STAFF REPORT
C30

A 1, 3 02/27/18
W 27111 / PRC 9415
S 1, 4 M. Schroeder

RESCISSION OF APPROVAL AND ISSUANCE OF A GENERAL LEASE – PUBLIC AGENCY USE

APPLICANT:
U.S. Fish and Wildlife Service

PROPOSED LEASE:
AREA, LAND TYPE, AND LOCATION:
Sovereign land in the Yuba River, adjacent to Assessor's Parcel Numbers 005-300-010, 005-300-014, 006-320-007, 50-010-13, and 50-010-79, near Smartsville, Nevada and Yuba Counties.

AUTHORIZED USE:
Placement and maintenance of gravel and riparian vegetation for the rehabilitation and restoration of Central Valley spring-run Chinook salmon and Central Valley steelhead spawning and rearing habitat, including dredging as needed to create side channels, and grading.

LEASE TERM:
10 years, beginning February 27, 2018.

CONSIDERATION:
Public use and 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.

STAFF ANALYSIS AND RECOMMENDATION:
Authority:
Public Resources Code sections 6005, 6216, 6301, 6501.1, and 6503; California Code of Regulations, title 2, sections 2000 and 2003.

Public Trust and State's Best Interests Analysis:
On August 17, 2017, the Commission authorized a General Lease – Public Agency Use to the U.S. Fish and Wildlife Service for placement and maintenance of gravel and riparian vegetation for the rehabilitation and

restoration of Central Valley spring-run Chinook salmon and Central Valley steelhead spawning and rearing habitat, dredging as needed to create side channels, and grading (Item C23, August 17, 2017). The lease was never fully executed. Subsequent to the Commission's approval, the Applicant raised several concerns with the standard lease provisions due to statutory limitations placed on the Applicant, a federal agency. Staff and the Applicant have agreed to revise the lease consistent with the Applicant's authority to accept those terms. Due to the changes to the lease provisions, staff requests the authorization made by the Commission at its August 17, 2017 public meeting be rescinded and a new lease issued to the Applicant reflecting these revisions. The primary lease terms remain unchanged from the Commission's August 17, 2017, approval and no changes to the Project itself have been proposed.

The Applicant seeks a General Lease – Public Agency Use for a habitat restoration project in the Yuba River to increase the spawning success and enhance juvenile rearing of Central Valley spring-run Chinook salmon and Central Valley steelhead. Proposed habitat restoration activities include placement and maintenance of gravel, riparian vegetation, creation of side channels for spawning and rearing habitat for salmonids, and grading within the Englebright Dam Reach of the Yuba River Canyon. The proposed grading and gravel placement activities will increase the quality and availability of spawning areas for salmonids by providing additional areas with spawning gravels within the appropriate size range (and by removing shot-rock).

The Yuba River Canyon is a distinct section of the lower Yuba River in the Sierra Nevada foothills and includes the Englebright Dam and Narrows reaches. During construction of the dam, large boulders and angular rock were ripped and blasted from the hillsides to aid in dam construction. Most of this material, commonly referred to as shot-rock, was subsequently mobilized during large floods and is now distributed within the river channel. The magnitude of shot-rock has overwhelmed the river corridor, degrading physical habitat. Mixed in with natural, river-rounded gravel, the shot-rock deters successful salmon spawning. The shot-rock material is comprised of large (frequently boulder size) relatively-sharp, angular rock fragments, which is very different from the typical river-rounded gravel and cobbles that the river carries in from upstream.

The proposed project will rehabilitate a section of the river channel and an adjacent gravel bar to improve salmonid spawning and rearing habitat. The restoration approach is to dredge, grade, and sort the gravel and enhance existing in-river topography. Gravel bar dredging will provide a

source of spawning gravels. The gravel bar and in-channel riffle and pool features will be reconfigured to increase the extent of spawning areas with appropriate sediment size and depth. The combination of grading the gravel bar, sorting dredged material, and river channel gravel placement are a viable suite of actions to improve salmonid habitat.

Three staging areas are proposed, two on the south side of the Yuba River and one on the north side. During construction, only two staging areas may be necessary. Access to the site will be through existing unpaved private roadways on the south side of the river. Improvements to the existing roadways are not expected to be necessary. The Applicant applied for permission to use the private roads and easement areas. All access and staging areas will be treated with erosion control measures during and after project completion. After channel bar grading activities have been completed, portions of the disturbed areas will be revegetated with native riparian vegetation.

The project work is expected to require a single construction season to complete, but due to unforeseen site conditions construction activities may continue to 2020. To avoid impacts to fish, in-stream gravel placement activities would only occur during the period from July 1 to September 1 of any year. Grading and gravel processing will begin in early July, after the gravel processing plant has been established on-site. Sorting and gravel augmentation would continue through July and August.

Public access to the Yuba River below the dam is constrained due to topography and private ownership of the uplands. Rafting, kayaking and fishing are possible, but are limited due to the constraints of the surrounding area. No developed regional or neighborhood parks or other recreational facilities exist within or directly adjacent to the project site. Public access to the Yuba River at the project site is available but limited.

Overall, the proposed action is considered beneficial because it will enhance fisheries, which is a recognized Public Trust use. Furthermore, the action will not impede or impair any other Public Trust uses in the area.

The lease includes certain provisions protecting the public's use of the proposed lease area by requiring the Applicant to obtain necessary permits and to conduct all work safely. The lease also has a limited term of 10 years that allows the Commission flexibility to determine if the Public Trust needs of the area have changed over time. Furthermore, post-project monitoring through review of topographic and water quality surveys

will take place for up to 5 years after project completion to evaluate outcomes of the project, implementation of the project and project influences on habitat conditions.

Climate Change:

The project area is not tidally influenced and therefore, would not be subject to sea-level rise. However, as stated in *Safeguarding California* (California Natural Resources Agency 2014), climate change is projected to increase the frequency and severity of natural disasters related to flooding, drought, and storms. In rivers, more frequent and powerful storms can result in increased flooding conditions and damage from storm-created debris. Conversely, prolonged droughts could dramatically reduce river flow and water levels, leading to loss of public access and navigability. Climate change will further influence riverine areas by changing erosion and sedimentation rates, and flooding and storm flow, as well as runoff, will likely increase scour, decreasing bank stability at a faster rate. The proposed project's vegetation management, hydraulic improvement, and recreation feature implementation would not affect upstream, local, or downstream water surface levels in the Yuba River. Further, because the proposed project would not alter the geometry of the Yuba River, it would not cause significant changes to water flow in the river or cause negative hydraulic effects upstream or downstream. Therefore, the proposed project would have a beneficial effect related to alteration of drainage patterns and impedance or redirection of flood flows on the Feather River and would not cumulatively contribute to drainage or flood flow impacts. The proposed Project would provide a more natural flood corridor both in the project area and downstream.

Conclusion:

For all the reasons above, Commission staff believes the proposed lease is consistent with the common law Public Trust Doctrine and is in the best interests of the State.

OTHER PERTINENT INFORMATION:

1. This action is consistent with Strategy 1.1 of the Commission's Strategic Plan to deliver the highest levels of public health and safety in the protection, preservation and responsible economic use of the lands and resources under the Commission's jurisdiction.

2. Rescission of the lease 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 to the environment.

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

3. An Environmental Assessment/Initial Study/Mitigated Negative Declaration, State Clearinghouse No. 2016122042, was prepared by the U.S. Fish and Wildlife Service and Yuba County and the Mitigated Negative Declaration was adopted by Yuba County on February 1, 2017, for this project. Commission staff has reviewed such document.

   A Mitigation Monitoring Program was adopted by Yuba County.

4. 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 staff's consultation with the persons nominating such lands and through the CEQA review process, it is staff's opinion that the project, as proposed, is consistent with its use classification.

APPROVALS REQUIRED:

Central Valley Regional Water Quality Control Board
California Department of Fish and Wildlife
U.S. Army Corps of Engineers
U.S. Fish and Wildlife Service
National Marine Fisheries Service
California State Historic Preservation Office
Nevada County Grading Permit
Yuba County Grading Permit

EXHIBITS:

A. Land Description
B. Site and Location Map
C. Mitigation Monitoring Program

RECOMMENDED ACTION:

It is recommended that the Commission:

CEQA FINDING:

Find that an Environmental Assessment/Initial Study/Mitigated Negative Declaration, State Clearinghouse No. 2016122042, and a Mitigation Monitoring Program were prepared by the U.S. Fish and Wildlife Service and Yuba County and that the Mitigated Negative Declaration and Mitigation Monitoring Program were adopted by the County on February 1, 2017, for this project and that the Commission has reviewed and

considered the information contained therein; that in the Commission's independent judgement, the scope of activities to be carried out under the lease to be issued by this authorization have been adequately analyzed; that none of the events specified in Public Resources Code section 21166 or the State CEQA Guidelines section 15162 resulting in any new or substantially more severe significant impact has occurred; and, therefore no additional CEQA analysis is required.

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

PUBLIC TRUST AND STATE'S BEST INTERESTS:

Find that the proposed lease will not substantially impair the public rights to navigation and fishing or substantially interfere with the Public Trust needs and values at this location, at this time, and for the foreseeable term of the lease; is consistent with the common law Public Trust Doctrine; and is in the best interests of the State.

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 for a General Lease – Public Agency Use, approved by the Commission on August 17, 2017, to the U.S. Fish and Wildlife Service.

2. Authorize issuance of a General Lease – Public Agency Use to the U.S. Fish and Wildlife Service, beginning February 27, 2018, for a term of 10 years, for placement and maintenance of gravel and riparian vegetation for the rehabilitation and restoration of Central Valley spring-run Chinook salmon and Central Valley steelhead spawning and rearing habitat, dredging as needed to create side channels, and grading; as described in Exhibit A and shown on Exhibit B (for reference purposes only), attached and by this reference made a part hereof; consideration being the public use and benefit, with the State reserving the right, at any time, to set a monetary rent as specified in the lease if the Commission finds such action to be in the State's best interests.

EXHIBIT A

W 27111

LAND DESCRIPTION

One parcel of submerged land situated in the bed of the Yuba River, lying adjacent to the E Half of fractional Section 22 and the W Half of fractional Section 23, Township 16 North, Range 6 East, M.D.B.&M., as shown on Official Government Township Plat approved August 19, 1867, Counties of Nevada and Yuba, State of California, more particularly described as follows:

> BOUNDED on the west by a line lying 300 feet westerly of, by perpendicular measure, the northerly prolongation of the easterly line of that Parcel 11 shown on "PM 2010-01 Parcel Map for Yuba Narrows Ranch" (Sheet 2 of 4), filed on December 29, 2010 in Book 92 of Maps at Page 49-52, Yuba County Records, said easterly line described as S 00° 27' 18" E, 2453.72 feet; BOUNDED on the northwest by the Low Water of the right (northerly) bank of the Yuba River; BOUNDED on the north by a line lying 350 feet southerly of, by perpendicular measure, the westerly prolongation of the northerly line of Parcel 1 shown on "Parcel Map 88-37, in the unincorporated territory of the County of Nevada Calif., Being a Portion of the E. Half Sec. 22 & W. Half Sec. 23, T.16N., R.6E., M.D.M." (Sheets 1 & 2 of 2), filed on March 17, 1989 in Book 17 of Parcel Maps at Page 209, of Nevada County Records, said northerly line described as S 86° 59' 36" E, 1321.37 feet; BOUNDED on the south and southeast by the Low Water of the left (southerly) bank of the Yuba River.

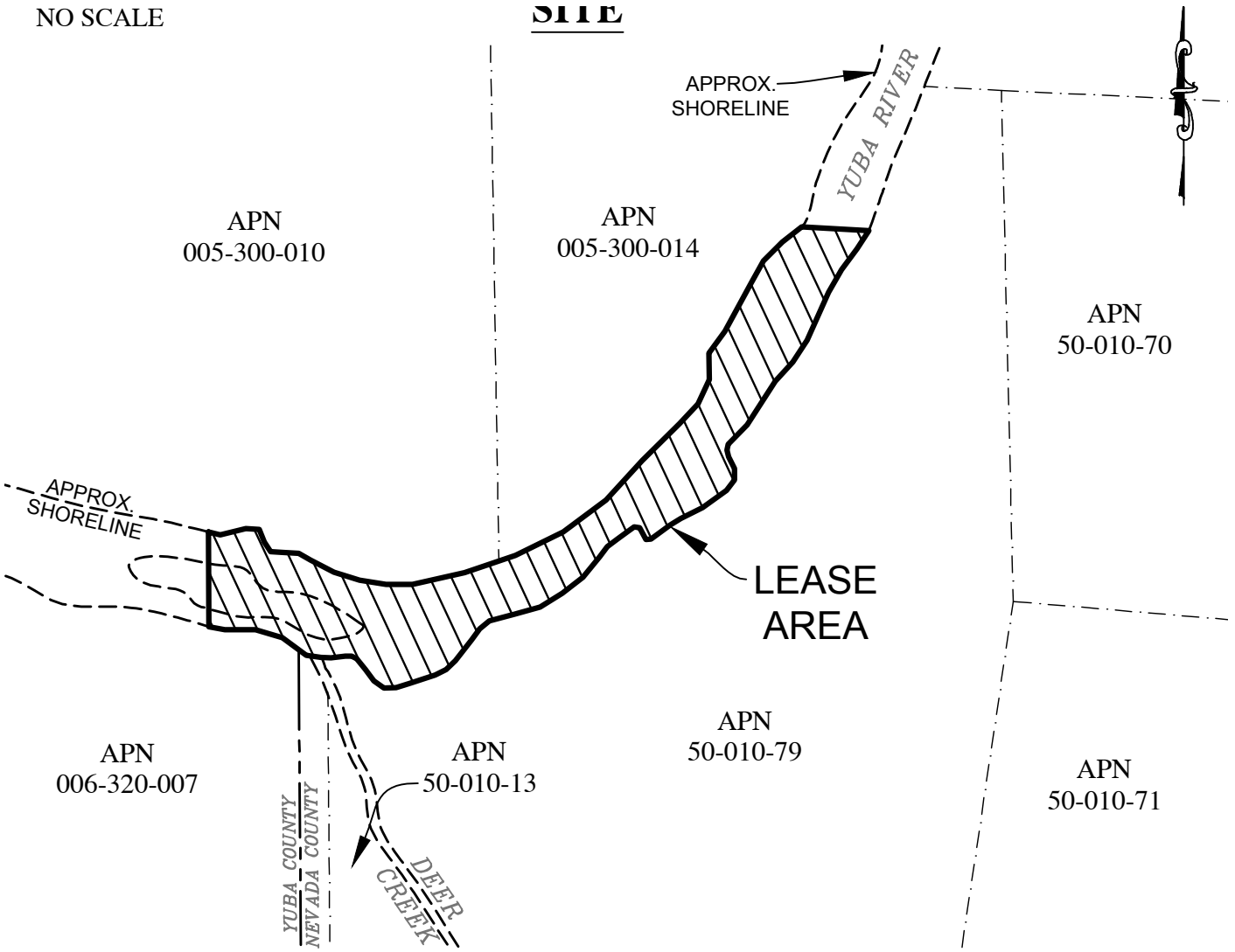
EXCEPTING THEREFROM any portion lying landward of the ordinary low water mark of the right and left bank of the Yuba River.

END OF DESCRIPTION

This description is based on Applicant provided design plans for a proposed salmon habitat restoration project, together with any and all appurtenances pertaining thereto, to be built at a later date within the Lease time frame. This description is to be updated once final as-built plans are submitted.

Prepared 06/09/2017 by the California State
Lands Commission Boundary Unit.

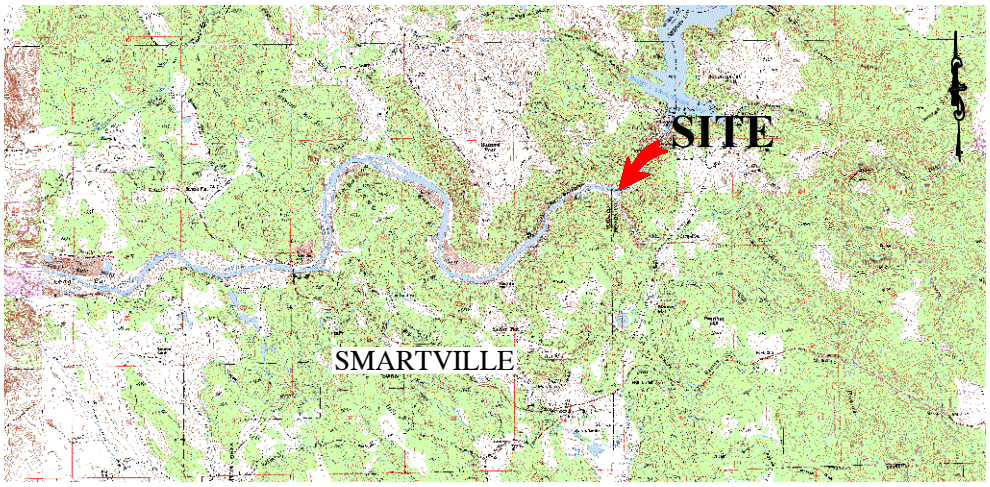
NO SCALE



YUBA RIVER, NEAR SMARTSVILLE

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

W 27111
U.S. FISH & WILDLIFE SERVICE
GENERAL LEASE -
PUBLIC AGENCY USE
NEVADA & YUBA COUNTIES

RGB 6/09/17

EXHIBIT C
CALIFORNIA STATE LANDS COMMISSION
MITIGATION MONITORING PROGRAM

Yuba River Canyon Salmon Habitat Restoration Project
(W27111, State Clearinghouse No. 2016122042)

The California State Lands Commission (Commission) is a responsible agency under the California Environmental Quality Act (CEQA) for the Yuba River Canyon Salmon Habitat Restoration Project (Project). The CEQA lead agency for the Project is Yuba County.

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 impose feasible measures to avoid or substantially reduce the significant environmental impacts from a project identified in an Environmental Impact Report (EIR) or a Mitigated Negative Declaration (MND). 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 an MND; State Clearinghouse No. 2016122042, and adopted a MMP for the whole of the Project (see Exhibit C, Attachment C-1), 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. The full text of each mitigation measure, as set forth in the MMP prepared by the CEQA lead agency and listed in Table C-1, is incorporated by reference in this Exhibit C. Differences between the Commission's MMP and that prepared by the CEQA lead agency are identified by <u>underlined text</u>.

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

Table C-1. Project Impacts and Applicable Mitigation Measures

Potential Impact	Mitigation Measure (MM)[2]	Difference Between CSLC MMP and Lead Agency MMP
BIO-1: Salmonids	**MM BIO-1: Measures to Reduce Impacts to Salmonids**	None
BIO-2: Foothill yellow-legged frog	**MM BIO-2: Perform Pre-construction Surveys for Foothill Yellow-legged Frog**	None
BIO-3: Western Pond Turtle	**MM BIO-3: Perform Pre-construction Surveys for Western Pond Turtle**	None
BIO-4: Special-status Birds	**MM BIO-4: Perform Pre-construction Surveys for Raptors and Migratory Birds**	None
BIO-5: Special-status Birds	**MM BIO-5: Perform Pre-construction Surveys for Bald Eagle**	None
BIO-6: Roosting Bats	**MM BIO-6: Perform Pre-construction Surveys for Special-status Bat Species**	None
BIO-7: Revegetation	**MM BIO-7: Revegetation**	None
CUL-1: Cultural Resources	**MM CUL-1: Inadvertent Discovery of Cultural Resources**	See below
CUL-2: Cultural Resources	**MM CUL-2: Inadvertent Discovery of Human Remains**	None
CUL-3: Cultural Resources	**MM CUL-3: Halt Work if Human Skeletal Remains are Identified During Construction**	None
HM-1: Hazards and Hazardous Materials	**MM HM-1: USFWS will ensure spark-producing equipment shall be cleared of dried vegetation or other materials that could serve as fire fuel**	None
HYDRO-1: Hydrology and Water Quality	**MM HYDRO-1: Prepare and Implement a SWPPP**	None
HYDRO-2: Hydrology and Water Quality	**MM HYDRO-2: Water Quality Measures for In-Channel Work**	None
HYDRO-3: Hydrology and Water Quality	**MM HYDRO-3: Fill Placement Measures**	None
NOISE-1: Noise	**MM NOISE-1: The USFWS shall require contractors to implement sound-control devices and work Monday through Friday from 6:30 am to 5 pm**	None

[2] See Attachment C-1 for the full text of each MM taken from the MMP prepared by the CEQA lead agency.

Mitigation Measure CUL-1: Inadvertent Discovery of Cultural Resources. If an inadvertent discovery of archaeological resources is made during the project, the USFWS will require ground disturbing activities in the vicinity of the discovery to cease. Prehistoric archaeological materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil ("midden") containing heat-affected rocks, artifacts, or shellfish remains; and stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-period materials might include refuse-filled privies or wells. After cessation of excavation the contractor shall immediately contact the USFWS. The contractor shall not resume work until authorization is received from the USFWS.

In the event of unanticipated discovery of archaeological materials during project implementation, the USFWS shall retain the services of a Secretary of the Interior-qualified archaeologist (and a Native American representative if the site is prehistoric) to evaluate the significance of the find prior to resuming any activities that could impact the site.

In the case of an unanticipated archaeological discovery, if it is determined that the find is potentially eligible for listing in the National Register, and the site cannot be avoided, the USFWS shall provide a research design and treatment plan, prepared by a qualified archaeologist, outlining data recovery to be performed on the resource, analysis, and reporting of the find. The research design and treatment plan shall be submitted to and approved by the USFWS, the State Historic Preservation Officer, and appropriate Native American organizations prior to construction being resumed.

<u>The title to all abandoned archaeological sites, and historic or cultural resources on or in the tide and submerged lands of California is vested in the State and under the jurisdiction of the CSLC (Pub. Resources Code, § 6313). The County shall consult with CSLC staff should any archaeological or historical resources on State lands be discovered during construction of the proposed Project. In addition, the final disposition of archaeological or historical resources recovered on State lands under the jurisdiction of the CSLC must be approved by the Commission.</u>

ATTACHMENT C-1

Mitigation Monitoring Program Adopted by

Yuba County

TABLE B-1
MITIGATION MONITORING AND REPORTING PROGRAM

Impact Topic	Mitigation Measure	Implementation Responsibility	Monitoring/Reporting Responsibility	Timing
Salmonids	**Mitigation Measure BIO-1: Measures to Reduce Impacts to Salmonids.** The following measures will be used to reduce the likelihood of adverse impacts on salmonids that use the lower Yuba River: • In channel work will occur from 1 July to 1 September to avoid impacting emigrating Central Valley steelhead and Central Valley spring-run Chinook salmon smolts, incubating Central Valley steelhead eggs/alevins, and immigrating and spawning adult Central Valley spring-run Chinook salmon. • Heavy equipment operation will be limited to 6:30 am to 5 pm. Fish passage will be maintained to allow passage of adult and juvenile salmon and steelhead outside of construction hours. The majority of salmonid migration movement occurs during the low light hours of dawn and dusk and at night. • All equipment will be steam cleaned prior to working within the river channel to remove contaminants and/or invasives that may enter the river and adjacent lands. • All equipment entering the river will be steam cleaned before it is used elsewhere to minimize the chance of introducing New Zealand mud snails to other water bodies. Additional measures may be taken at the recommendation of CDFW. • Equipment will not operate in the active channel except as necessary to construct temporary stream crossings and place spawning gravel and in-stream habitat structure. • Prior to in-channel work, a qualified fisheries biologist will survey the work area for the presence of adult salmonids, particularly adult Central Valley spring-run Chinook salmon, and if adults are observed then work will cease until the fish have left the area to be impacted • All project personnel will be instructed on the protection of biological resources, and in particular the special-status species that might be encountered during project activities. They will be trained to stop work upon observation of a special-status species within the work area and to notify a project monitor for additional guidance. • During construction, as much understory brush and as many trees as possible will be retained. The emphasis will be on retaining shade-producing and bank-stabilizing vegetation.	USFWS	USFWS/ Biologist/ Construction Contractor	Prior to and during project construction
Foothill yellow-legged frog	**Mitigation Measure BIO-2:** Perform Pre-construction Surveys for Foothill Yellow-legged Frog. Two weeks prior to any disturbance within suitable habitat for foothill yellow-legged frog, proposed disturbance areas shall be surveyed for adult frogs, tadpoles, or eggs by a qualified biologist. If the species is detected, the biologist shall contact CDFW to determine if moving any of the life stages is appropriate. In making this determination, CDFW would consider if an appropriate relocation site exists. If CDFW approves moving the animals, the biologist shall be allowed sufficient time to move the animals from the work site before work activities begin.	USFWS	USFWS/ Biologist	Prior to project construction
Western Pond Turtle	**Mitigation Measure BIO-3:** Perform Pre-construction Surveys for Western Pond Turtle. Prior to construction, a qualified biologist shall conduct a survey for western pond turtles within 24 hours of the start of construction activities within 500 feet of suitable habitat located within the construction area. If no individuals are identified then no additional measures are required. If a turtle is found in a proposed construction area, the biologist would move the turtle from the area to suitable habitat downstream of the project site.	USFWS	USFWS/ Biologist	Prior to project construction

TABLE B-1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

Impact Topic	Mitigation Measure	Implementation Responsibility	Monitoring/Reporting Responsibility	Timing
Special-status Birds	**Mitigation Measure BIO-4: Perform Pre-construction Surveys for Raptors and Migratory Birds.** For construction activities expected to occur during the nesting season of raptors (February 1 to August 31) and migratory birds, a pre-construction survey shall be conducted to determine if active nests are present on or within 500 feet of the project site. The survey shall be conducted by a qualified biologist no more than seven days prior to the onset of construction. If no active nests are identified during the pre-construction survey, no further mitigation is necessary. If active nests are found on or within 500 feet of the project site, then USFWS shall notify CDFW and explain any additional measures that a qualified biologist plans to implement to prevent or minimize disturbance to the nest while it is still active. Depending on the conditions specific to each nest, and the relative location and rate of construction activities, it may be feasible for construction to occur as planned within the 500-foot buffer without impacting the breeding effort. Appropriate measures may include restricting construction activities within 500 feet of active raptor nests, and having a qualified biologist with stop work authority monitor the nest for evidence that the behavior of the parents have changed during construction. Appropriate measures would be implemented until the young have fledged or until a qualified biologist determines that the nest is no longer active. Construction activities may be halted at any time if, in the professional opinion of the biologist, construction activities are affecting the breeding effort.	USFWS	USFWS/ Biologist	Prior to project construction
Special-status Birds	**Mitigation Measure BIO-5: Perform Pre-construction Surveys for Bald Eagle.** If construction, grading or other project-related activities are scheduled during the nesting season (February 1 to August 31), a pre-construction survey would be conducted by a qualified biologist to identify potential bald eagle nests within ½-mile of proposed construction activities. The survey would be conducted no less than seven days prior to the beginning of construction. If the pre-construction survey does not identify any potential bald eagle nests, no further mitigation would be required. No trees containing potential eagle nests shall be removed. If a potential or active bald eagle nest is found on or within ½-mile feet of the project site, then appropriate USFWS biologists shall be consulted. Additional permitting may be required and construction may be prohibited by the USFWS until the nesting season has been completed. At a minimum, additional mitigation measures would be implemented and likely include restricting construction activities within 600 feet of the nests, until the young have fledged or until a qualified biologist determines that the nest is no longer active. Depending on the conditions specific to each nest, and the relative location and rate of construction activities, it may be feasible for construction to occur as planned within the 600-foot buffer without impacting the breeding effort. In this case and as determined on an individual basis by a qualified biologist in consultation with USFWS, the nest(s) shall be monitored by a qualified biologist during construction within the 600-foot buffer. Construction activities may be halted at any time if, in the professional opinion of the biologist, construction activities are affecting the breeding effort.	USFWS	USFWS/ Biologist	Prior to project construction

TABLE B-1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

Impact Topic	Mitigation Measure	Implementation Responsibility	Monitoring/Reporting Responsibility	Timing
Roosting Bats	**Mitigation Measure BIO-6: Perform Pre-construction Surveys for Special-status Bat Species.** If construction activities commence on the project site during the maternity roosting season of native bat species (approximately April 15 to August 31), a survey for special-status bats shall be conducted by a qualified biologist prior to construction activities to characterize potential bat habitat and identify active roost sites. Surveys should be conducted within 100 feet of construction activities. If no roosting bats are found, then no further mitigation is required. If bats are found, then USFWS shall notify CDFW and explain any additional measures that a qualified biologist plans to implement to prevent or minimize disturbance to roosting bats. Additional provisions resulting from the consultation could be required to protect roosting bats.	USFWS	USFWS/ Biologist	Prior to project construction
Revegetation	**Mitigation Measure BIO-7: Revegetation.** After channel bar grading activities have been completed, portions of the disturbed areas will be revegetated with native riparian vegetation. Planting would occur in late November before the winter storm season in order to maximize survival rates. USFWS is currently preparing a Revegetation Plan, which will be implemented as soon as construction is complete.	USFWS	USFWS/ Restoration Ecologist/ Construction Contractor	Following project construction
Cultural Resources	**Mitigation Measure CUL-1: Inadvertent Discovery of Cultural Resources.** If an inadvertent discovery of archaeological resources is made during the project, the USFWS will require ground disturbing activities in the vicinity of the discovery to cease. Prehistoric archaeological materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil ("midden") containing heat-affected rocks, artifacts, or shellfish remains; and stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-period materials might include refuse-filled privies or wells. After cessation of excavation the contractor shall immediately contact the USFWS. The contractor shall not resume work until authorization is received from the USFWS. In the event of unanticipated discovery of archaeological materials during project implementation, the USFWS shall retain the services of a Secretary of the Interior-qualified archaeologist (and a Native American representative if the site is prehistoric) to evaluate the significance of the find prior to resuming any activities that could impact the site. In the case of an unanticipated archaeological discovery, if it is determined that the find is potentially eligible for listing in the National Register, and the site cannot be avoided, the USFWS shall provide a research design and treatment plan, prepared by a qualified archaeologist, outlining data recovery to be performed on the resource, analysis, and reporting of the find. The research design and treatment plan shall be submitted to and approved by the USFWS, the State Historic Preservation Officer, and appropriate Native American organizations prior to construction being resumed.	USFWS	USFWS / Construction Inspector / Archaeologist	During project construction
Cultural Resources	**Mitigation Measure CUL-2: Inadvertent Discovery of Human Remains.** If potential human remains are encountered, ground disturbing activities in the vicinity of the discovery shall cease and the Nevada or Yuba County Coroner shall be contacted in accordance with Public Resources Code Section 5097.98 and Health and Safety Code Section 7050.5. If the Coroner determines the remains are Native American, the Coroner will contact the Native American Heritage Commission (NAHC). As provided in Public Resources Code Section 5097.98, the NAHC will identify the person or persons believed to be most likely descended from the deceased Native American. The Most Likely Descendent will make recommendations for means of treating, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98.	USFWS	USFWS / Construction Inspector / Archaeologist	During project construction

TABLE B-1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

Impact Topic	Mitigation Measure	Implementation Responsibility	Monitoring/Reporting Responsibility	Timing
Cultural Resources	**Mitigation Measure CUL-3: Halt Work if Human Skeletal Remains are Identified During Construction**. If human skeletal remains are uncovered during project construction, work must immediately halt and the Merced County Coroner must be contacted to evaluate the remains; the procedures and protocols set forth in Section 15064.5 (e)(1) of the CEQA Guidelines must be followed. If the County Coroner determines that the remains are Native American, the project proponent shall contact the NAHC, in accordance with Health and Safety Code Section 7050.5, subdivision (c), and Public Resources Code 5097.98 (as amended by AB 2641). Per Public Resources Code 5097.98, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred, as prescribed in this section (PRC 5097.98), with the most likely descendants regarding their recommendations, if applicable, taking into account the possibility of multiple human remains.	USFWS	USFWS / Construction Inspector / Archaeologist	During project construction
Hazards and Hazardous Materials	**Mitigation Measure HM-1:** During construction, staging areas, or areas slated for development using spark-producing equipment shall be cleared of dried vegetation or other materials that could serve as fire fuel. To the extent feasible, the contractor shall keep these areas clear of combustible materials in order to maintain a firebreak. Any construction equipment that normally includes a spark arrester shall be equipped with an arrester in good working order. This includes, but is not limited to, vehicles and heavy equipment.	USFWS	USFWS/ Construction Contractor	During project construction
Hydrology and Water Quality	**Mitigation Measure HYDRO-1: Prepare and Implement a SWPPP.** Subject to requirements of Section 402 of the federal Clean Water Act, and the National Pollutant Discharge Elimination System (NPDES) permitting process, all construction projects that disturb more than one acre of land are required to prepare and implement a stormwater pollution prevention plan (SWPPP). The SWPPP is incorporated into all project plans and specifications. The restoration construction contractor(s) will be required to post a copy of the SWPPP at the project location, file a notice of intent to discharge stormwater with the CVRWQCB, and implement all measures required by the SWPPP. A Qualified SWPPP Practitioner (QSP) will be responsible for construction monitoring to ensure that the provisions of the SWPPP are effectively enforced. In the event of noncompliance, the QSP will have the authority to shut down the construction site or fine the responsible party or parties. • The SWPPP will include the following information and Best Management Practices (BMPs). • A description of site characteristics, including runoff and drainage characteristics and soil erosion hazard. • A description of proposed construction procedures and construction-site housekeeping BMPs, including prohibitions on discharging or washing potentially harmful materials into roads, drainages, or the Yuba River. • A description of BMPs that will be implemented for erosion and sediment control, including requirements to: • Conduct major construction activities involving excavation and spoils haulage during the dry season, to the extent possible. • Conduct all construction work in accordance with site-specific construction plans that minimize the potential for increased sediment inputs to \ surface waters.	USFWS	USFWS / Construction Contractor	Prior to and during project construction

TABLE B-1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

Impact Topic	Mitigation Measure	Implementation Responsibility	Monitoring/Reporting Responsibility	Timing
Hydrology and Water Quality (cont.)	• Grade and stabilize spoils sites to minimize erosion and sediment input to surface waters and generation of airborne particulate matter. • Implement erosion control measures as appropriate to prevent sediment from entering surface waters to the extent feasible, including the use of silt fencing or fiber rolls to trap sediments. • A Spill Prevention and Response Plan that identifies any hazardous materials to be used during construction; describes measures to prevent, control, and minimize spillage of hazardous substances; describes transport, storage and disposal procedures for these substances; and outlines procedures to be followed in case of a spill of a hazardous material. The Spill Prevention and Response Plan will require that hazardous and potentially hazardous substances stored onsite be kept in securely closed containers located away from drainage courses and areas where stormwater is allowed to infiltrate. Spill prevention kits will be required to be kept in close proximity to construction areas and workers will be trained in their use. It will also stipulate procedures, such as the use of spill containment pans, to minimize hazard during onsite fueling and servicing of construction equipment. Finally, the Spill Prevention and Response Plan will require that all agencies listed in the Spill Prevention and Response Plan be notified immediately of any substantial spill or release. • A stipulation that construction will be monitored by a QSP to ensure that contractors are adhering to all provisions relevant to state and federal stormwater discharge requirements, and that the QSP will shut down the construction site in the event of noncompliance.			
Hydrology and Water Quality	**Mitigation Measure HYDRO-2: Water Quality Measures for In-Channel Work.** • In-channel work, including all channel and bank modifications, will be restricted to the minimum necessary to support restoration success. In-channel work will be limited to the summer season (1 July – 1 September). • The project will comply with Section 401 of the Clean Water Act and obtain certification for project-related activities to control sediment from entering the main river channel during construction. To minimize risk from additional fine sediments, all trucks and equipment will be cleaned, and gravels will be processed away from flowing water. • Throughout the construction period, water quality (turbidity, settleable material, and/or visible construction pollutants) will be monitored as required by Section 401 CVRWQCB certification requirements to ensure that it stays within acceptable limits. This will include regular grab samples to monitor turbidity and settleable material. Construction pace will be slowed and/or stopped if turbidity exceeds criteria established by the CVRWQCB. • Total mercury concentrations from excavated fine sediments (fines) will be evaluated to ensure materials used within the restoration footprint are below or within an acceptable range of natural background levels. Excavated fines will be monitored and tested regularly, following methods in the Stillwater Sciences Mercury Assessment conducted at Merced River Ranch (2004). For construction activities that involve fines, samples will be randomly collected every other day from the 'fines' pile at the processing plant. All samples will be delivered to and analyzed by a qualified laboratory located within driving distance of the project site. The laboratory will supply collection jars and collection methods, and sampling quantities will follow laboratory instructions. Thresholds shall be established for acceptable mercury levels, in coordination with the RWQCB as a part of the Section 401 permit process; sampling results will be compared to these established thresholds. If fines contain acceptable levels of mercury, they will be placed in	USFWS	USFWS / Construction Contractor	Prior to and during project construction

TABLE B-1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

Impact Topic	Mitigation Measure	Implementation Responsibility	Monitoring/Reporting Responsibility	Timing
Hydrology and Water Quality (cont.)	upslope areas away from drainages, and used to provide a soil matrix for re-vegetation of riparian species, or to serve as a base above which additional topographic variation is created. If fines are determined to contain mercury above acceptable levels, they may be buried and capped with coarser materials, or hauled off-site for proper disposal, based upon resource agency direction. As laboratory turn-around times are generally short (< 48 hrs.), the monitoring team will obtain approximate real-time information about any potential mercury-related issues. All on-site construction activities involving the use and/or placement of fines will cease, if mercury measurements above established thresholds are observed, to allow for coordination with appropriate resource agencies, for the assessment of contamination potential and the appropriate type(s) of use and/or disposal. • Oil and grease used in equipment will be vegetable based. • All equipment working within the stream corridor will be inspected daily for fuel, lubrication, and coolant leaks; and for leak potentials (e.g., cracked hoses, loose filling caps, stripped drain plugs); and, all equipment must be free of fuel, lubrication, and coolant leaks. • In-stream construction will proceed in a manner that minimizes sediment discharge. • Vehicles or equipment will be washed/cleaned only at the primary staging area or other approved off-site areas. All equipment will be steam cleaned prior to working within the stream channel to remove contaminants that may enter the river and adjacent lands. All equipment will be fueled and lubricated in a designated staging area located outside the stream channel and banks, • All equipment entering the river that has been used in or near other Central Valley rivers would be steam cleaned before it is used to minimize the chance of introducing New Zealand mud snails or other invasive species to the project site. • Spill prevention kits will be in close proximity to construction areas and workers will be trained in their use. • Gravel, either obtained onsite or from a commercial source, will be appropriately screened prior to being placed in the river to avoid introduction of fine material into the Yuba River. On-site gravels will be screened and sorted; gravels imported from a commercial source, if necessary, will be clean-washed and of appropriate size.			
Hydrology and Water Quality	**Mitigation Measure HYDRO-3: Fill Placement Measures.** • Gravel, either obtained onsite or from a commercial source, will be appropriately screened prior to being placed in the river to avoid introduction of fine material into the Yuba River. On-site gravels will be screened and sorted; gravels imported from a commercial source, if necessary, will be clean-washed and of appropriate size. • During in-channel work, clean spawning gravels will be used where practical to create a pad in the channel from which equipment will operate. • Spawning gravel or the existing substrate will be used to construct any required in-stream crossings. • Following completion of restoration activities, spawning gravel will be used in overall restoration actions and/or spread evenly across the bottom of the channel, consistent with existing gravels.	USFWS	USFWS / Construction Contractor	During project construction

TABLE B-1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM

Impact Topic	Mitigation Measure	Implementation Responsibility	Monitoring/Reporting Responsibility	Timing
Noise	**Mitigation Measure NOISE-1:** To reduce daytime noise impacts due to onsite restoration, the USFWS shall require contractors to implement the following measures: • The construction contractor will ensure that all equipment is equipped with sound-control devices no less effective than those provided as original equipment. All equipment will be operated and maintained to meet the applicable Nevada County standards for construction noise generation. No equipment will be operated with an unmuffled exhaust. • The construction activities will occur Monday through Friday from 6:30 am to 5 pm.	USFWS	USFWS / Construction Contractor	During project construction