285349° West Longitude.

PARCEL 18 (US CBS RM 216.2)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 36° 46' 24.20" North Latitude, 120° 17' 07.28" West Longitude.

PARCEL 19 (Gravelly Ford Site)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 36.798355° North Latitude, 120.161264° West Longitude.

PARCEL 20 (Grangani RM 227.5)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 36° 47' 54.22" North Latitude, 120° 09' 39.93" West Longitude.

PARCEL 21 (DS Skaggs Bridge RM 232.7)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 36° 49' 31.59" North Latitude, 120° 04' 48.30" West Longitude.

PARCEL 22 (US Skaggs Bridge RM 234.8)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 36° 49' 02.04" North Latitude, 120° 02' 44.07" West Longitude.

PARCEL 23 (Sierra Runway RM 238.4)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 36° 49' 44.52" North Latitude, 119° 59' 33.45" West Longitude.

PARCEL 24 (HWY 99 DS RM 242.6)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 36° 50' 12.75" North Latitude, 119° 56' 08.72" West Longitude.

PARCEL 25 (Highway 99 Bridge Site)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 36.843765° North Latitude, 119.932331° West Longitude.

PARCEL 26 (HWY 99 US RM 243.5)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 36° 50' 48.12" North Latitude, 119° 55' 50.49" West Longitude.

PARCEL 27 (SantaFe RM 245.3)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 36° 50' 54.35" North Latitude, 119° 54' 27.74" West Longitude.

PARCEL 28 (Mosios RM 246.1)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 36° 51' 06.88" North Latitude, 119° 53' 24.36" West Longitude.

PARCEL 29 (Lower Milburn Unit)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 36.856704° North Latitude, 119.879482° West Longitude.

PARCEL 30 (Upper Millburn RM 247.3)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 36° 51' 17.57" North Latitude, 119° 52' 31.42" West Longitude.

PARCEL 31 (Lower Scout Island RM 250.8)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 36° 51' 27.96" North Latitude, 119° 50' 17.42" West Longitude.

PARCEL 32 (Upper Scout Island)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 36.855261° North Latitude, 119.837039° West Longitude.

PARCEL 33 (Sycamore Island Lower RM 252.5)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 36° 50' 59.13" North Latitude, 119° 49' 14.66" West Longitude.

PARCEL 34 (Sycamore Island Upper RM 254.1)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 36° 51' 59.32" North Latitude, 119° 48' 19.97" West Longitude.

PARCEL 35 (Wildwood Flow Split RM 255.2)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 36° 52' 38.68" North Latitude, 119° 47' 28.63" West Longitude.

PARCEL 36 (Woodward Park)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 36.876632° North Latitude, 119.787627° West Longitude.

PARCEL 37 (Sportsmen/Fort Washington RM 256)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 36° 52' 56.30" North Latitude, 119° 47' 05.51" West Longitude.

PARCEL 38 (Brown RM 257.5)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 36° 53' 58.33" North Latitude, 119° 47' 08.17" West Longitude.

PARCEL 39 (Vulcan Access Point)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 36.909747° North Latitude, 119.772481° West Longitude.

PARCEL 40 (Vulcan Lower RM 258.8)

A circular parcel of land having a one hundred (100) foot radius with a central point having a NAD 83 coordinate of 36° 54' 38.31" North Latitude, 119° 46' 07.68" West Longitude.

PARCEL 41 (Vulcan Upper RM 259.5)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 36° 54' 57.16" North Latitude, 119° 45' 30.42" West Longitude.

PARCEL 42 (Rank Island Split RM 260.2)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 36° 55' 23.15" North Latitude, 119° 45' 10.18" West Longitude.

PARCEL 43 (Willow ER RM 260.9)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 36° 55' 52.05" North Latitude, 119° 45' 04.87" West Longitude

PARCEL 44 (Upper Willow ER RM 261.6)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 36° 56' 19.20" North Latitude, 119° 44' 49.14" West Longitude.

PARCEL 45 (Ball Ranch Bridge RM 262.2)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 36° 56' 37.83" North Latitude, 119° 44' 18.53" West Longitude.

PARCEL 46 (Ledger Island RM 263.4)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 36° 57' 13.94" North Latitude, 119° 44' 34.28" West Longitude.

PARCEL 47 (Lower Lost Lake RM 264.8)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 36° 58' 19.34" North Latitude, 119° 44' 21.10" West Longitude.

PARCEL 48 (Lost Lake RM 265.5)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 36° 58' 47.67" North Latitude, 119° 43' 52.90" West Longitude.

PARCEL 49 (Across from Interim Facility RM 266.3)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 36° 59' 10.51" North Latitude, 119° 43' 15.61" West Longitude.

PARCEL 50 (Friant Dam RM 267.4)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 36° 59' 47.97" North Latitude, 119° 42' 29.68" West Longitude.

PARCEL 51 (Friant Dam Site)

A circular parcel of land having a five hundred (500) foot radius with a central point having a NAD 83 coordinate of 36.999000° North Latitude, 119.706740° West Longitude.

EXCEPTING THEREFROM any portion lying landward of the low water mark of the right and left banks of said river.

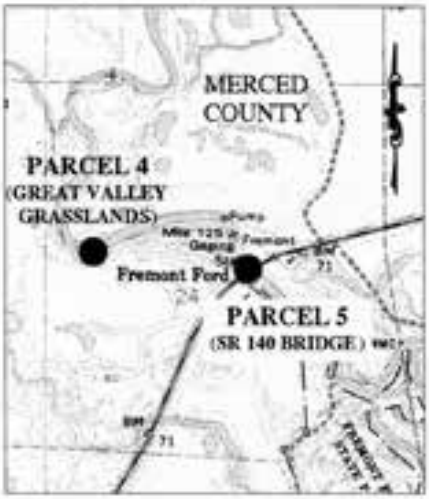
END OF DESCRIPTION

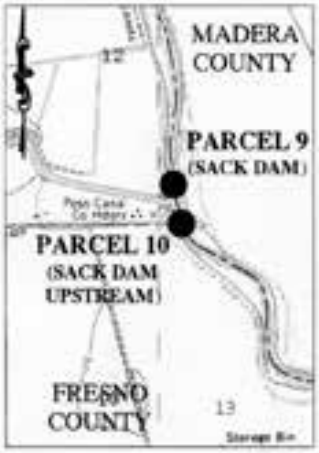
NAD 83 Geographic Coordinates provided by the CA Department of Fish and Wildlife.

Prepared 11/30/15 by the California State Lands Commission Boundary Unit

NO SCALE

SITE

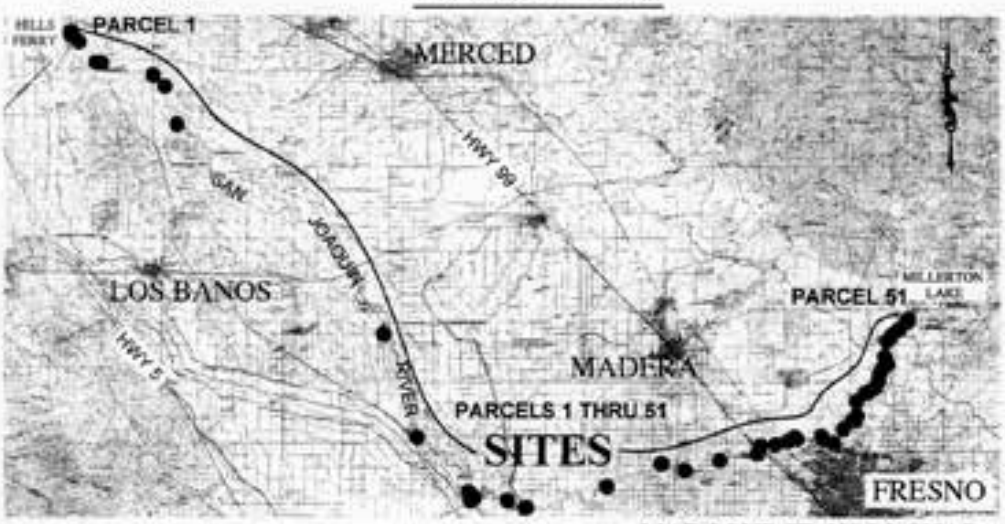




FISH TRAPPING, HOLDING & MONITORING EQUIPMENT, SAN JOAQUIN RIVER, CA

NO SCALE

LOCATION



MAP SOURCE: USGS QUAD

This Exhibit is solely for purposes of generally defining the lease premises, is based on unverified information provided by the Lessee or other parties and is not intended to be, nor shall it be construed as, a waiver or limitation of any State interest in the subject or any other property.

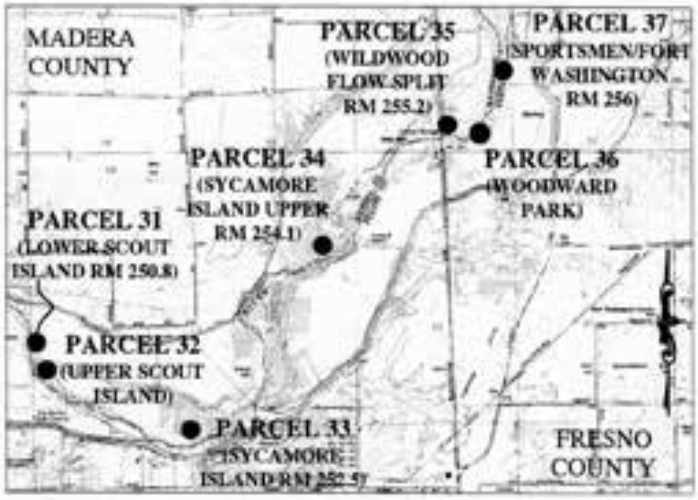
Exhibit B-1

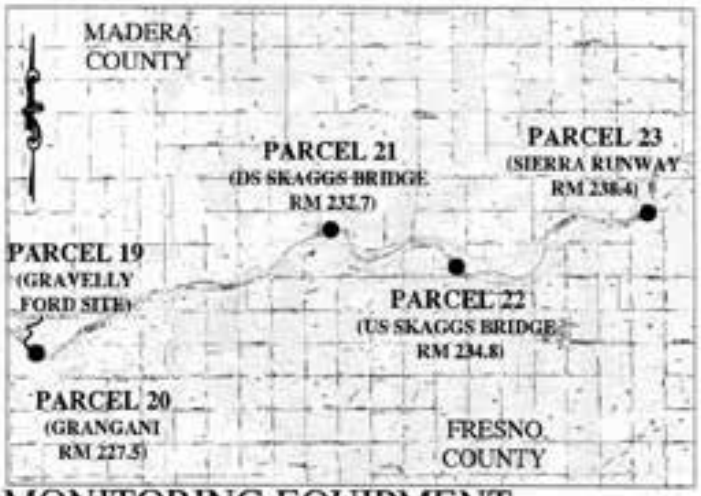
PRC 9173.9
CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
APNs-MULTIPLE
GENERAL LEASE - PUBLIC AGENCY USE
FRESNO, MADERA, MERCED & STANISLAUS COUNTIES

TS 11/30/15

NO SCALE

SITE

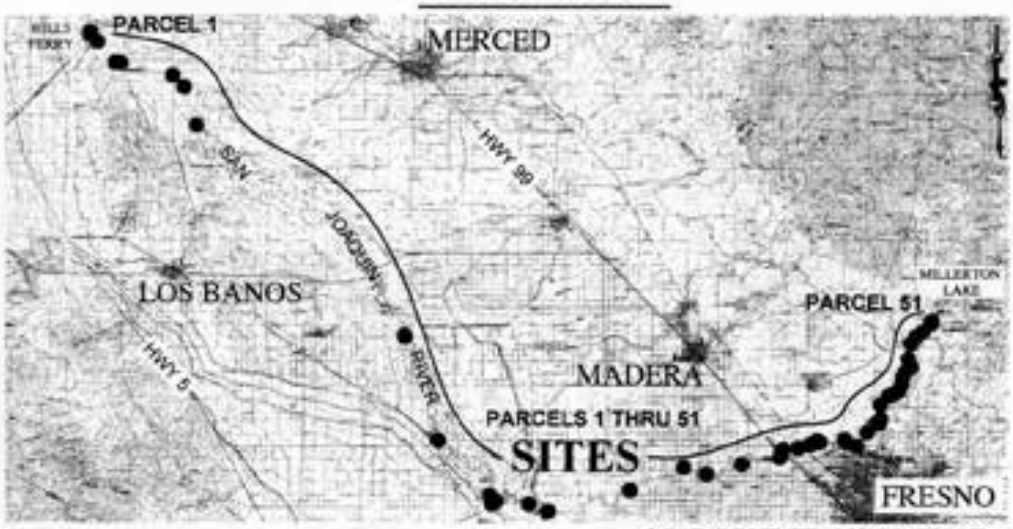




FISH TRAPPING, HOLDING & MONITORING EQUIPMENT,
SAN JOAQUIN RIVER, CA

NO SCALE

LOCATION



MAP SOURCE: USGS QUAD

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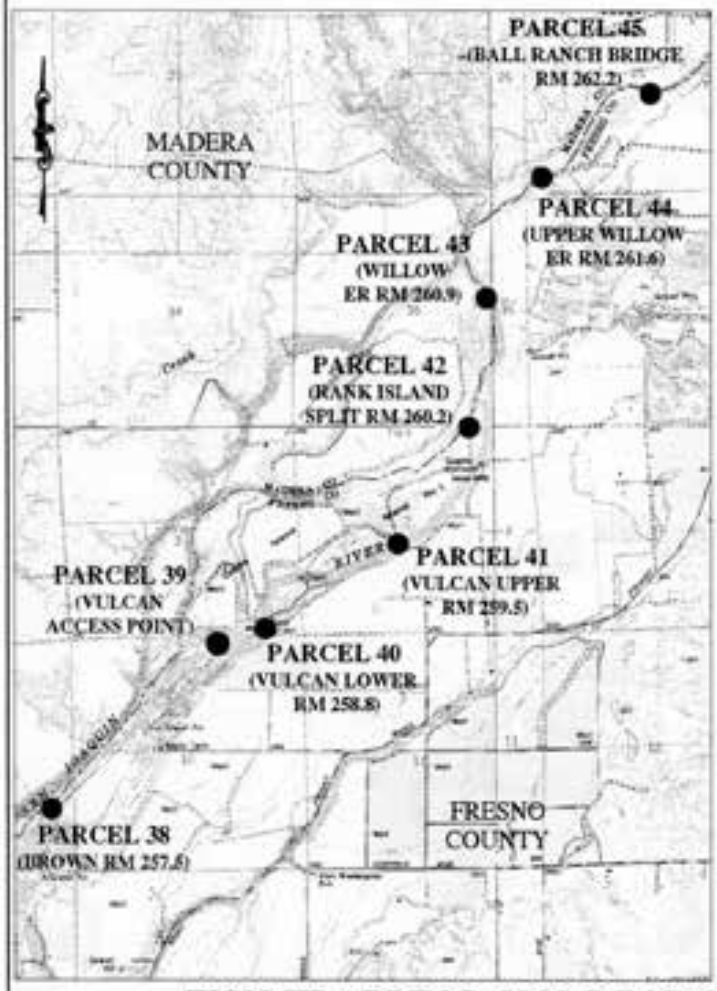
Exhibit B-2

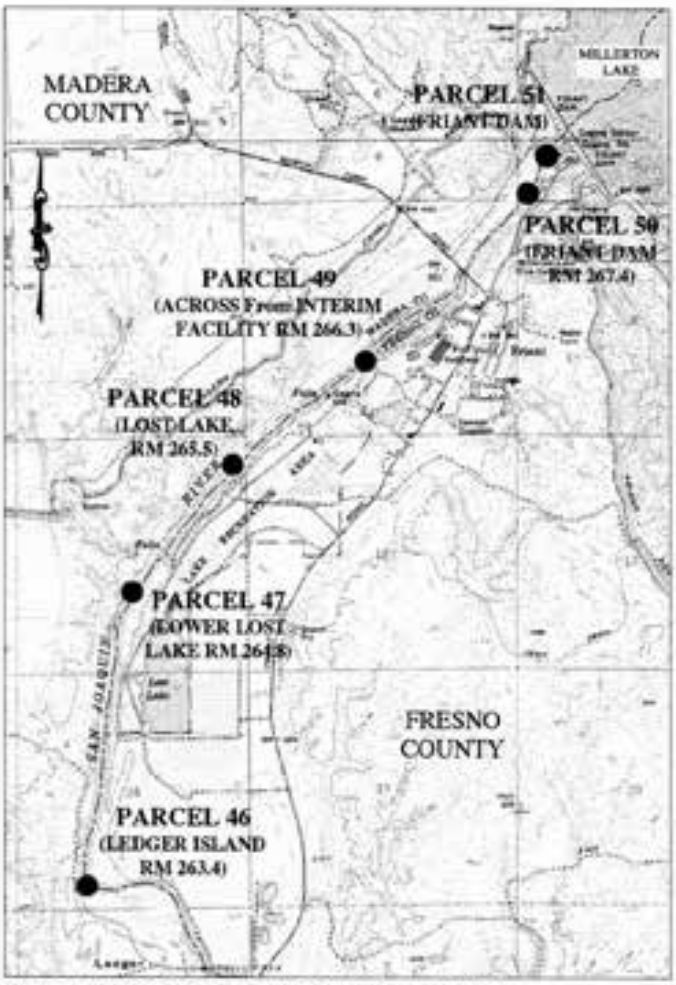
PRC 9173.9
CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
APNs-MULTIPLE
GENERAL LEASE - PUBLIC AGENCY USE
FRESNO, MADERA, MERCED & STANISLAUS COUNTIES

TS 11/30/15

NO SCALE

SITE

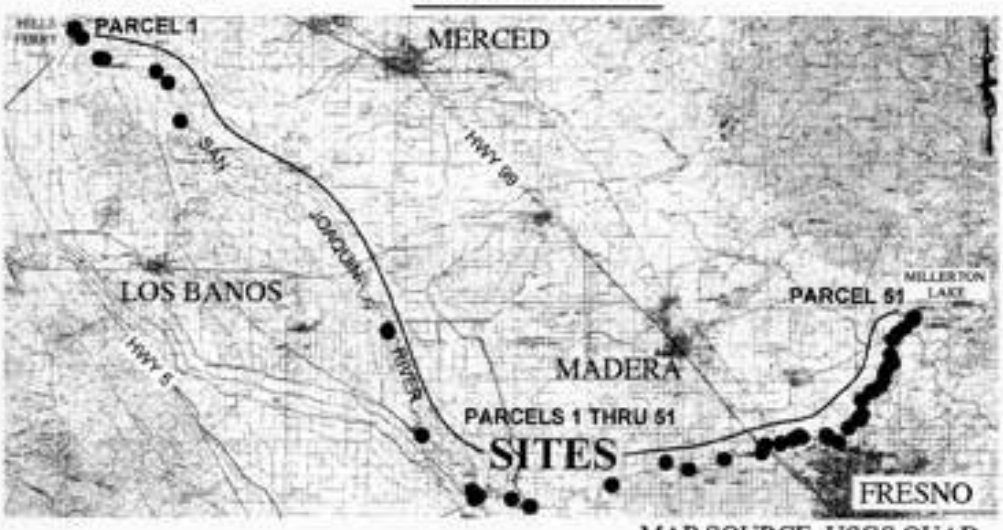




FISH TRAPPING, HOLDING & MONITORING EQUIPMENT, SAN JOAQUIN RIVER, CA

NO SCALE

LOCATION



MAP SOURCE: USGS QUAD

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Exhibit B-3

PRC 9173.9
CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
APNs-MULTIPLE
GENERAL LEASE - PUBLIC AGENCY USE
FRESNO, MADERA, MERCED & STANISLAUS COUNTIES

TS 11/30/15

EXHIBIT C
CALIFORNIA STATE LANDS COMMISSION
MITIGATION MONITORING PROGRAM

SAN JOAQUIN RIVER RESTORATION PROGRAM
(State Clearinghouse No. 2012111083)

The California State Lands Commission (Commission) is a responsible agency under California Environmental Quality Act (CEQA) for the San Joaquin River Restoration Program (Project). The CEQA lead agency for the Project is the California Department of Fish and Wildlife (CDFW). While the CSLC must consider the environmental impacts of the Project as set forth in the Environmental Impact Report (EIR) prepared for this Project by the CDFW, the CSLC's obligation to mitigate or avoid the direct or indirect environmental impacts of the Project is limited to those parts which it decides to carry out, finance, or approve (Pub. Resources Code, § 21002.1, subd. (d); State CEQA Guidelines, §§ 15041, subd. (b), 15096, subds. (f)-(g).) Accordingly, because the CSLC's exercise of discretion involves only issuing a General Lease – Public Agency Use for this Project, the CSLC is responsible for considering only the environmental impacts related to lands or resources subject to the CSLC's jurisdiction. With respect to all other impacts associated with implementation of the Project, the CSLC is bound by the legal presumption that the EIR fully complies with CEQA.

In conjunction with approval of this Project, the Commission adopts this Mitigation Monitoring Program (MMP) for the implementation of mitigation measures for the portion(s) of the Project located on Commission lands. The purpose of a MMP is to discuss feasible measures to avoid or substantially reduce the significant environmental impacts from a project identified in an Environmental Impact Report (EIR) or Mitigated Negative Declaration. State CEQA Guidelines section 15097, subdivision (a), states in part:[1]

> *In order to ensure that the mitigation measures and project revisions identified in the EIR or negative declaration are implemented, the public agency shall adopt a program for monitoring or reporting on the revisions which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental effects. A public agency may delegate reporting or monitoring responsibilities to another public agency or to a private entity which accepts the delegation; however, until mitigation measures have been completed the lead agency remains responsible for ensuring that implementation of the mitigation measures occurs in accordance with the program.*

The lead agency has adopted a MMP for the whole of the Project and remains responsible for ensuring that implementation of the mitigation measures occurs in accordance with its program. The Commission's action and authority as a responsible agency apply only to the mitigation measures listed in Table C-1 below.

[1] The State CEQA Guidelines are found at California Code of Regulations, Title 14, section 15000 et seq.

Table C-1. CSLC Mitigation Monitoring Program

Potential Impact	Mitigation Measure (MM)	Location	Monitoring / Reporting Action	Timing	Responsible Party	Effectiveness Criteria
Biological Resources Fisheries						
FISH-MANAGEMENT-2: Implementation of the Project could significantly affect aquatic species due to bank destabilization, erosion, and increased sedimentation during trap and haul activities.	**MM GEO-CONSTRUCT-1a. Implement Construction Best Management Practices to Minimize Erosion.** CDFW, DGS, or their contractor(s) shall implement the following measures: • Implement practices to maintain water quality, including silt fences, stabilized construction entrances, and storm-drain inlet protection. • Develop spill prevention and emergency response plans to handle potential fuel or other spills. • Where feasible, limit construction to dry periods. The performance standard for this mitigation measures is use of the best available technology that is economically achievable.	Restoration Area	Compliance Monitoring	During construction/ installation of rotary screw traps, fyke nets, and single channel receivers	Contractor	Erosion and sedimentation is avoided
	MM GEO-MANAGEMENT-1a: Stabilize Soils to Avoid Increasing Erosion on Streambanks. Project activities will be done in such a manner as to not increase erosion within the banks of the river during or immediately following rainfall events. All disturbed soils at project activity sites will be stabilized to reduce erosion potential, both during and following installation of equipment (e.g., fyke nets, traps, etc.). After removal of such equipment, soils shall be stabilized and recontoured, as necessary.	Restoration Area	Compliance Monitoring	During construction/ installation of rotary screw traps, fyke nets, and single channel receivers	Contractor	Erosion on streambanks is minimized
	MM GEO-MANAGEMENT-1b: Use Energy Dissipaters to Minimize Turbidity at the Point of Discharge. Water deposited back into the river following Chinook salmon transport shall be done at a rate to minimize water turbidity and	Salmon Release Sites	Compliance Monitoring	During Operation	CDFW	Turbidity at salmon release sites is minimized

Potential Impact	Mitigation Measure (MM)	Location	Monitoring / Reporting Action	Timing	Responsible Party	Effectiveness Criteria
	erosion. As necessary at each site, temporary energy dissipaters such as rip rap shall be placed at the point of discharge to moderate the return of water to the channel.					
FISH-MANAGEMENT-5. Implementation of the Project could interfere with the movements of large-bodied (non-target) fish, including federally listed species such as Central Valley Steelhead and Green Sturgeon, due to trap and haul activities.	**MM FISH-MANAGEMENT-5a: Monitor Fish Communities in the Vicinity of Traps.** If actions described in Impact FISH-MANAGEMENT-5 are used in the Restoration Area, CDFW shall assess the species composition of fish communities within the 500-foot reach both upstream and downstream of each trap, during the time of year that the trap is in place. The monitoring activities shall focus on large bodied special status fish species such as green sturgeon and steelhead. Monitoring techniques may include the use of visual surveys, rod and reel angling, set lines, fyke nets, DIDSON™, or seines.	Trapping Areas	Compliance Monitoring	During Operation	CDFW	Interference with the movement of large (non-target) fish is minimized
	MM FISH-MANAGEMENT-5b: Develop and Implement Measures to Allow Special-Status Large Bodied Fishes to Bypass Traps. If as a result of Mitigation Measure FISH MANAGEMENT-5a or through other means, CDFW identifies that the migration of special-status large bodied fishes could be impeded by trap and haul activities, then CDFW shall modify the operation of the trap so that movement of large bodied special-status fish species such as green sturgeon and steelhead is not impeded. Such measures may include operating a trap(s) to allow for manual selection of fish passing across the barrier.	Trapping Areas	Compliance Monitoring	During Operation	CDFW and/or Contractor	Interference with the movement of large (non-target) fish is avoided
FISH-MANAGEMENT-8. Implementation of the Project could significantly impact	**MM FISH-MANAGEMENT-5a: Monitor Fish Communities in the Vicinity of Traps.** Please see Impact FISH-MANAGEMENT-5 for the full text of this mitigation measure.	Trapping Areas	Compliance Monitoring	During Operation	CDFW	Interference with the movement of large (non-target) fish is

Potential Impact	Mitigation Measure (MM)	Location	Monitoring / Reporting Action	Timing	Responsible Party	Effectiveness Criteria
fish as a result of the deployment of fish trapping devices for trap and haul activities.						minimized
	MM FISH-MANAGEMENT-5b: Develop and Implement Measures to Allow Special-Status Large Bodied Fishes to Bypass Traps. Please see Impact FISH-MANAGEMENT-5 for the full text of this mitigation measure.	Trapping Areas	Compliance Monitoring	During Operation	CDFW and/or Contractor	Interference with the movement of large (non-target) fish is avoided
	MM FISH-MANAGEMENT-8a: Check Traps Daily and Minimize Handling of Fish. To reduce stress on captured fish, all trapping devices will be checked at least once per day. Untargeted wildlife (e.g., snakes, turtles) caught in traps will be released into suitable habitat for the species. Traps will be checked more frequently during times when conditions are stressful (e.g., high temperatures, large amounts of debris during high flow events) to reduce the time that fish are subject to trap related stress. Fish will be carefully handled and given sufficient time to recover (at least 30 minutes) prior to being released back into the river. If rotary screw traps are used, they will be operated in accordance with the USFWS "Draft Rotary Screw Trap Protocol for Estimating Production of Juvenile Chinook Salmon" (USFWS 2008) and/or similar protocols which are at least as protective and developed after conferring with USFWS and, if required, NMFS.	Trapping Areas	Compliance Monitoring	During Operation	CDFW	Impacts to fish and untargeted species from trap operations is minimized
	MM FISH-MANAGEMENT-8b: Adaptively Manage Trap Operations. If mortalities greater than 2 fish or 2% of total catch are observed in a given day due to high debris loads, traps will be removed or raised out of the water until conditions are suitable for survival of fish (i.e., reduced winds or streamflow, improved weather conditions). For rotary screw traps, if predation causes such mortality, a structural refuge will be	Trapping Areas	Compliance Monitoring	During Operation	CDFW	Impacts to fish and untargeted species from trap operations is minimized

Potential Impact	Mitigation Measure (MM)	Location	Monitoring / Reporting Action	Timing	Responsible Party	Effectiveness Criteria
	installed inside the trap to reduce predation. This will consist of a perforated plastic box or similar refuge for small fish within the rotary screw trap to prevent predation by larger fish captured in the trap.					
FISH-MONITORING-2. Implementation of the Project could result in incidental mortalities as a result of field research and monitoring activities.	**MM FISH-MONITORING-2a: Implement Standard Protocols for Active Sampling of Aquatic Species.** When conducting active sampling, CDFW shall adhere to fish handling procedures prescribed in Guidelines for the Use of Fishes in Research (Nickum et al. 2004), or any more current protocols which are considered at least as protective.	Restoration Area	Compliance Monitoring	During Operation	CDFW	Incidental mortalities are avoided
	MM FISH-MONITORING-2b: Use Passive Sampling Techniques in place of Active Sampling Techniques, When Appropriate. To reduce impacts associated with active instream monitoring activity such as electrofishing, seining, and use of jet or propeller motor boats by investigators, the use of passive capture equipment will be used in place of active sampling whenever appropriate and feasible. Passive sampling equipment includes entanglement gear such as gill nets and trammel nets, and entrapment gear such as Fyke nets and rotary screw traps.	Restoration Area	Compliance Monitoring	During Operation	CDFW	Incidental mortalities are avoided
	MM FISH-MONITORING-2c: Use Observational Techniques in place of Traditional Capture Techniques, When Appropriate. Wherever possible and appropriate, observational techniques will be used in place of capture techniques to reduce the need to handle organisms.	Restoration Area	Compliance Monitoring	During Operation	CDFW	Incidental mortalities are avoided
	MM FISH-MONITORING-2d: Check Rotary Screw Traps Daily. Rotary screw traps will be operated in accordance with the USFWS "Draft Rotary Screw Trap Protocol for Estimating	Trapping Areas	Compliance Monitoring	During Operation	CDFW	Incidental mortalities are avoided

Potential Impact	Mitigation Measure (MM)	Location	Monitoring / Reporting Action	Timing	Responsible Party	Effectiveness Criteria
	Production of Juvenile Chinook Salmon" (USFWS 2008) and/or similar protocols which are at least as protective and developed after conferring with USFWS and, if required, NMFS. USFWS (2008) includes several measures, as follows. To reduce stress on captured fish, all trapping devices will be checked at least once per day when in the fishing position. Untargeted wildlife (e.g., snakes, turtles) caught in traps will be released into suitable habitat for the species. Traps will be checked more frequently during times when conditions are stressful (e.g., high temperatures, large amounts of debris during high flow events) to reduce the time that fish are subject to trap-related stress. Fish may need to be anesthetized, which would be done using methods acceptable to USFWS and NMFS before they are handled and given sufficient time to recover (at least 30 minutes) prior to being released back into the river.					
	MM FISH-MONITORING-2e: Adaptively Manage Trap Operations. If mortalities are greater than two fish or 2% of total catch are observed in a given day due to high debris loads, traps will be raised out of the water until conditions are suitable for survival of fish (i.e., reduced winds or streamflow, improved weather conditions). If predation causes such mortality, a structural refuge will be installed inside the trap to reduce predation. This will consist of a perforated plastic box or similar refuge for small fish within the rotary screw trap to prevent predation by larger fish captured in the trap.	Trapping Areas	Compliance Monitoring	During Operation	CDFW	Incidental mortalities are avoided
Biological Resources Vegetation and Wildlife						
BIO-MONITORING-2. Implementation of	**MM FISH-MANAGEMENT-8a: Check Traps Daily and Minimize Handling of Fish.** Please see Impact FISH-MANAGEMENT-8 for the full	Trapping Areas	Compliance Monitoring	During Operation	CDFW	Impacts to fish and untargeted species from

Potential Impact	Mitigation Measure (MM)	Location	Monitoring / Reporting Action	Timing	Responsible Party	Effectiveness Criteria
the Project could result in significant impacts to special-status wildlife species during research and monitoring activities.	text of this mitigation measure.					trap operations is minimized
	MM FISH-MONITORING-2d: Check Rotary Screw Traps Daily. Please see Impact FISH-MONITORING-2 for the full text of this mitigation measure.	Trapping Areas	Compliance Monitoring	During Operation	CDFW	Incidental mortalities are avoided
BIO-MONITORING-4. Implementation of the Project could result in significant impact to wildlife movement and nursery sites during research and monitoring activities.	**MM FISH-MANAGEMENT-8a: Check Traps Daily and Minimize Handling of Fish.** Please see Impact FISH-MANAGEMENT-8 for the full text of this mitigation measure.	Trapping Areas	Compliance Monitoring	During Operation	CDFW	Impacts to fish and untargeted species from trap operations is minimized
	MM FISH-MONITORING-2d: Check Rotary Screw Traps Daily. Please see Impact FISH-MONITORING-2 for the full text of this mitigation measure.	Trapping Areas	Compliance Monitoring	During Operation	CDFW	Incidental mortalities are avoided
Geology, Soils, and Seismicity						
GEO-MANAGEMENT-1. Implementation of the Project at the location could result in erosion due to disturbance of the streambank or stream channel from the installation, operation, or removal of research and monitoring equipment.	**MM GEO-MANAGEMENT-1a: Stabilize Soils to Avoid Increasing Erosion on Streambanks.** Please see Impact FISH-MANAGEMENT-2 for the full text of this mitigation measure.	Restoration Area	Compliance Monitoring	During construction/ installation of rotary screw traps, fyke nets, and single channel receivers	Contractor	Erosion on streambanks is minimized
	MM GEO-MANAGEMENT-1b: Use Energy Dissipaters to Minimize Turbidity at the Point of Discharge. Please see Impact FISH-MANAGEMENT-2 for the full text of this mitigation measure.	Salmon Release Sites	Compliance Monitoring	During Operation	CDFW	Turbidity at salmon release sites is minimized
GEO-	**MM GEO-MANAGEMENT-1a: Stabilize Soils**	Restoration	Compliance	During	Contractor	Erosion on

Potential Impact	Mitigation Measure (MM)	Location	Monitoring / Reporting Action	Timing	Responsible Party	Effectiveness Criteria
MONITORING-1. Implementation of the Project at the location could result in erosion due to disturbance of the streambank or stream channel from trap and haul activities.	**to Avoid Increasing Erosion on Streambanks.** Please see Impact FISH-MANAGEMENT-2 for the full text of this mitigation measure.	Area	Monitoring	construction/ installation of rotary screw traps, fyke nets, and single channel receivers		streambanks is minimized
	MM GEO-MANAGEMENT-1b: Use Energy Dissipaters to Minimize Turbidity at the Point of Discharge. Please see Impact FISH-MANAGEMENT-2 for the full text of this mitigation measure.	Salmon Release Sites	Compliance Monitoring	During Operation	CDFW	Turbidity at salmon release sites is minimized
Hydrology, Geomorphology, and Water Quality						
HYD-MONITORING-1. Implementation of the Project could affect water turbidity from the installation of fish monitoring equipment and from fish monitoring activities.	**MM FISH-MONITORING-2b: Use Passive Sampling Techniques in place of Active Sampling Techniques, When Appropriate.** Please see Impact FISH-MONITORING-2 for the full text of this mitigation measure.	Restoration Area	Compliance Monitoring	During Operation	CDFW	Incidental mortalities are avoided
	MM FISH-MONITORING-2c: Use Observational Techniques in place of Traditional Capture Techniques, When Appropriate. Please see Impact FISH-MONITORING-2 for the full text of this mitigation measure.	Restoration Area	Compliance Monitoring	During Operation	CDFW	Incidental mortalities are avoided

References

Nickum, J.G., H.L. Bart, P.R. Bowser, I.E. Greer, C. Hubbs, J.A. Jenkins, J.R. MacMillan, J.W. Rachlin, J.D. Rose, P.W. Sorensen, and J.R. Tomasso. 2004. Guidelines for the Use of Fishes in Research. American Fisheries Society. Available: http://fisheries.org/docs/policy_useoffishes.pdf. Accessed: April 10, 2013.

U.S. Fish and Wildlife Service (USFWS). 2008. Draft Rotary Screw Trap Protocol for Estimating Production of Juvenile Chinook Salmon. Available: http://www.fws.gov/sacramento/es/Survey-Protocols-Guidelines/Documents/2008_ draft_ CAMP_Rotary_Screw_Trap_Protocol.pdf. Accessed: April 10, 2013.

EXHIBIT D – SAN JOAQUIN RIVER RESTORATION PROGRAM

CALIFORNIA STATE LANDS COMMISSION
STATEMENT OF FINDINGS

1.0 INTRODUCTION

The California State Lands Commission (CSLC), acting as a responsible agency under the California Environmental Quality Act (CEQA), makes these findings to comply with CEQA as part of its discretionary approval to authorize issuance of a general lease – public agency use, to the California Department of Fish and Wildlife (CDFW), for use of sovereign lands associated with the proposed fish monitoring and management activities as part of the San Joaquin River Restoration Program (Project). (See generally Pub. Resources Code, § 21069; State CEQA Guidelines, § 15381.)[1] 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.

The CSLC is a responsible agency under CEQA for the Project because the CSLC must approve a lease for the Project to go forward and because the CDFW, as the CEQA lead agency, has the principal responsibility for approving the Project and has completed its environmental review under CEQA. The CDFW analyzed the environmental impacts associated with the Project in a Final Environmental Impact Report (EIR) (State Clearinghouse [SCH] No. 2012111083) and, in June 2014, certified the EIR and adopted a Mitigation Monitoring and Reporting Program (MMRP) and Findings.

Although the San Joaquin River Restoration Program includes a number of projects that may occur within the CSLC's jurisdiction, the only aspects of the San Joaquin River Restoration Program under consideration by the CSLC at this time are salmon migration studies and trap and haul activities. The Project involves placing rotary screw traps and fyke nets in the San Joaquin River. The use of rotary screw traps and fyke nets is to assess juvenile Chinook salmon migration and facilitate trap and haul activities. In addition, single-channel receivers capable of identifying coded transmitter tags will be strategically placed in the San Joaquin River to monitor adult Chinook salmon migration. These activities were analyzed at a project level in the CDFW's EIR for the San Joaquin River Restoration Program.

The CDFW determined that the Project could have significant environmental effects on the following environmental resources:

- Aesthetics;

[1] CEQA is codified in Public Resources Code section 21000 et seq. The State CEQA Guidelines are found in California Code of Regulations, Title 14, section 15000 et seq.

- Air Quality;
- Biological Resources – Fisheries;
- Biological Resources – Vegetation and Wildlife;
- Cultural Resources;
- Geology, Soils and Seismicity;
- Greenhouse Gas Emissions;
- Hazards and Hazardous Materials;
- Hydrology, Geomorphology, and Water Quality;
- Land Use and Planning;
- Noise;
- Recreation; and
- Traffic and Transportation.

Of those 13 resources areas, Project components under consideration by the CSLC (i.e., placement and operation of rotary screw traps, fyke nets, and receivers) could have significant environmental effects on 5 of the above resource areas:

- Biological Resources – Fisheries;
- Biological Resources – Vegetation and Wildlife;
- Geology, Soils, and Seismicity;
- Hydrology, Geomorphology, and Water Quality; and
- Land Use and Planning.

In certifying the Final EIR and approving the Project, the CDFW imposed various mitigation measures for Project-related significant effects on the environment as conditions of Project approval and concluded that Project-related impacts would be substantially lessened with implementation of these mitigation measures such that the impacts would be less than significant for most resource areas.

However, even with the integration of all feasible mitigation, the CDFW concluded in the EIR that some of the identified impacts would remain significant. As a result, the CDFW adopted a Statement of Overriding Considerations to support its approval of the Project despite the significant and unavoidable impacts (Attachment D-1). The CDFW determined that, after mitigation, the Project may still have significant impacts on Biological Resources – Fisheries and Greenhouse Gas Emissions because of impacts of wild broodstock collection of Chinook salmon, the spread of aquatic invasive species through recreational fishing enhancements, and greenhouse gas emissions from construction activities. These significant impacts, however, are not caused by the Project components under consideration by the CSLC, and a Statement of Overriding Considerations is not required by the CSLC for this approval.

As a responsible agency, the CSLC complies with CEQA by considering the EIR and reaching its own conclusions on whether, how, and with what conditions to approve a project. In doing so, the CSLC may require changes in a project to lessen or avoid the effects, either direct or indirect, of that part of the project which the CSLC will be called on to carry out or approve. In order to ensure the identified mitigation measures and/or

project revisions are implemented, the CSLC adopts the Mitigation Monitoring Program (MMP) as set forth in Exhibit C as part of its Project approval.

2.0 FINDINGS

The CSLC's role as a responsible agency affects the scope of, but not the obligation to adopt, findings required by CEQA. Findings are required under CEQA by each "public agency" that approves a project for which an EIR has been certified that identifies one or more significant impacts on the environment (Pub. Resources Code, § 21081, subd. (a); State CEQA Guidelines, § 15091, subd. (a).) Because the EIR certified by the CDFW for the Project identifies potentially significant impacts that fall within the scope of the CSLC's approval, the CSLC makes the Findings set forth below as a responsible agency under CEQA. (State CEQA Guidelines, § 15096, subd. (h); *Resource Defense Fund* v. *Local Agency Formation Comm. of Santa Cruz County* (1987) 191 Cal.App.3d 886, 896-898.)

While the CSLC must consider the environmental impacts of the Project as set forth in the EIR, the CSLC's obligation to mitigate or avoid the direct or indirect environmental impacts of the Project is limited to those parts which it decides to carry out, finance, or approve (Pub. Resources Code, § 21002.1, subd. (d); State CEQA Guidelines, §§ 15041, subd. (b), 15096, subds. (f)-(g).) Accordingly, because the CSLC's exercise of discretion involves only issuing a General Lease – Public Agency Use for this Project, the CSLC is responsible for considering only the environmental impacts related to lands or resources subject to the CSLC's jurisdiction. With respect to all other impacts associated with implementation of the Project, the CSLC is bound by the legal presumption that the EIR fully complies with CEQA.

The CSLC has reviewed and considered the information contained in the Project EIR. All significant adverse impacts of the Project identified in the EIR relating to the CSLC's approval of a General Lease – Public Agency Use, which would allow the placement and operation of rotary screw traps, fyke nets and single channel receivers, are included herein and organized according to the resource affected. These Findings, which reflect the independent judgment of the CSLC, are intended to comply with CEQA's mandate that no public agency shall approve or carry out a project for which an EIR has been certified that identifies one or more significant environmental effects unless the agency makes written findings for each of those significant effects. Possible findings on each significant effect are:

(1) Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

(2) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the CSLC. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

(3) Specific economic, legal, social, technological or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the Final EIR.[2]

A discussion of supporting facts follows each Finding.

- Whenever Finding (1) occurs, the mitigation measures that lessen the significant environmental impact are identified in the facts supporting the Finding.
- Whenever Finding (2) occurs, the agencies with jurisdiction are specified. These agencies, within their respective spheres of influence, have the responsibility to adopt, implement, and enforce the mitigation discussed.

These Findings are based on the information contained in the EIR and information submitted by the Applicant, all of which is contained in the administrative record. The mitigation measures are briefly described in these Findings; more detail on the mitigation measures is included in the Final EIR.

The CSLC is the custodian of the record of proceedings upon which its decision is based. The location of the CSLC's record of proceedings is in the Sacramento office of the CSLC, 100 Howe Avenue, Suite 100-South, Sacramento, CA 95825.

A. SUMMARY OF FINDINGS

Based on public scoping, the Project will have No Impact on the following environmental issue areas:

- Agricultural Resources
- Mineral Resources
- Population and Housing
- Public Services

The EIR subsequently identified the following impacts as Less Than Significant:

- Utilities and Service Systems

For the remaining potentially significant effects, the Findings are organized by significant impacts within the EIR issue areas as presented below.

B. IMPACTS REDUCED TO LESS THAN SIGNIFICANT LEVELS WITH MITIGATION

The impacts identified below were determined in the Final EIR to be potentially significant absent mitigation; after application of mitigation, however, the impacts were determined to be less than significant.

[2] See Public Resources Code section 21081, subdivision (a) and State CEQA Guidelines section 15091, subdivision (a).

1. Biological Resources – Fisheries	FISH-MANAGEMENT-2, FISH-MANAGEMENT-5, FISH-MANAGEMENT-8, FISH-MONITORING-2
2. Biological Resources – Vegetation and Wildlife	BIO-MONITORING-2, BIO-MONITORING-4
3. Geology, Soils, and Seismicity	GEO-MANAGEMENT-1, GEO-MONITORING-1
4. Hydrology, Geomorphology and Water Quality	HYD-MONITORING-1
5. Land Use and Planning	LU-MANAGEMENT-1

1. BIOLOGICAL RESOURCES – FISHERIES

CEQA FINDING NO. FISH-MANAGEMENT-2

Impact: **FISH-MANAGEMENT-2.** Implementation of the Project could significantly affect aquatic species due to bank destabilization, erosion, and increased sedimentation during trap and haul activities.

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project have the potential to result in bank and bed erosion and resultant sedimentation. Erosion and sedimentation could significantly impact aquatic species due to degrading fish forage conditions in the San Joaquin River. Studies of fish forage conditions in the San Joaquin River found that fish food sources were more abundant and diverse in areas with gravel-cobble substrate than in areas with shifting sand substrate. Erosion and sedimentation could create more shifting sand substrate and thus have an adverse effect on fish.

Implementation of **Mitigation Measures (MM) GEO-CONSTRUCT-1a, GEO-MANAGEMENT-1a,** and **GEO-MANAGEMENT-1b** have been incorporated into the Project to reduce this impact to a less than significant level.

MM GEO-CONSTRUCT-1a: Implement Construction Best Management Practices to Minimize Erosion. CDFW, DGS, or their contractor(s) shall implement the following measures:

- Implement practices to maintain water quality, including silt fences, stabilized construction entrances, and storm-drain inlet protection.
- Develop spill prevention and emergency response plans to handle potential fuel or other spills.
- Where feasible, limit construction to dry periods.
- The performance standard for this mitigation measures is use of the best available technology that is economically achievable.

MM GEO-MANAGEMENT-1a: Stabilize Soils to Avoid Increasing Erosion on Streambanks. Project activities will be done in such a manner as to not increase erosion within the banks of the river during or immediately following rainfall events. All disturbed soils at project activity sites will be stabilized to reduce erosion potential, both during and following installation of equipment (e.g., fyke nets, traps, etc.). After removal of such equipment, soils shall be stabilized and recontoured, as necessary.

MM GEO-MANAGEMENT-1b: Use Energy Dissipaters to Minimize Turbidity at the Point of Discharge. Water deposited back into the river following Chinook salmon transport shall be done at a rate to minimize water turbidity and erosion. As necessary at each site, temporary energy dissipaters such as rip rap shall be placed at the point of discharge to moderate the return of water to the channel.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

CEQA FINDING NO. FISH-MANAGEMENT-5

Impact: **FISH-MANAGEMENT-5.** Implementation of the Project could interfere with the movements of large-bodied (non-target) fish, including federally listed species such as Central Valley Steelhead and Green Sturgeon, due to trap and haul activities.

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project have the potential to interfere with the movement of non-target large-bodied fishes. The rotary screw traps and fyke nets are intended to capture Chinook salmon; however the traps and nets may also capture other large-bodied fishes. Following restoration in the San Joaquin River, improved flows and water quality may attract Central Valley steelhead, green sturgeon, white sturgeon, striped bass, common carp and channel catfish. Operation of rotary screw traps and fyke nets in the San Joaquin river may capture these non-target species and impede their movement.

Implementation of **Mitigation Measures (MM) FISH-MANAGEMENT-5a** and **FISH-MANAGEMENT-5b** have been incorporated into the Project to reduce this impact to a less than significant level.

MM FISH-MANAGEMENT-5a: Monitor Fish Communities in the Vicinity of Traps. If actions described in Impact FISH-MANAGEMENT-5 are used in the Restoration Area, CDFW shall assess the species composition of fish communities within the 500-foot reach both upstream and downstream of each trap, during the time of year that the trap is in place. The monitoring activities

shall focus on large bodied special status fish species such as green sturgeon and steelhead. Monitoring techniques may include the use of visual surveys, rod and reel angling, set lines, fyke nets, DIDSON™, or seines.

MM FISH-MANAGEMENT-5b: Develop and Implement Measures to Allow Special-Status Large Bodied Fishes to Bypass Traps. If as a result of Mitigation Measure FISH MANAGEMENT-5a or through other means, CDFW identifies that the migration of special-status large bodied fishes could be impeded by trap and haul activities, then CDFW shall modify the operation of the trap so that movement of large bodied special-status fish species such as green sturgeon and steelhead is not impeded. Such measures may include operating a trap(s) to allow for manual selection of fish passing across the barrier.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

CEQA FINDING NO. FISH-MANAGEMENT-8

Impact: **FISH-MANAGEMENT-8.** Implementation of the Project could significantly impact fish as a result of the deployment of fish trapping devices for trap and haul activities.

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project have the potential to impact fish trapped as part of the trap and haul activities. Prolonged entrainment of fish in the trapping devices can cause stress and reduce fitness. These impacts may occur to the targeted species, Chinook salmon, and non-target species, such as green sturgeon and Central Valley steelhead.

Implementation of **Mitigation Measures (MM) FISH-MANAGEMENT-5a, FISH-MANAGEMENT-5b, FISH-MANAGEMENT-8a,** and **FISH-MANAGEMENT-8b** have been incorporated into the Project to reduce this impact to a less than significant level. Please see CEQA Finding No. FISH-MANAGEMENT-5 for MM FISH-MANAGEMENT-5a and MM FISH-MANAGEMENT-5b. MM FISH-MANAGEMENT-8a and FISH-MANAGEMENT-8b are included below.

MM FISH-MANAGEMENT-8a: Check Traps Daily and Minimize Handling of Fish. To reduce stress on captured fish, all trapping devices will be checked at least once per day. Untargeted wildlife (e.g., snakes, turtles) caught in traps will be released into suitable habitat for the species. Traps will be checked more frequently during times when conditions are stressful (e.g., high temperatures, large amounts of debris during high flow events) to reduce the time that fish are subject to trap related stress. Fish will be carefully handled and given sufficient

time to recover (at least 30 minutes) prior to being released back into the river. If rotary screw traps are used, they will be operated in accordance with the USFWS "Draft Rotary Screw Trap Protocol for Estimating Production of Juvenile Chinook Salmon" (USFWS 2008) and/or similar protocols which are at least as protective and developed after conferring with USFWS and, if required, NMFS.

MM FISH-MANAGEMENT-8b: Adaptively Manage Trap Operations. If mortalities greater than 2 fish or 2% of total catch are observed in a given day due to high debris loads, traps will be removed or raised out of the water until conditions are suitable for survival of fish (i.e., reduced winds or streamflow, improved weather conditions). For rotary screw traps, if predation causes such mortality, a structural refuge will be installed inside the trap to reduce predation. This will consist of a perforated plastic box or similar refuge for small fish within the rotary screw trap to prevent predation by larger fish captured in the trap.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

CEQA FINDING NO. FISH-MONITORING-2

Impact: **FISH-MONITORING-2.** Implementation of the Project could result in incidental mortalities as a result of field research and monitoring activities.

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project, including research and monitoring, have the potential to result in incidental sampling mortality and significant impacts to fish populations. Individual research and monitoring events are not likely to result in significant impacts. However, the collective impact of all research and monitoring efforts has the potential to result in significant impacts on fish and aquatic habitats in the Restoration Area. Studies employing rotary screw traps to sample juvenile Chinook Salmon in Central Valley rivers have documented incidental mortalities ranging between 0.2% and 4.5% (Gaines et al. 2003; Montgomery et al. 2007; Watry et al. 2007), although one study reported an unusually high daily mortality of 50% during a period of extremely low catches (Watry et al. 2007).

Implementation of **Mitigation Measures (MM) FISH-MONITORING-2a, FISH-MONITORING-2b, FISH-MONITORING-2c, FISH-MONITORING-2d,** and **FISH-MONITORING-2e** have been incorporated into the Project to reduce this impact to a less than significant level.

MM FISH-MONITORING-2a: Implement Standard Protocols for Active Sampling of Aquatic Species. When conducting active sampling, CDFW shall adhere to fish handling procedures prescribed in Guidelines for the Use of Fishes in

Research (Nickum et al. 2004), or any more current protocols which are considered at least as protective.

MM FISH-MONITORING-2b: Use Passive Sampling Techniques in place of Active Sampling Techniques, When Appropriate. To reduce impacts associated with active instream monitoring activity such as electrofishing, seining, and use of jet or propeller motor boats by investigators, the use of passive capture equipment will be used in place of active sampling whenever appropriate and feasible. Passive sampling equipment includes entanglement gear such as gill nets and trammel nets, and entrapment gear such as fyke nets and rotary screw traps.

MM FISH-MONITORING-2c: Use Observational Techniques in place of Traditional Capture Techniques, When Appropriate. Wherever possible and appropriate, observational techniques will be used in place of capture techniques to reduce the need to handle organisms.

MM FISH-MONITORING-2d: Check Rotary Screw Traps Daily. Rotary screw traps will be operated in accordance with the USFWS "Draft Rotary Screw Trap Protocol for Estimating Production of Juvenile Chinook Salmon" (USFWS 2008) and/or similar protocols which are at least as protective and developed after conferring with USFWS and, if required, NMFS. USFWS (2008) includes several measures, as follows. To reduce stress on captured fish, all trapping devices will be checked at least once per day when in the fishing position. Untargeted wildlife (e.g., snakes, turtles) caught in traps will be released into suitable habitat for the species. Traps will be checked more frequently during times when conditions are stressful (e.g., high temperatures, large amounts of debris during high flow events) to reduce the time that fish are subject to trap-related stress. Fish may need to be anesthetized, which would be done using methods acceptable to USFWS and NMFS before they are handled and given sufficient time to recover (at least 30 minutes) prior to being released back into the river.

MM FISH-MONITORING-2e: Adaptively Manage Trap Operations. If mortalities are greater than two fish or 2% of total catch are observed in a given day due to high debris loads, traps will be raised out of the water until conditions are suitable for survival of fish (i.e., reduced winds or streamflow, improved weather conditions). If predation causes such mortality, a structural refuge will be installed inside the trap to reduce predation. This will consist of a perforated plastic box or similar refuge for small fish within the rotary screw trap to prevent predation by larger fish captured in the trap.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

2. BIOLOGICAL RESOURCES – VEGETATION AND WILDLIFE

CEQA FINDING NO. BIO-MONITORING-2

Impact: **BIO-MONITORING-2.** Implementation of the Project could result in significant impacts to special-status wildlife species during research and monitoring activities.

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project have the potential to result in adverse impacts to special-status wildlife species through the generation of noise, access to and from streams, creation of temporary movement barriers, or the release of noxious materials (e.g., fuel). Use of temporary research and monitoring equipment such as rotary screw traps would not adversely affect terrestrial wildlife. However, movement of semiaquatic organisms, such as amphibians and reptiles, may be temporarily affected by use of traps or nets.

Implementation of **MMs FISH-MANAGEMENT-8a** and **FISH-MONITORING-2d** have been incorporated into the Project to reduce this impact to a less than significant level. Please see CEQA Finding No. FISH-MANAGEMENT-8 for MM FISH-MANAGEMENT-8a and CEQA Finding No. FISH-MONITORING-2 for MM FISH-MONITORING-2d.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

CEQA FINDING NO. BIO-MONITORING-4

Impact: **BIO-MONITORING-4.** Implementation of the Project could result in significant impact to wildlife movement and nursery sites during research and monitoring activities.

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project, have the potential to result in adverse impacts to the wildlife movement and nursery sites. Research and monitoring would not interfere with the movement of terrestrial wildlife species or affect nursery sites. However, movement of aquatic organisms, such as amphibians and reptiles, may be temporarily affected by instream trapping devices such as fyke nets and rotary screw traps.

Implementation of **MMs FISH-MANAGEMENT-8a** and **FISH-MONITORING-2d** have been incorporated into the Project to reduce this impact to a less than significant level.

Please see CEQA Finding No. FISH-MANAGEMENT-8 for MM FISH-MANAGEMENT-8a and CEQA Finding No. FISH-MONITORING-2 for MM FISH-MONITORING-2d.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

3. GEOLOGY, SOILS, AND SEISMICITY

CEQA FINDING NO. GEO-MANAGEMENT-1

Impact: **GEO-MANAGEMENT-1.** Implementation of the Project at the location could result in erosion due to disturbance of the streambank or stream channel from the installation, operation, or removal of research and monitoring equipment.

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project have the potential to change erosion patterns in the river. Releasing fish that have been trapped and hauled for management purposes may change the flow of water in both the upstream and downstream vicinity of the barrier or the release location. This changed flow could affect erosion patterns downstream.

Implementation of **MMs GEO-MANAGEMENT-1a** and **GEO-MANAGEMENT-1b** have been incorporated into the Project to reduce this impact to a less than significant level. Please see CEQA Finding No. FISH-MANAGEMENT-2 for MMs GEO-MANAGEMENT-1a and GEO-MANAGEMENT-1b.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

CEQA FINDING NO. GEO-MONITORING-1

Impact: **GEO-MONITORING-1.** Implementation of the Project at the location could result in erosion due to disturbance of the streambank or stream channel from trap and haul activities.

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project have the potential to disturb the streambank or streambed. Instream monitoring equipment, including screw traps and fry traps, may be

used in order to assess the effectiveness of the Project. Traps would need to be anchored either to the streambed or banks, and may disturb the streambanks or stream bottom during installation or removal. Such disturbances could create loose sediment that could potentially cause erosion and degrade downstream waters.

Implementation of **MMs GEO-MANAGEMENT-1a** and **GEO-MANAGEMENT-1b** have been incorporated into the Project to reduce this impact to a less than significant level. Please see CEQA Finding No. FISH-MANAGEMENT-2 for MMs GEO-MANAGEMENT-1a and GEO-MANAGEMENT-1b.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

4. HYDROLOGY, GEOMORPHOLOGY, AND WATER QUALITY

CEQA FINDING NO. HYD-MONITORING-1

Impact: **HYD-MONITORING-1.** Implementation of the Project could affect water turbidity from the installation of fish monitoring equipment and from fish monitoring activities.

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Installation of fish monitoring equipment and fish monitoring activities have the potential to result in water turbidity. Instream monitoring techniques, including screw traps, would be used in order to assess the effectiveness of the Project. Traps would need to be anchored either to the streambed or banks, and may disturb the stream bottom during installation activities, which could release sediment and cause turbidity.

Implementation of **Mitigation Measures (MM) FISH-MONITORING-2b** and **FISH-MONITORING-2c** have been incorporated into the Project to reduce this impact to a less than significant level. Please see CEQA Finding No. FISH-MONITORING-2 for MMs FISH-MONITORING-2b and FISH-MONITORING-2c.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

References

Gaines, P.D., R.E. Null, and M.R. Brown. 2003. Estimating the abundance of Clear Creek juvenile Chinook salmon and steelhead trout by use of a rotary-screw trap. Progress report, U.S. Fish and Wildlife Service, Red Bluff, CA.

Montgomery, J., A. Gray, C.B. Watry, and B. Pyper. 2007. Using rotary screw traps to determine juvenile Chinook salmon out-migration abundance, size and timing in the lower Merced River, California. Prepared for U.S. Fish and Wildlife Service, Anadromous Fish Restoration Program, Lodi, CA.

Nickum, J.G., H.L. Bart, P.R. Bowser, I.E. Greer, C. Hubbs, J.A. Jenkins, J.R. MacMillan, J.W. Rachlin, J.D. Rose, P.W. Sorensen, and J.R. Tomasso. 2004. Guidelines for the Use of Fishes in Research. American Fisheries Society. Available: http://fisheries.org/docs/policy_useoffishes.pdf. Accessed: April 10, 2013.

U.S. Fish and Wildlife Service (USFWS). 2008. Draft Rotary Screw Trap Protocol for Estimating Production of Juvenile Chinook Salmon. Available: http://www.fws.gov/sacramento/es/Survey-Protocols-Guidelines/Documents/2008_draft_CAMP_Rotary_Screw_Trap_Protocol.pdf. Accessed: April 10, 2013.

Watry, C.B., A. Gray, R. Cuthbert, B. Pyper, and K. Arendt. 2007. Out-migrant abundance estimates and coded wire tagging pilot study for juvenile Chinook salmon at Caswell Memorial State Park in the Lower Stanislaus River, California. Prepared for U.S. Fish and Wildlife Service, Anadromous Fish Restoration Program, Lodi, CA.

ATTACHMENT D-1

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE FINDINGS REGARDING ALTERNATIVES AND STATEMENT OF OVERRIDING CONSIDERATIONS

Explanation:

Impacts at alternative SCARF sites would likely be similar in kind and scope to those of the planned SCARF site. Additionally, this alternative could result in additional impacts associated with development and extensions of infrastructure that go beyond what would be required for the Proposed Project by not being located adjacent to the existing hatchery and infrastructure, in particular water supply infrastructure. Such impacts may include impacts air quality and greenhouse gas emissions from the use of construction vehicles and equipment; biological impacts to wetland, riparian, and upland habitats and the special-status plant and wildlife species that may use the habitats; geology and soils impacts from soil erosion; and water quality impacts from construction. One of these impacts (greenhouse gas emissions) was found as cumulatively significant and unavoidable for the Proposed Project, and so avoiding additional contributions to this impact is considered desirable.

Additionally, at least one possible alternative location (the River Vista parcel) would result in land use inconsistencies. Specifically, the River Vista parcel is included in the San Joaquin River Parkway Master Plan, and has been identified to be set aside as a natural conservation area. Since alternative locations (specifically, the site of the Proposed Project) would not create such a conflict, the River Vista side is considered less desirable.

Finally, this alternative would not avoid or substantially lessen any of the Proposed Project's significant and unavoidable impacts – none of which are expected to result from Proposed Project activities at the SCARF site, itself. Therefore the SCARF Siting Alternative is not considered to be environmentally superior to the Proposed Project.

STATEMENT OF OVERRIDING CONSIDERATIONS

This section addresses CDFW's obligations under Public Resources Code section 21081, subdivisions (a)(3) and (b). (See also CEQA Guidelines, §§ 15091, subd. (a)(3), 15093.) Under these provisions, CEQA requires CDFW to balance, as applicable, the economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits, of the revised regulations against the backdrop of unavoidable significant environmental impacts. For purposes of CEQA, if the specific economic, legal, social, technological, or other benefits of a proposed project outweigh the unavoidable significant environmental effects, those effects may be considered acceptable and the decision making agency may still approve the underlying project.

The EIR analyzes and discusses the significant and unavoidable environmental effects CDFW expects to occur. (See, e.g., DEIR, § 6.5.3, pp. 6-51 to 6-54 and 6-74 to 6-75; § 10.4.3, pp. 10-9 to 10-11 and 10-12; and § 18.5.3, pp. 18-29 and 18-32.) As the sections previously mentioned discuss in detail, implementation of the Proposed Project may result in significant and unavoidable effects to spawning and rearing habitat (including riparian or instream habitat) from wild broodstock collection due to the lack of details available with which to develop adequate CEQA mitigation at this time. Also, as the sections previously mentioned discuss in detail, implementation of the recreational enhancement components of the Proposed Project may result in significant and unavoidable effects related to introduction of invasive species, due to the lack of feasible mitigation that can ensure that impacts would be less than significant. Finally, as the sections previously mentioned discuss in detail, implementation of the Proposed Project may result in significant and unavoidable effects related to greenhouse gas emissions, due to the potential infeasibility of the identified mitigation measure.

For purposes of CEQA, CDFW's implementation of the Proposed Project may result in the following significant and unavoidable effects to the environment:

- Impact FISH-REINTRO-1: Disturbance to Suitable Spawning and Rearing Habitat, Damage to Existing Redds, and Overharvest of Eggs and Juveniles during Broodstock Collection
- Impact FISH-RECREATION-4: Riparian or Instream Habitat Degradation or Spread of Invasive Species or Pathogens from Recreational Fishing Enhancements
- Impact GHG-MANAGEMENT-1: Potential for Construction of Fish Segregation Weirs to Generate Substantial GHG Emissions or Conflict with the CARB's Applicable Plans, Policies, or Regulations Adopted for the Purpose of Reducing the Emissions of GHGs
- Impact GHG-RECREATION-1: Potential for Construction Activities Related to Enhancing Recreational Fishing Opportunities to Generate Substantial GHG Emissions or Conflict with the CARB's Applicable Plans, Policies, or Regulations Adopted for the Purpose of Reducing the Emissions of GHGs
- Impact CUM-4: Effects of Wild Broodstock Collection
- Impact CUM-6: Effects on the Generation of Greenhouse Gas Emissions

<u>Balancing the Benefits of Final Action by the Department with the Significant and Unavoidable Environmental Effects.</u>

As noted above, CDFW is charged by CEQA to balance, as applicable, the economic, legal, social, technological, or other benefits, including region-wide or

statewide environmental benefits, of the Proposed Project against the backdrop of significant unavoidable environmental impacts. This section describes those benefits. In addition, CDFW finds that, after weighing the benefits of the Proposed Project against related unavoidable significant environmental impacts, the benefits of the Proposed Project outweigh its unavoidable adverse environmental effects so that the adverse environmental effects may be considered "acceptable" (CEQA Guidelines § 15093, subd. (a).)

CDFW has determined that the Proposed Project should be approved and that any remaining unmitigated environmental impacts attributable to the Proposed Project are outweighed by the following specific overriding considerations, each one being a separate and independent basis upon which to approve the Proposed Project. In other words, any single benefit described below is adequate to support the approval of the Proposed Project in spite of its unavoidable environmental impacts. Substantial evidence in the record demonstrates the following benefits that would occur as a result of approving the Proposed Project:

- First, the Proposed Project may not in fact result in all of the significant and unavoidable impacts identified above. In the case of broodstock collection, future CEQA evaluation and development of mitigation measures are anticipated to ensure impacts would be less than significant; however, in some instances, CDFW simply lacks the data or it is infeasible to obtain sufficient information at this time to support a conclusion that mitigation will, in fact, successfully reduce the impact to a less than significant level. With respect to wild broodstock collection future more detailed analysis would be conducted as necessary through tiered CEQA documentation prior to broodstock collection from naturally spawning spring-run donor stock. This is expected to ensure that impacts from wild broodstock collection would not be significant. In the case of GHG emissions, potentially feasible mitigation exists which could reduce impacts to a level that is less than significant, but it is unknowable at this time whether CDFW would be able to acquire the funding to implement mitigation to achieve that level of reduction in the impact.

- Second, the Proposed Project arises from the SJRRP, which in turn is a product of the Settlement Agreement reached as a result of federal court action in *Natural Resources Defense Council (NRDC) et al. v. Kirk Rogers et al.* (*NRDC v. Rodgers* 2006). The U.S. Department of the Interior, U.S. Department of Commerce, NRDC, and the Friant FWUA signed the Settlement Agreement. Pursuant to the State Agency MOU, CDFW agreed to assist the Settling Parties in the Settlement Agreement's implementation, consistent with CDFW's authorities, resources, and

broader regional resource strategies. As such, the SJRRP must be implemented in order to be compliance with the Settlement Agreement, and as a signatory to the MOU, CDFW has committed to assist the Settling Parties in the Settlement Agreement's implementation, consistent with the State Agencies' authorities, resources, and broader regional resource strategies. Furthermore, implementation of the Settlement Agreement is anticipated to have beneficial effects to salmon populations and the ecosystems in which they are found, which are considered to outweigh the significant and unavoidable impacts of the Proposed Project.

More specifically, the Proposed Project would assist in achieving the Restoration Goal of the Settlement Agreement, the benefits of which are anticipated to outweigh the Proposed Project's significant and unavoidable effects. The Restoration Goal is to restore and maintain fish populations in good condition, including naturally reproducing and self-sustaining populations of salmon and other fish in the Restoration Area (defined as the main stem of the San Joaquin River from below Friant Dam to the confluence with the Merced River). The ways in which the Proposed Project would assist in achieving the Restoration Goal are described further in the following paragraphs.

As stated in detail in the DEIR, within sections 2.4.3 and 2.4.4 (pp. 2-7 through 2-41), implementation of the Proposed Project, which includes the construction and operation of the SCARF as well as associated improvements, would enable CDFW to produce a conservation stock of fall- and spring-run Chinook salmon that is genetically diverse while minimizing impacts to source populations, as described in the Proposed Project objectives. Chinook salmon historically existed in the San Joaquin River but were subsequently fully extirpated, and therefore creation of a robust broodstock would be anticipated to benefit salmon stocks statewide.

Implementation of the Proposed Project also would help satisfy the Restoration Goal of the SJRRP and would support CDFW's mission by allowing for the management and conservation of native salmon in the San Joaquin River for their ecological significance. The Proposed Project would replace the Interim Conservation Facility, which is not sufficiently large to produce the numbers of fish needed to develop a founding stock for the San Joaquin River and therefore would fail to meet the Restoration Goal of the SJRRP.

The Proposed Project may also include the removal, repurposing, or construction of instream barriers to segregate Chinook salmon runs in the Restoration Area (DEIR § 2.4.5, pp. 2-43 through 2-46) in order to prevent overlap of spring- and fall-run salmon spawning. Because many details surrounding this aspect of the Proposed Project are not known at this time, these actions are generally evaluated at a program level in the EIR. Nevertheless, if operation of instream barriers are shown to assist in the establishment of fall- and spring-run Chinook salmon, implementation of this aspect of the Proposed Project would assist in achieving the Restoration Goal of the SJRRP.

Under the Proposed Project, CDFW would also conduct research in the Restoration Area related to Chinook salmon habitat, genetics, and survival (DEIR § 2.4.6, pp. 2-46 through 2-50). The results of studies in the area may increase the success of salmon reintroduction efforts via adaptive management measures based on the results of the studies. This would also assist in achieving the Restoration Goal of the SJRRP.

- Third, the Proposed Project involves enhancement of recreational opportunities, the benefits of which are a consideration when evaluating whether to approve the Proposed Project despite its significant and unavoidable impacts. Providing such recreational opportunities is consistent with CDFW's mission. Enhancement of recreational opportunities as part of the Proposed Project include the following possible actions: enhancing off-channel ponds (i.e., ponds or abandoned gravel mining pits without river connectivity) for recreational fishing, providing access to and facilities for additional fishing opportunities in or near the Restoration Area, stocking trout for recreational fishing in off-channel ponds near the San Joaquin River, changing stocking practices in the San Joaquin River below Friant Dam to protect reintroduced Chinook salmon, increasing enforcement of fishing regulations in the Restoration Area, and/or increasing monitoring of recreational activities within the Restoration area (DEIR § 2.4.7, pp. 2-50 through 2-51).

- Finally, the following impacts that would occur as a result of implementation of the Proposed Project may have a beneficial impact on the surrounding area (refer to DEIR Executive Summary, pp. ES-24 through ES-54):

    - Impact FISH-REINTRO-6: Cascading Effects in Aquatic Food Webs from Chinook Salmon Produced either within the Restoration Area or by the SCARF

- Impact FISH-MANAGEMENT-6: Effects on Chinook Salmon in San Joaquin River Tributaries due to Non-Operation of Hills Ferry Barrier
- Impact REC-OP-2: Operation of SCARF Would Provide New Recreational Facilities
- Impact REC-REINTRO-1: An Increase in Recreational Opportunities Would Occur in the Potentially Affected Area from the Reintroduction of Chinook Salmon
- Impact CUM-3: Effects of Fish Species and Their Habitats

Taken as a whole and individually, weighing the above economic, legal, social, technological, and other benefits, including region-wide and statewide environmental benefits, of the Proposed Project against the Project's unavoidable significant environmental impacts, CDFW has found that the benefits of the Proposed Project individually and collectively outweigh its unavoidable adverse environmental effects and its adverse environmental effects are therefore considered acceptable.

CDFW has reviewed and considered the information contained in the EIR, finds that the EIR reflects its independent judgment and discretion, finds that the EIR was completed in compliance with CEQA, and hereby certifies the EIR. In so doing, CDFW adopts these findings of fact and the Statement of Overriding Considerations as set forth above, approves the Project for purposes of CEQA, and adopts the Mitigation Monitoring and Reporting Program.

June 4, 2014

Jeffrey R. Single, Ph.D.
Central Region
California Department of Fish & Wildlife

REFERENCES

Cal EMA *see* California Emergency Management Agency
Caltrans *see* California Department of Transportation
CDFG *see* California Department of Fish and Game
CNDDB *see* California Natural Diversity Database
DWR *see* California Department of Water Resources
NMFS *see* National Marine Fisheries Service
Reclamation *see* U.S. Bureau of Reclamation
USFS *see* U.S. Forest Service
USFWS *see* U.S. Fish and Wildlife Service