

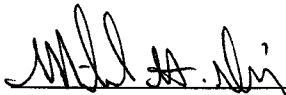
Department of the Interior
Bureau of Reclamation
Mid-Pacific Region

Record of Decision

Contra Costa Water District
Los Vaqueros Expansion
Final Environmental Impact Statement

February 2011

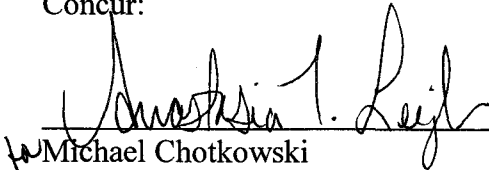
Recommended:



Michelle H. Denning
Regional Planning Officer

Date 2/25/2011

Concur:



Michael Chotkowski
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Date 2/25/2011

Approved:



Donald R. Glaser
Regional Director

Date 3/11/2011

I. Introduction

This Record of Decision (ROD) documents the decision of the Department of the Interior, Bureau of Reclamation (Reclamation), Mid-Pacific Region on the Los Vaqueros Expansion. Reclamation's decision is to enter into an Integrated Operations Agreement by and between Reclamation and Contra Costa Water District (CCWD).

This ROD is based upon the Final Environmental Impact Statement/Environmental Impact Report (EIS/EIR) dated March 2010.

II. Background

On May 10, 2005, Reclamation executed a Long-Term Renewal Contract with CCWD. CCWD diverts a small portion of its water supply under its own permit and license at Mallard Slough intake (when CCWD uses its Mallard Slough water rights, use of Central Valley Project (CVP) water delivered under its water supply contract with Reclamation is reduced by a like amount). Reclamation supplies up to 195,000 acre-feet per year (af/yr) of CVP water for delivery to CCWD's service area. CVP water is diverted at the Rock Slough Intake for the Contra Costa Canal and at CCWD's Old River Intake and new Middle River Intake on Victoria Canal for the Los Vaqueros Reservoir and/or the Contra Costa Canal. This water supply is subject to wide variations in salt and organic carbon concentrations, as well as other water quality parameters. Reclamation does not warrant the quality of water delivered to CCWD.

During periods when water quality in the Delta at CCWD intakes does not meet CCWD's water quality objectives, CCWD uses higher-quality water stored in Los Vaqueros Reservoir to blend with the directly diverted Delta water. However, even with the source blending benefits of the Los Vaqueros Reservoir, CCWD expects to be unable to meet its water quality objectives during some extended periods of high salinity in the Delta, and expects these periods to occur more frequently in the future.

CCWD serves treated and untreated water to approximately 550,000 people in central and eastern Contra Costa County, California. CCWD provides retail treated water to customers in Clayton, Clyde, Concord, Pacheco, Port Costa, and parts of Martinez, Pleasant Hill, and Walnut Creek primarily from the Bollman Water Treatment Plant (WTP) in Concord, but also the Randall-Bold Water Treatment Plant in Oakley.

In addition, CCWD sells wholesale treated water to the City of Antioch and the Golden State Water Company in Bay Point. CCWD treats water for wholesale distribution primarily at the Randall-Bold WTP in Oakley for delivery to the Diablo Water District, the Golden State Water Company which distributes water to its customers in Bay Point, and to the city of Brentwood (Brentwood's untreated water is supplied by the East Contra Costa Irrigation District). CCWD also sells untreated water to the cities of Antioch, Martinez, and Pittsburg, each of whom has its own treatment facilities, as well as 22 major industrial customers, and a number of smaller customers.

Decision

The Preferred Alternative, expansion of the existing reservoir from 100 thousand acre-feet (TAF) to 160 TAF, provides dry year water supply reliability, improves CCWD water quality, and increases the emergency water supply for the San Francisco Bay Area. The Federal action by Reclamation is limited to entering into a coordinated operations agreement by and between Reclamation and CCWD to identify how and when Los Vaqueros Reservoir is to fill without adversely impacting the Federal CVP and the State Water Project (SWP).

After consideration of the analysis in the Draft and Final EIS/EIR (released February 2009, and March 2010, respectively), and other information in the record, Reclamation's decision is to enter into a coordinated operations agreement that establishes the provisions under which the expanded reservoir may operate in the regulated environment of the Sacramento-San Joaquin Bay-Delta.

CCWD's implementation of the Preferred Alternative will include compliance with all required mitigation set forth in the Mitigation Monitoring and Reporting Program (MMRP) (Attachment A), and the Biological Opinions (BOs). The Preferred Alternative, which is also the environmentally preferable alternative, is the 60 TAF expansion of the existing reservoir (Alternative 4), as described in detail below and more fully described in the EIS/EIR.

Operations

CCWD operates the reservoir together with its intakes to provide high quality, low-salinity water to its customers. In winter and spring, when the Delta is relatively fresh (generally January through July), customer demand is supplied by direct diversion from the Delta. In the late summer and fall months, CCWD releases water from the Los Vaqueros Reservoir to blend with higher-salinity direct diversions from the Delta to meet CCWD water quality goals. The reservoir is re-filled during winter and spring, when chloride concentrations at Old River are low.

The reservoir is operated in a manner consistent with the biological opinions for the reservoir, which require numerous fish protection measures, including an annual 75-day "no-fill" period and a concurrent 30-day "no-diversion" period. The default dates for the no-fill and no-diversion periods are March 15 through May 31 and April 1 through April 30, respectively; the U.S. Fish and Wildlife Service, National Marine Fisheries Service, and California Department of Fish and Game can change these dates to best protect covered species. Customer demand during the no-diversion period is met through releases from the reservoir. CCWD also preferentially uses the screened Old River Intake over unscreened Rock Slough from January through August to further protect fish.

CCWD diverts unregulated flows and regulated flows from CVP storage facility releases as a contractor of Reclamation's CVP. Under Water Service Contract No. 175r-3401A-LTR1 (renewed May 10, 2005) with Reclamation, CCWD can divert and re-divert up to 195 TAF per year of water from its Rock Slough, Old River and Middle River intakes for direct use or to storage in Los Vaqueros Reservoir. CCWD also diverts from Old River to storage in the reservoir under its own Los Vaqueros water right permit (Permit No. 20749).

IV. Alternatives Considered

The process for developing alternatives involved consideration of previous studies and reports from the CALFED Bay-Delta Program and CCWD, input from CCWD engineers, planners, and consultants; and results of the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) scoping activities.

Screening criteria included factors such as water supply reliability, environmental water management, water quality improvement, regulatory requirements, institutional factors, technical and operational practicability, and cost. The first phase of screening determined the alternatives that could potentially meet the purpose and need/project objectives.

The second stage of screening included a more detailed evaluation of the alternatives to determine which should be carried forward into the EIS/EIR for a detailed analysis of environmental impacts. The EIS/EIR evaluated the No-Action Alternative and four action alternatives in detail. The action alternatives include Alternative 1, Expanded 275-TAF Reservoir, South Bay Connection, Environmental Water Management and Water Supply Reliability Dual Emphasis; Alternative 2, Expanded 275-TAF Reservoir, South Bay Connection, Environmental Water Management Emphasis; Alternative 3, Expanded 275-TAF Reservoir, No South Bay Connection, Environmental Water Management Emphasis; and Alternative 4 (Preferred Alternative), Expanded 160-TAF Reservoir, No South Bay Connection, Water Supply Reliability Emphasis. The alternatives, including the Preferred Alternative, are described below:

No-Action Alternative

The No-Action Alternative represents the projection of current conditions to reasonably foreseeable future conditions that could occur if the proposed activity would not take place. Essentially, the No-Action Alternative represents the future without the proposed action. Under this alternative, CCWD and Reclamation would not implement the Los Vaqueros Reservoir Expansion (LVE) project. CCWD would continue to operate and maintain its existing facilities to deliver reliable water supply to its customers and maximize delivered water quality consistent with environmental regulations and permit conditions. In the near term, there would be no substantive operational changes implemented under the No-Action Alternative.

Bay Area water agencies receiving water from the Delta via the SWP or the CVP would continue to pursue actions to improve water supply reliability under separate environmental impact review, in accordance with CEQA and NEPA, as appropriate. No new emergency storage would be provided at Los Vaqueros Reservoir for Bay Area water agencies. No new pipeline connection to Bethany Reservoir would be constructed. The approved enlargement of the South Bay Aqueduct (SBA) now in progress would be completed, but no other changes to the SBA conveyance system would be included.

Action Alternatives

Expanded 275-TAF Reservoir, South Bay Connection, Environmental Water Management and Water Supply Reliability Dual Emphasis (Alternative 1)

The physical features of Alternative 1 consist of expanding the existing storage capacity of Los Vaqueros Reservoir from 100 TAF to 275 TAF by raising the existing dam and building over the existing dam facility to support the larger reservoir. Total diversion capacity would be up to 670 cfs with 500 cfs from the existing Old River Intake and Pump Station (250 cfs) and Middle River (250 cfs), and the remaining capacity from a new 170 cfs Delta Intake and Pump Station. The new Delta Intake and Pump Station would be constructed along the Old River channel south of the existing intake structure.

The capacity of the existing conveyance facilities that move water from the Delta to the Los Vaqueros Reservoir would also be expanded by installing an additional pipeline parallel to the existing pipeline that extends from the Delta to the Transfer Facility and then from the Transfer Facility to the reservoir; and adding expanded facilities at the existing Transfer Facility site. The proposed new Delta-Transfer Pipeline would have a capacity of up to 350 cfs. With the addition of this pipeline, total conveyance capacity between the Delta intake facilities and the Transfer Facility would be up to 670 cfs.

Similarly, an adjoining pipeline, referred to as the Transfer-LV Pipeline, would be installed parallel to the existing Transfer Pipeline between the Transfer Facility and the Los Vaqueros Reservoir and would be used to fill the expanded reservoir at a rate of up to 670 cfs and to release water from the Los Vaqueros Reservoir to Bethany Reservoir via the Transfer-Bethany Pipeline at a rate of up to 470 cfs. The existing Transfer Pipeline would be used to convey release flows to the Contra Costa Canal via the Los Vaqueros Pipeline at up to 400 cfs.

The water system operations include a dual emphasis to improve environmental water management and to increase water supply reliability for the Bay Area.

Expanded 275-TAF Reservoir, South Bay Connection, Environmental Water Management Emphasis (Alternative 2)

The physical features of Alternative 2 consist of new and expanded facilities to increase the storage capacity of Los Vaqueros Reservoir and connect to the South Bay water agencies which would be the same as those described for Alternative 1. Alternative 2 is distinct from Alternative 1 in the water system operations evaluated. The water system operations for this alternative are focused on using the expanded Los Vaqueros system primarily to improve environmental water management. This alternative results in some increases to water supply reliability, but not to the same extent as Alternative 1.

Expanded 275-TAF Reservoir, No South Bay Connection, Environmental Water Management Emphasis (Alternative 3)

The physical features of Alternative 3 consists of new and expanded facilities to increase the storage capacity of Los Vaqueros Reservoir to a 275-TAF reservoir as in Alternatives 1 and 2 with expanded diversion and filling capacity but without the South Bay Connection or new Delta Intake and Pump Station. This alternative represents a "reduced facility" scenario. Diversion rates would be lower and a new Delta intake would not be required. The Old River Intake and Pump Station would be expanded by replacing the existing pumps with higher capacity pumps and installing additional fish screens within existing vacant bays. All expansion work would be conducted within the existing facility site and would not require work within Old River. Total diversion capacity would be 570 cfs with Middle River Intake providing 250 cfs and an Expanded Old River Intake and Pump Station providing 320 cfs.

The water system operations for this alternative are focused on using the expanded Los Vaqueros system to improve environmental water management. The water stored upstream of the Delta in CVP reservoirs that had been reserved for delivery to CCWD could be reallocated for environmental purposes. These purposes would include cold water releases to support salmon spawning or pulse flow releases to support salmon migration in addition to water for wildlife refuges or other environmental purposes.

Expanded 160-TAF Reservoir, No South Bay Connection, Water Supply Reliability Emphasis (Alternative 4, Preferred Alternative)

The physical features and operations of Alternative 4 are presented under Section III, "Decision," above.

Environmentally Preferable Alternative (Alternative 4)

The Environmentally Preferable Alternative best promotes the national environmental policies expressed in NEPA. The environmentally preferable alternative attains the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences, causes the least damage to the environment, and best protects natural and cultural resources.

In comparing the alternatives, it is apparent that all of the action alternatives, including the Preferred Alternative, will have short-term construction-related impacts upon many resources that do not occur with the No-Action Alternative. However, construction-related impacts are short-term in nature and can be mitigated with the measures described in the environmental commitments set forth in the Mitigation Monitoring and Reporting Program (MMRP).

The Environmentally Preferable Alternative is the Preferred Alternative (Alternative 4). The impacts of Alternative 4 will be less than those of Alternatives 1, 2, and 3, with the primary difference being a smaller project footprint on environmentally sensitive lands and waterways.

V. Basis of Decision, Issues Evaluated, and Factors Considered

The decision is based on meeting the objectives, Federal and State requirements, and the evaluation of impacts as provided within the EIS/EIR. Implementation of the Preferred Alternative provides CCWD with dry year water supply reliability, increases the emergency water supply for the San Francisco Bay Area, and improves CCWD water quality which satisfies some, but not all of the feasibility study objectives.

Biological Resources

Reclamation has completed Section 7 consultation under the Endangered Species Act with the U.S. Fish and Wildlife Service (Service) and also with the National Marine Fisheries Service (NMFS) for this action. The terrestrial Biological Opinion (BO) and Incidental Take Statement from the Service for implementation of the Preferred Alternative was completed on February 24, 2011 after they reviewed the current status of the California red-legged frog, California tiger salamander, Alameda whipsnake, San Joaquin kit fox, and valley elderberry longhorn beetle. The Service concluded that the project, as proposed, including extensive conservation measures, is not likely to jeopardize the continued existence of these listed terrestrial species. Conservation measures include, but are not limited to the acquisition and protection of a minimum of 4,890 acres of habitat in Contra Costa, Alameda, and San Joaquin Counties.

The Service concurred with Reclamation's determination that the listed delta smelt are not likely to be adversely affected by implementation of the Preferred Alternative. Similarly, NMFS concurred with Reclamation's determination that listed winter-run Chinook salmon, spring-run Chinook salmon, Central Valley steelhead, and green sturgeon are not likely to be adversely affected by implementation of the Preferred Alternative.

Additionally, the Fish and Wildlife Coordination Act Report, prepared by the Service, concluded that the Alternative 4, the Preferred Alternative, would have the fewest terrestrial impacts of all the proposed action alternatives. It would have the smallest reservoir footprint, the fewest facilities, and would not impact terrestrial habitats in the out-of-watershed study area. However, implementing this alternative would still result in impacts to the grassland habitat within the Los Vaqueros watershed, in addition to impacts to other habitats within the watershed. This alternative would result in relatively small impacts to Delta fishery resources as compared to the No Project/No Action alternative. The Report indicated that overall Alternative 4, the Preferred Alternative, would result in the fewest negative environmental effects.

Compliance with Other Regulations

CCWD and Reclamation are complying with all applicable federal and State regulations. CCWD will secure a permit from the United States Army Corps of Engineers (Corps) on the Preferred Alternative pursuant to Section 404(b)(1) of the Clean Water Act (33 U.S.C. 1344). The project also requires that the State Water Resources Control Board and Central Valley

Regional Water Quality Control Board issue a Section 401 water quality certification pursuant to Section 401 of the Clean Water Act.

Cultural Resources Section 106

In compliance with Section 106 of the National Historic Preservation Act (NHPA) (16 U.S.C. 470) and its implementing regulations at 36 CFR Part 800, Reclamation as the lead federal agency for compliance with Section 106, has determined that the act of entering into an operations agreement with CCWD constitutes an undertaking pursuant to Section 307 of the NHPA and §800.16(y). Further, this undertaking was determined to result in actions that have the potential to cause adverse effects to historic properties. Utilizing cultural resources identification efforts provided by CCWD under contract with William Self and Associates, Reclamation entered into consultation with the State Historic Preservation Officer (SHPO) seeking their concurrence on our finding of adverse effects to historic properties on November 1, 2010. The SHPO concurred with Reclamation's finding on November 16, 2010. In accordance with §800.6(a)(1), Reclamation notified the Advisory Council on Historic Preservation (ACHP) of our finding of adverse effects to historic properties and invited their participation in the resolution of adverse effects on November 24, 2010. The ACHP responded to Reclamation on December 15, 2010 declining our invitation to participate in the resolution of adverse effects, stating that they did not believe that their participation was needed at this time. Copies of these correspondences are included in Attachment B. Reclamation has continued and will continue to seek input from both federally recognized Indian Tribes and other potentially interested parties in both the identification of historic properties and the resolution of adverse effects.

Reclamation shall enter into a Memorandum of Agreement (MOA) between Reclamation, SHPO, Corps, and CCW to resolve adverse effects to historic properties. The Corps is a cooperating agency in the Section 106 process. The MOA stipulates the efforts the above parties will take to continue historic property identification efforts and resolve adverse effects to historic properties. Execution of the MOA will result in the fulfillment of Reclamation's and the Corps' collective responsibilities under Section 106. The MOA will guide the implementation of the 160 AF reservoir raise as it applies to the treatment of and effects to historic properties which will include ongoing involvement by the signatory parties as stipulated in the MOA. Reclamation shall not sign or execute an operations agreement with CCWD until the MOA has been executed. To date, a draft MOA has been provided to the SHPO, CCWD, and the Corps for their review. Requests for input have also been solicited from federally recognized Indian Tribes.

Consideration of Environmental Impacts

The Preferred Alternative would provide dry year water supply reliability, improve CCWD water quality, and increase the emergency water supply for the San Francisco Bay Area.

Based on the analysis presented in the EIS/EIR, the majority of the impacts would result from construction activities. These temporary impacts can be mitigated through implementation of the mitigation measures identified in the EIS/EIR and MMRP. However, the San Joaquin kit fox impacts cannot be avoided through project redesign, mitigation measures, or the selection of an

environmentally preferable alternative to reduce impacts. Increased inundation results in a disconnect in an existing corridor used as habitat by the San Joaquin kit fox.

Potentially significant impacts were evaluated in the EIS/EIR and identified for the following issue areas: Delta fisheries and aquatic resources, geology, soils and seismicity; local hydrology, drainage, and water quality, biological resources, land use; agriculture; transportation and circulation, air quality; noise; utilities and public service systems; hazardous materials/public health; visual/aesthetic resources; recreation; and cultural resources. However, all of these impacts with the exception of effects to San Joaquin kit fox can be mitigated such that the Preferred Alternative is the environmentally preferable alternative.

VI. Implementing the Decision and Environmental Commitments

Reclamation and CCWD have adopted all practicable means to avoid or minimize environmental harm for the Preferred Alternative and are committed to ensure the measures identified in the EIS/EIR are implemented. The Preferred Alternative is designed to minimize potential harm to floodplains, wetlands, and farmlands. The attached Mitigation Monitoring and Reporting Program (MMRP) is part of this decision as a means to avoid and/or minimize adverse effects of the Preferred Alternative.

The MMRP includes a summary of all the environmental commitments and mitigation for the Preferred Alternative specified in the EIS/EIR, specifies the party responsible for implementation, and provides a time frame for completion. Reclamation and CCWD will use this tool to ensure environmental impacts are minimized and natural resources are protected. Additionally, Reclamation and CCWD will implement all the Reasonable and Prudent Measures set forth in the Incidental Take Statements for the Preferred Alternative.

VII. Mitigation Monitoring and Reporting Program

Mitigation Measures adopted by Reclamation as part of this ROD are detailed in the MMRP, (Attachment A). The MMRP has been prepared to ensure all required mitigation measures are implemented and completed according to schedule in an effective manner during design, construction, and operation as required. The MMRP identifies the mitigation measures to address the following subjects:

- Local hydrology, drainage and groundwater
- Biological resources
- Wetlands
- Terrestrial habitat
- Special-status species
- Migratory birds

- Light and glare
- Traffic control and safety
- Air quality
- Utilities and public service systems
- Solid waste reduction
- Hazardous materials/public health
- Visual/aesthetic resources
- Recreation
- Cultural and Paleontological resources

These mitigation measures specified in the EIS/EIR were incorporated into the MMRP.

VIII. Comments on the Final Environmental Impact Report/Final Environmental Impact Statement

The Final EIS/EIR was released on March 31, 2010. Four comment letters were received on the Final EIS/EIR for the LVE Project: 1) East Bay Regional Park District (EBRPD); 2) Contra Costa County Flood Control and Water Conservation District (CCCFCWCD); 3) Western Area Power Administration (Western); and 4) United States Environmental Protection Agency (EPA), Region 10. In addition, three speakers made comments at the CCWD Board of Directors meeting on March 31, 2010, at which the CEQA Final EIR was certified: 1) Brad Olson, EBRPD; 2) Troy Bristol, Save Mount Diablo; and 3) Bird Morningstar, CCWD customer and owner of a landscape management company. The comment letters and the speakers at the CCWD Board meeting of March 31, 2010, reiterated issues that were fully addressed in the EIS/EIR and that the commenters had raised previously in their comments on the Draft EIS/EIR for which they had received a response in the Response to Comments section of the Final EIS/EIR.

The EBRPD speaker and letter again requested that CCWD provide a new multi-use trail to mitigate for project impacts to public recreation. Mr. Bristol of Save Mount Diablo also made this comment. As explained in the EIS/EIR, the only significant impact to public recreation is associated with the temporary closure of the watershed during project construction and reservoir refill. Mitigation is provided for this impact. There are no impacts to multi-use trails and the project will increase the length of public hiking trails within the watershed, thus expanding trail recreation opportunities. Additional trails, as requested by EBRPD, are not needed to mitigate for any project impacts. The EBRPD letter also encourages CCWD to acquire and restore lands near the watershed and with high biological values as part of its mitigation program. In accordance with EIS/EIR mitigation requirements, CCWD will implement a comprehensive Biological Resources Mitigation and Compensation Program. Habitat quality and proximity to the watershed will be taken in to account along with other factors that reflect the conservation goals and needs for affected habitats and special status species. Mr. Bristol also reiterated a concern

about the project impact on existing conservation easements and indicated that compensation for these areas should occur at a higher ratio than provided for in the EIS/EIR mitigation in order to have a punitive effect. The EIS/EIR identified appropriate habitat compensation ratios based on the nature and magnitude of project impact. Mr. Bristol also expressed concern for the project impact on kit fox movement corridors. The EIS/EIR stated that the District would work with regulatory agencies in order to identify and preserve kit fox corridors and promote connectivity.

The CCCFCWCD comment letter discusses specific technical issues associated with site drainage at the reservoir and requests that CCWD coordinate with the County on issues related to flood control and permits. CCWD will continue to coordinate and work with the County on these issues. Western reiterated in its letter that because the selected project alternative – the 160-TAF reservoir expansion – does not require additional power supply or infrastructure from Western, it will not be further involved in the project process and will not be signing the ROD.

Bird Morningstar commented that additional water storage was needed, but was concerned that at some point there would not be enough water to put into the reservoir. As discussed in the EIS/EIR, the reservoir expansion project would increase water system flexibility that would further improve CCWD ability to manage its water supply diversion in response to Delta conditions.

The EPA letter indicated that revisions made in response to its comments on the Draft EIS/EIR regarding vernal pools adequately addressed its concerns. The EPA reiterated its concern regarding sufficient environmental assurances for project benefits related to fishery enhancements and recommended the ROD provide more concrete assurances that environmental benefits will be incorporated in, and achieved by, the project. Since publication of the Final EIS/EIR, Reclamation and CCWD have proceeded to develop a Coordinated Operations Agreement to establish the project operating procedures that will assure protections for listed threatened and endangered fish species consistent with current operations of the CVP/SWP. Finally, the EPA letter reiterated a concern for the potential effects of climate change, specifically sea-level rise, on the overall State and Federal water systems operation and ability to provide a reliable water supply and maintain water quality through the release of upstream reservoir water. The Final EIS/EIR acknowledges the potential issues for the State and Federal water system posed by climate change. The project improves system flexibility, which in a real, albeit small, way could aid in responding to changing conditions under a range of climate change scenarios.

The comments received did not raise substantive or new issues that had not been addressed in the Final EIS/EIR. Therefore, no additional response is provided in this ROD.

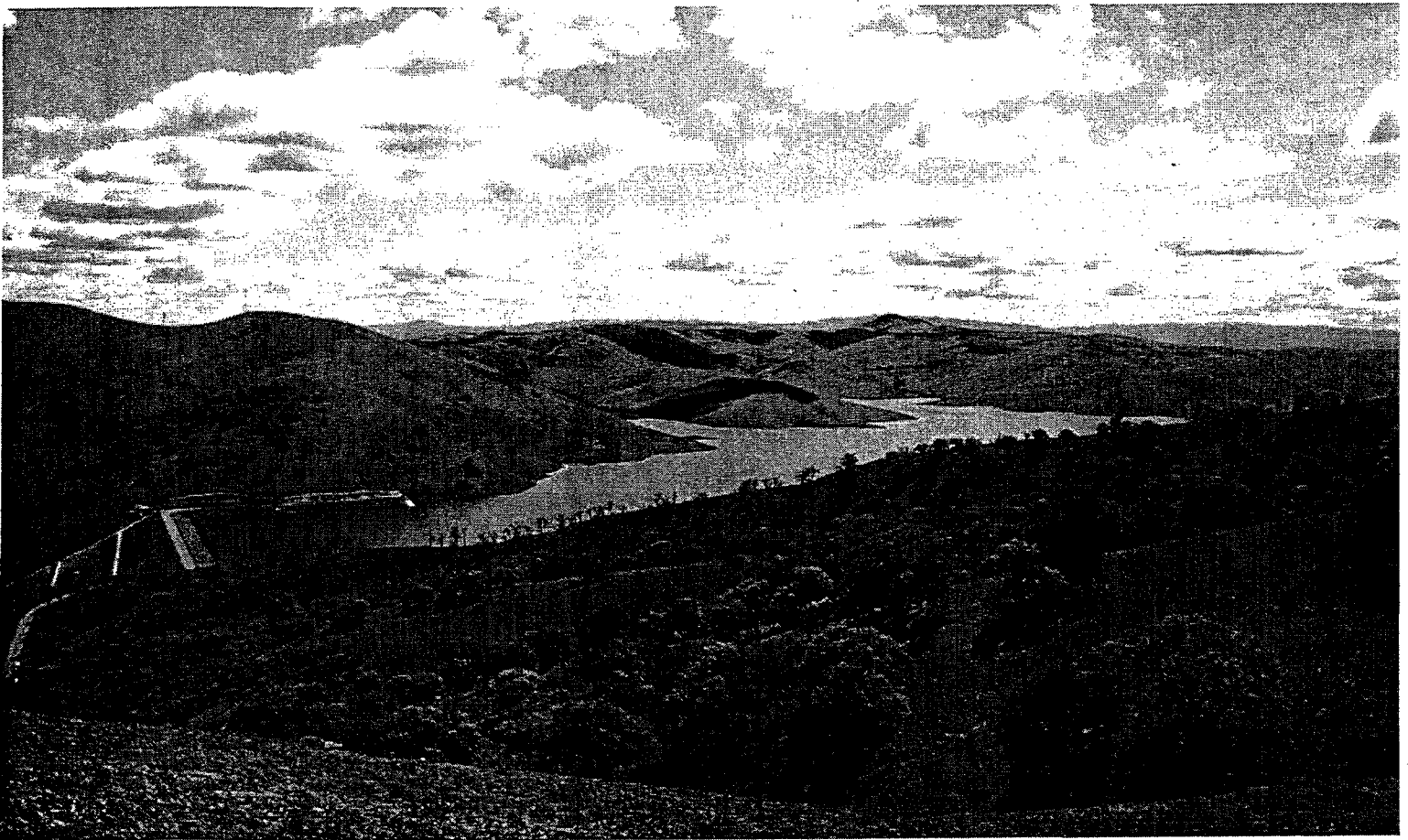
Attachment A
Los Vaqueros Expansion
Mitigation Monitoring and Reporting Program

LOS VAQUEROS RESERVOIR EXPANSION PROJECT

Mitigation Monitoring and
Reporting Program

Prepared for
Contra Costa Water District

March 2010



LOS VAQUEROS RESERVOIR EXPANSION PROJECT

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LOS VAQUEROS RESERVOIR EXPANSION PROJECT

Mitigation Monitoring and Reporting Program

Introduction

In accordance with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA), the Contra Costa Water District (CCWD) and the U.S. Department of the Interior, Bureau of Reclamation, Mid-Pacific Region (Reclamation) prepared an Environmental Impact Statement/ Environmental Impact Report (EIS/EIR) that identifies potentially significant effects related to the proposed Los Vaqueros Reservoir Expansion Project to be implemented by CCWD. The EIS/EIR also identifies mitigation measures that would reduce or eliminate these significant effects. This Mitigation Monitoring and Reporting Program (MMRP) addresses Alternative 4 from the EIS/EIR (the Project), which involves reservoir expansion from the existing 100,000 acre-foot (100 TAF) capacity to 160 TAF. CCWD is the lead agency under CEQA and Reclamation is the lead agency under NEPA.

Section 21081.6 of the California Public Resources Code and Sections 15091 (d) and 15097 of the State CEQA Guidelines require public agencies "to adopt a reporting or monitoring program for changes to the project which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment." An MMRP is required for the Project because the EIS/EIR for the Project identified potentially significant adverse impacts related to construction and implementation activities, and mitigation measures have been identified to reduce those impacts.

This MMRP will be adopted by the CCWD Board of Directors if the Board approves the Project.

Purpose of the MMRP

This MMRP has been prepared to ensure that all required mitigation measures are implemented and completed according to schedule and maintained in a satisfactory manner during project design, construction, and implementation, as required. The MMRP may be modified by CCWD during project implementation, as necessary, in response to changing conditions or other refinements. A summary table (attached) has been prepared to assist the responsible parties in implementing the MMRP. The table identifies individual mitigation measures, the entity responsible for implementing each measure, the timing of implementation, and a record of implementation of the mitigation measures. This table will be input into the Environmental Commitments database that will be used to track all mitigation and permit conditions for the Project. The numbering of

mitigation measures follows the numbering sequence found in the EIS/EIR. CCWD's monitoring and reporting procedures, applicable to the program as a whole, are described below.

Roles and Responsibilities

Unless otherwise specified herein, CCWD is responsible for taking all actions necessary to implement the mitigation measures according to the specifications provided for each measure and for demonstrating that the action has been successfully completed. CCWD at its discretion may delegate implementation responsibility or portions thereof to a licensed contractor.

CCWD will be responsible for overall administration of the MMRP and for verifying that CCWD staff or a qualified construction contractor has completed the necessary actions for each measure. CCWD will designate a project manager to oversee the MMRP during the construction period. Duties of the project manager include the following:

- Ensure that routine inspections of the construction site are conducted by appropriate CCWD staff; and check plans, reports, and other documents required by the MMRP.
- Serve as a liaison between CCWD and the construction contractor regarding the mitigation monitoring issues.
- Complete forms and maintain records and documents required by the MMRP.
- Coordinate and ensure that corrective actions or enforcement measures are taken, if necessary.

Monitoring and reporting requirements for mitigation measures that extend beyond the construction period will be overseen by the CCWD Watershed and Lands Manager or his designee.

MMRP Summary Table

The MMRP Summary Table that follows will guide CCWD in its monitoring and reporting of the mitigation implementation. The column categories identified in the MMRP Summary Table are described below:

- **Mitigation Measure:** Provides the number and text of the mitigation measures, which are each a condition of project approval, identified in the EIS/EIR.
- **Implementation Responsibility:** Identifies the entity responsible for complying with the requirements of each mitigation measure.
- **Timing/Schedule:** Lists the timeframe for complying with the requirements of each mitigation measure.
- **Record of Implementation:** Provides space to record the action taken and the date the action was taken to implement each mitigation measure.

SUMMARY TABLE
MITIGATION MONITORING AND REPORTING PROGRAM FOR THE LOS VAQUEROS RESERVOIR EXPANSION PROJECT

Mitigation Measure	Implementation Responsibility	Timing/Schedule	Record of Implementation
Local Hydrology, Drainage and Groundwater			
<p>Measure 4.5.1a: Prepare and Implement a Stormwater Pollution Prevention Plan that Minimizes the Potential Contamination of Surface Waters (SWPPP), and Complies with Regional Water Quality Control Board Requirements (RWQCB) to Protect Water Quality</p> <p>CCWD shall ensure that a Storm Water Pollution Prevention Plan (SWPPP) is prepared in accordance with the requirements of the RWQCB's NPDES General Construction Permit requirements. The SWPPP will be designed to identify and control pollutant sources that could affect the quality of stormwater discharges from the construction sites through the development of best management practices (BMPs). BMPs will include those that effectively target pollutants in stormwater discharges to prevent or minimize the introduction of contaminants into surface waters. To protect receiving water quality, the BMPs will include, but are not limited to, the following:</p> <ul style="list-style-type: none"> • Temporary erosion control measures (fiber rolls, staked straw bales, detention basins, check dams, geofabric, sandbag dikes, or temporary revegetation or other ground cover) will be employed for disturbed areas. • No disturbed surfaces will be left without erosion control measures in place during the winter and spring months. • Sediment will be retained onsite by a system of sediment basins, traps, or other appropriate measures. • The construction contractor will prepare standard operating procedures for the handling of hazardous materials on the construction site to prevent discharge of materials to stream or storm drains. This will include the contractor establishing specific fueling areas for construction vehicles and equipment located at least 200 feet from drainages. Grading areas must be clearly marked and equipment and vehicles must remain within graded areas. The contractor will also identify and implement as appropriate specific procedures for handling and containment of hazardous materials, including catch basins and absorbent pads. • Wherever construction work is performed near a creek, reservoir, or drainage area (excluding work that is permitted for working in the drainage itself), a 100-foot vegetative or engineered buffer will be maintained between the construction zone and surface water body. Specific water bodies to be protected through implementation of this BMP include but are not limited to: Los Vaqueros Reservoir, Kellogg Creek, and/or other seasonal drainages. 	CCWD and construction contractor(s)	Prior to and during construction	Date: _____ Action Taken:

SUMMARY TABLE
MITIGATION MONITORING AND REPORTING PROGRAM FOR THE LOS VAQUEROS RESERVOIR EXPANSION PROJECT

Mitigation Measure	Implementation Responsibility	Timing/Schedule	Record of Implementation
<ul style="list-style-type: none"> Native and annual grasses or other vegetative cover will be established on construction sites immediately upon completion of work causing disturbance. 			
<p>Measure 4.5.1b: Treat and Discharge Groundwater Extracted During Construction to Comply with the Requirements of RWQCB Order No. 5-00-175 and the SWPPP</p> <p>If groundwater cannot be contained onsite during construction, CCWD shall ensure that the water is pumped into multiple Baker tanks or approved equivalent with either a filter or gel coagulant system or other containment to remove sediment. The remaining water will then be discharged to a designated receiving water body or via land application in accordance with the requirements of RWQCB Order No. 5-00-175. On upland areas, sprinkler systems may be used to disperse the water in support of revegetation efforts. BMPs, as described in the SWPPP, will also be implemented to retain, treat, and dispose of groundwater. Measures will include but are not limited to:</p> <ul style="list-style-type: none"> Retaining pumped groundwater in surface facilities to reduce turbidity and suspended sediment concentrations; Treating (i.e., flocculating) pumped groundwater to reduce turbidity and concentrations of suspended sediments if turbidity exceeds RWQCB effluent limitations as defined in General Order 5-00-175; Directly conveying pumped groundwater to a suitable land disposal area capable of percolating flows; If contamination is suspected, water collected during dewatering will be tested for contamination prior to disposal; Discharges will comply with the RWQCB's requirements. 	CCWD and construction contractor(s)	During construction	Date: _____ Action Taken:
<p>Measure 4.5.4: Design Facilities to be consistent with the RWQCB's NPDES Municipal Stormwater Runoff Requirements and Prepare and Implement a Stormwater Facility Operation and Management Plan</p> <p>CCWD shall design facilities with introduced impervious surfaces with stormwater control measures that are consistent with the Regional Water Quality Control Board's NPDES municipal stormwater runoff requirements. The stormwater control measures shall be designed and implemented to reduce the discharge of stormwater pollutants to the maximum extent practical. Stormwater controls such as bioretention facilities, flow-through planters, detention basins, vegetative swales, covering pollutant sources, oil/water separators, retention ponds, shall be designed to control stormwater quality to the maximum extent practical. In addition, CCWD shall prepare and implement a Stormwater Facility Operation and Management Plan that assigns responsibility for maintenance of stormwater facilities for the life of the project.</p>	CCWD	Prior to construction of facilities with introduced impervious surfaces	Date: _____ Action Taken:

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MITIGATION MONITORING AND REPORTING PROGRAM FOR THE LOS VAQUEROS RESERVOIR EXPANSION PROJECT**

Mitigation Measure	Implementation Responsibility	Timing/Schedule	Record of Implementation
Biological Resources			
<p>Comprehensive Biological Resources Mitigation and Compensation Program</p> <p>This mitigation program, governing all mitigation measures that include habitat compensation lands, is described at Volume 2, pages 4.6-178 through 4.6-188 of the EIS/EIR. The program includes a summary of impacts, habitat compensation required, the principles that will guide the acquisition program and findings regarding the availability of suitable lands to meet the mitigation requirements for habitat compensation.</p>	CCWD	Compensation land shall be designated and management activities shall commence prior to construction on, or inundation of, the specific habitat for which the compensation is being provided	See measures for specific habitats below
<p>Measure 4.6.1a: Implement Avoidance and Minimization Measures to Minimize Impacts to Sensitive Plant Communities</p> <p>Based on the documented distribution of sensitive plant communities, CCWD shall implement avoidance and minimization measures to minimize impacts on sensitive plant communities during project construction. To the extent feasible, project design shall minimize impacts on sensitive plant communities. Exclusion and/or silt fencing shall be installed to buffer avoided areas.</p>	CCWD and construction contractor(s)	Prior to and during construction at each work site	Date: _____ Action Taken:
<p>Measure 4.6.1b: Provide Compensation Through Habitat Creation where Avoidance of Sensitive Plant Communities is Not Possible</p> <p>Where avoidance of sensitive plant communities is not possible, CCWD shall provide compensation through habitat creation, enhancement, and preservation, both within and outside the watershed, for temporary and permanent impacts on the following sensitive plant communities that will be affected by the project:</p> <p><u>Natural Seasonal Wetland (Bulrush-cattail Series and Saltgrass Series)</u></p> <ul style="list-style-type: none"> CCWD shall implement Mitigation Measure 4.6.2, presented below, to minimize, and compensate for impacts to sensitive plant communities associated with jurisdictional wetlands and other waters of the United States. <p><u>Valley Oak, Blue Oak Woodlands, and Fremont Cottonwood Series</u></p> <ul style="list-style-type: none"> CCWD shall develop an oak woodland mitigation and monitoring plan to outline mitigation and monitoring obligations for impacts resulting from increased reservoir levels and construction activities. This plan shall include restoration, enhancement, and/or preservation sites; thresholds of success; monitoring and reporting requirements; site-specific designs for site restoration/enhancement activities; and long-term maintenance activities as set forth in the following bullets. 	CCWD and construction contractor(s)	Compensation land shall be designated and management activities shall commence prior to construction on, or inundation of, the existing sensitive plant community site for which the compensation is being provided	Date: _____ Action Taken:

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MITIGATION MONITORING AND REPORTING PROGRAM FOR THE LOS VAQUEROS RESERVOIR EXPANSION PROJECT

Mitigation Measure	Implementation Responsibility	Timing/Schedule	Record of Implementation
<ul style="list-style-type: none"> • Under the oak woodland mitigation and monitoring plan, CCWD shall acquire or dedicate land suitable for blue oak woodland and riparian woodland (valley oak and Fremont cottonwood series) restoration, enhancement, and preservation. If restoration is feasible, then a ratio of at least 2:1 shall be used. If preservation (with enhancement) is used, at least a 3:1 ratio shall be implemented to offset losses. • Due to the limited availability of suitable mitigation lands in the watershed, CCWD shall purchase blue oak mitigation lands outside of the watershed. • CCWD shall coordinate acquisition of woodland mitigation lands with USFWS to minimize potential conflicts with regional San Joaquin kit fox planning efforts, which seek to maintain open grasslands movement corridors. • CCWD shall submit the mitigation and monitoring plan to the appropriate regulatory agencies for approval. <p><u>Purple Needlegrass Grasslands</u></p> <ul style="list-style-type: none"> • CCWD shall seed disturbed areas within this habitat area with native grass seed collected within or in the vicinity of impacts. Additional seed could be used to supplement seed mixes, but seed shall be from locally collected (within the ecoregion) source material and shall be appropriately selected for site conditions. • Consistent with MSCS guidance (CALFED, 2000) and coordination with CDFG and USFWS, mitigation for loss of this plant community shall be provided by preservation and enhancement of mitigation lands at a minimum of a 2:1 mitigation ratio to compensate for permanent losses. • CCWD shall develop and implement a native grassland restoration and enhancement plan to identify potential seed collection sites, quantities of seed required, potential enhancement areas within the Los Vaqueros Watershed, potential enhancement activities, and other measures required to maintain the sustainability of native grassland restoration and enhancement areas. 			
<p>Measure 4.6.2a: Avoid and Minimize the Fill of Wetlands and Other Waters</p> <p>Final project design shall avoid and minimize the fill of wetlands and other waters to the greatest practicable extent. No access vaults would be installed within the jurisdictional drainages that occur along any pipeline corridors. Areas that are avoided shall be subject to best management practices under the General National Pollutant Discharge Elimination System Permit, as described in Measure 4.5.1.</p>	CCWD and construction contractor(s)	Prior to and during construction	Date: _____ Action Taken:
<p>Measure 4.6.2b: Provide Restoration and Compensation Where Avoidance of Jurisdictional Wetlands and Other Waters is Not Possible</p> <p>Where jurisdictional wetlands and other waters cannot be avoided, to offset</p>	CCWD and a qualified biologist	Compensation land shall be designated and management activities shall	Date: _____ Action Taken:

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MITIGATION MONITORING AND REPORTING PROGRAM FOR THE LOS VAQUEROS RESERVOIR EXPANSION PROJECT

Mitigation Measure	Implementation Responsibility	Timing/Schedule	Record of Implementation
<p>temporary and permanent impacts that would occur as a result of the project, restoration and compensatory mitigation shall be provided through the following mechanisms:</p> <ol style="list-style-type: none"> 1. Purchase or dedication of land to provide wetland preservation, restoration or creation. If restoration is available and feasible, then a ratio of at least 2:1 shall be used. If a wetland needs to be created, at least a 3:1 ratio shall be implemented to offset losses. Where practical and feasible, onsite mitigation shall be implemented. 2. A wetland mitigation and monitoring plan shall be developed by a qualified biologist in coordination with CDFG, USFWS, USACE, and/or RWQCB that details mitigation and monitoring obligations for temporary and permanent impacts to wetlands and other waters as a result of construction activities. The plan shall quantify the total acreage lost, describe mitigation ratios for lost habitat, annual success criteria, mitigation sites, monitoring and reporting requirements, and site specific plans to compensate for wetland losses resulting from the project. 3. The wetland mitigation and monitoring plan shall be submitted to the appropriate regulatory agencies for approval. 		commence prior to construction on, or inundation of, the existing wetland or water for which the compensation is being provided	
<p>Measure 4.6.3a: Design Facilities to Avoid Sensitive Plant Populations and Implement Protection Measures During Construction</p> <p>To the extent feasible, the final project design shall minimize impacts on known special-status plant populations within and next to the construction footprints. CCWD and its contractors will design facilities to avoid sensitive plant populations whenever feasible, and shall install exclusion fencing and/or silt fencing around sensitive plant populations with as large a buffer as possible to minimize the potential for direct and indirect impacts such as fugitive dust and accidental intrusion into sensitive areas. Dust and erosion control measures are described in Measure 4.5.1.</p>	CCWD, a qualified biologist, and construction contractor(s)	Prior to and during construction	Date: _____ Action Taken:

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MITIGATION MONITORING AND REPORTING PROGRAM FOR THE LOS VAQUEROS RESERVOIR EXPANSION PROJECT

Mitigation Measure	Implementation Responsibility	Timing/Schedule	Record of Implementation
<p>Measure 4.6.3b: Develop and Implement a Restoration and Mitigation Plan to Provide Compensation for the Loss of Brewer's Dwarf-Flax</p> <p>Where avoidance is not feasible, CCWD shall compensate for the loss of Brewer's dwarf-flax through the following steps:</p> <ul style="list-style-type: none"> A qualified ecologist shall develop and implement a restoration and mitigation plan according to CDFG guidelines and in coordination with CDFG and USFWS. At a minimum, the plan shall include collection of reproductive structures from affected plants, a full description of microhabitat conditions necessary, seed germination requirements, restoration techniques for temporarily disturbed occurrences, assessments of potential transplant and enhancement sites, success and performance criteria, and monitoring programs, as well as measures to ensure long-term sustainability. Land that supports known populations of affected Brewer's dwarf-flax shall be identified, enhanced, and protected within the watershed or acquired outside of the watershed at a ratio of 1.1:1 and protected in perpetuity with conservation easements. 	CCWD and a qualified ecologist	Compensation land shall be designated and management activities shall commence prior to construction on the Brewer's dwarf-flax site for which the compensation is being provided	Date: _____ Action Taken:
<p>Measure 4.6.4a: Conduct Surveys and Implement Protective Measures, if needed, to Minimize Potential Effects on California red-legged frog and California tiger salamander</p> <p>CCWD shall implement measures to minimize and avoid take of California red-legged frogs and California tiger salamanders. Before and during construction, the following actions shall minimize impacts on these species:</p> <ul style="list-style-type: none"> CCWD shall submit the name and credentials of a biologist qualified to act as construction monitor to USFWS for approval at least 15 days before construction work begins. General minimum qualifications are a 4-year degree in biological sciences or other appropriate training and/or experience in surveying, identifying, and handling California tiger salamanders and California red-legged frogs. A USFWS-approved biologist shall survey the work sites 2 weeks before the onset of construction. If California tiger salamanders or California red-legged frogs (or their tadpoles or eggs) are found, the approved biologist shall contact USFWS to determine whether moving any of these life-stages is appropriate. If USFWS approves moving the animals, the approved biologist shall be allowed sufficient time to move frogs and/or salamanders from the work sites before work begins. If these species are not identified, construction can proceed at these sites. The approved biologist shall use professional judgment to determine whether (and if so, when) the California tiger salamanders and/or California red-legged frogs are to be moved. The 	CCWD, a qualified biologist, and construction contractor(s)	Prior to and during construction	Date: _____ Action Taken:

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MITIGATION MONITORING AND REPORTING PROGRAM FOR THE LOS VAQUEROS RESERVOIR EXPANSION PROJECT

Mitigation Measure	Implementation Responsibility	Timing/Schedule	Record of Implementation
<p>USFWS-approved biologist shall immediately inform the construction manager that work should be halted, if necessary, to avert avoidable take of listed species.</p> <ul style="list-style-type: none"> • Areas will be monitored during construction to identify, capture, and relocate sensitive amphibians, if present. • A detailed California red-legged frog/California tiger salamander relocation plan will be prepared at least 3 weeks before the start of groundbreaking, and submitted to USFWS for review. The purpose of the plan is to standardize amphibian relocation methods and relocation sites. • A USFWS-approved biologist shall be present at the active work sites until California red-legged frogs and California tiger salamanders have been removed, and habitat disturbance has been completed. Thereafter, the contractor or CCWD shall designate a person to monitor onsite compliance with all minimization measures. A USFWS-approved biologist shall ensure that this individual receives training consistent with USFWS requirements. • CCWD and its contractors shall initiate all work within potential California red-legged frog aquatic breeding habitat between May 1 and November 1 (i.e., generally identified as the nonbreeding season). Project construction timing constraints are summarized in Section 4.6.3. • CCWD and its contractors shall install frog-exclusion fencing (i.e., silt fences) around all construction areas that are within 100 feet of potential California red-legged frog or California tiger salamander aquatic breeding habitat. • A USFWS-approved biologist shall conduct a training session for all construction personnel. At a minimum, the training shall include a description of the California red-legged frog and California tiger salamander and their habitat, the importance of these species and their habitat, the general measures that are being implemented to conserve the red-legged frog and tiger salamander as they relate to the project, and the boundaries within which the project construction shall occur. • During work activities, all trash that may attract predators shall be properly contained, removed from the work site, and disposed of regularly. After construction, the contractor shall remove all trash and construction debris from work areas on a daily basis. • All fueling and maintenance of vehicles and other equipment and staging areas will occur at least 20 meters (65.6 feet) from any riparian habitat or water body. 			

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Mitigation Measure	Implementation Responsibility	Timing/Schedule	Record of Implementation
<ul style="list-style-type: none"> • Before the onset of work, CCWD shall prepare a stormwater pollution prevention plan and water pollution control plan as described in Measures 4.5.1a and 4.5.1b to allow prompt and effective response to any accidental spills. • Before construction begins, CCWD shall prepare a plan describing pre-project conditions, restoration, and monitoring success criteria. CCWD or its contractors shall restore the contours and revegetate all areas disturbed by the project with an appropriate assemblage of native vegetation suitable to the area. • Where needed to maintain California red-legged frog and/or California tiger salamander breeding in existing mitigation wetlands that are presently supplemented with water, but are not directly disrupted by construction, CCWD shall continue to provide supplemental water to these ponds during and after construction according to the existing terms and conditions for these mitigation sites. 			
<p>Measure 4.6.4b: Provide Compensation for Permanent and Temporary Impacts on California tiger salamander and California red-legged frog</p> <p>CCWD shall provide compensation for permanent and temporary impacts on California tiger salamander and California red-legged frog aquatic habitat. In accordance with MSCS (CALFED, 2000) objectives, CCWD shall provide compensation for the permanent loss of California red-legged frog and California tiger salamander aquatic habitat at a minimum of a 3:1 ratio. The MSCS does not require compensation for loss of California red-legged frog and California tiger salamander aestivation habitat. To satisfy compensation guidelines, CCWD shall implement the following measures:</p> <ul style="list-style-type: none"> • CCWD shall mitigate for the loss of aquatic breeding sites that will be filled or otherwise directly affected by the project (number to be confirmed by pre-construction surveys) as well as mitigate for impacts on associated California red-legged frog upland habitat by providing compensatory habitat. • CCWD shall develop and implement a mitigation, monitoring, and management plan, with input from regulatory agencies that shall outline long-term management strategies and performance standards to be attained to compensate for habitat losses resulting from the project. At a minimum, the plan shall include standards for mitigation site selection and construction specifications for mitigation sites, a description of site conditions including aerial maps, an analysis of local amphibian habitat (e.g., is another breeding 	<p>CCWD and construction contractor(s)</p>	<p>Compensation land shall be designated and management activities shall commence prior to construction on, or inundation of, the existing aquatic habitat site for which the compensation is being provided</p>	<p>Date: _____</p> <p>Action Taken:</p>

¹ Note that final mitigation acreage requirements and compensation ratios may be adjusted by the USFWS or USACE based on actual wetland impacts, which will be identified during the permitting process.

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MITIGATION MONITORING AND REPORTING PROGRAM FOR THE LOS VAQUEROS RESERVOIR EXPANSION PROJECT

Mitigation Measure	Implementation Responsibility	Timing/Schedule	Record of Implementation
<p>habitat nearby?), and performance criteria by which site quality can be assessed over time (see below). A monitoring program shall be established to track the development of habitat conditions that are conducive to the establishment of the California red-legged frog and/or California tiger salamander breeding populations. Long-term monitoring (e.g., night surveys and aquatic dipnet surveys) shall be performed on an annual basis to determine if these species are present. The plan shall provide that monitoring be performed to ensure that mitigation ponds that are dependent upon artificial water function as designed.</p> <ul style="list-style-type: none"> • Performance criteria shall be used to assess the success of aquatic habitat created for California red-legged frogs and California tiger salamander aquatic habitat. These criteria shall be outlined in the mitigation, monitoring and management plan and shall include: <ul style="list-style-type: none"> ○ A description of the type of habitat to be created (e.g., permanent marsh consisting of open water and emergent vegetation; semipermanent marsh); ○ The total area, size and number of California red-legged frog and California tiger salamander mitigation ponds to be created based on a comparable loss of breeding sites (e.g., 1:1 replacement ratio) as a result of the project. These ponds shall concurrently satisfy wetland mitigation requirements identified in Measure 4.6.2b;1 ○ Constructed permanent marsh ponds that are designed to support California red-legged frog breeding shall provide: <ul style="list-style-type: none"> ▪ at least 75% absolute vegetation cover of wetland plant species within shallow water emergent vegetation zones; ▪ year-round inundation with depths of at least 1.5 feet in the vegetation zone and 4 feet in open water. ○ Constructed semipermanent marsh ponds that are designed to support California tiger salamander or California red-legged frog breeding habitat shall provide: <ul style="list-style-type: none"> ▪ water regimes similar to affected features, with semi-permanent water ranging from depths of 1.5 to 2.5 feet or greater during a typical rainfall year and an inundation period that exceeds 120 consecutive days; a predominance of seasonal wetland plants (at least 75% absolute vegetation cover) during the winter/spring monitoring period (though may support upland species later in the year when pools dry). 			

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Mitigation Measure	Implementation Responsibility	Timing/Schedule	Record of Implementation
<ul style="list-style-type: none"> • To the greatest practicable extent, CCWD or its contractors shall construct and manage compensation habitat (i.e., replacement ponds) for California red-legged frogs and California tiger salamanders prior to project implementation. A qualified biologist shall ensure that ponds are functioning before the removal and/or inundation of existing California tiger salamander and California red-legged frog aquatic breeding sites. • Construction within the Kellogg Creek corridor (i.e., creek crossing sites) shall be designed to impact the smallest area required to provide for the installation of pipelines, particularly in the area below Los Vaqueros Dam. • CCWD and its contractors shall restore and enhance Kellogg Creek and adjacent natural upland environs in the project area (about 4.0 linear miles) to restore suitable aquatic breeding habitat for California red-legged frogs and restore disturbed upland areas as close as possible to pre-project conditions. Methods of enhancement and restoration could include, but are not limited to, reducing erosion; installing breeding ponds; excluding cattle from sensitive areas; and managing, salvaging, and seeding with grasses, forbs, and other species that are native to the site, as well as other measures to increase water quality within the enhancement and restoration reach. <p>New mitigation ponds that are created for California red-legged frog and California tiger salamander shall be hydrologically self-sustaining and shall not require a supplemental water supply. Because few natural drainages in the Los Vaqueros Watershed could maintain self-sustaining mitigation ponds, a portion of the pond mitigation locations will likely be identified outside of the watershed.</p>			
<p>Measure 4.6.5: Conduct Surveys and Implement Protective Measures to Minimize Potential Effects on Western Pond Turtle</p> <p>Before construction activities begin, a qualified biologist shall conduct western pond turtle surveys within creeks and in other ponded areas affected by the project. Upland areas shall also be examined for evidence of nests as well as individual turtles. The project biologist shall be responsible for the survey and for the relocation of turtles. Construction shall not proceed until a reasonable effort has been made to capture and relocate as many western pond turtles as possible to minimize take. However, some individuals may be undetected or enter sites after surveys, and would be subject to mortality. If a nest is observed, a biologist with the appropriate permits and prior approval from CDFG shall move eggs to a suitable location or facility for incubation, and release hatchlings into the creek system the following autumn.</p> <p>In addition, concurrent with mitigation commitments to create and enhance aquatic sites for California red-legged frog (Measure 4.6.4b), CCWD shall include habitat elements in the aquatic habitat and tiger salamander plan that benefit western pond</p>	CCWD and a qualified biologist	Prior to construction	Date: _____ Action Taken:

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Mitigation Measure	Implementation Responsibility	Timing/Schedule	Record of Implementation
<p>turtle. Such elements may include logs or rafts for emergent basking sites where needed and the maintenance of upland areas adjacent to ponds in a relatively open condition.</p>			
<p>Measure 4.6.7a: Implement Protection Measures to Minimize Impacts on San Joaquin Kit Fox Habitat and Potential Regional Movement Opportunities</p> <p>CCWD shall implement San Joaquin kit fox protection measures. The following measures, which are intended to reduce direct and indirect project impacts on San Joaquin kit foxes, are derived from the San Joaquin Kit Fox Survey Protocol for the Northern Range (USFWS, 1999a) and the Standardized Recommendations for Protection of the San Joaquin Kit Fox (USFWS, 1999b). These measures shall be implemented for construction areas along pipeline corridors, staging areas, and facilities within the watershed:</p> <ul style="list-style-type: none"> • Preconstruction surveys shall be conducted within 200 feet of work areas to identify potential San Joaquin kit fox dens or other refugia in and surrounding workstations. A qualified biologist shall conduct the survey for potential kit fox dens 14 to 30 days before construction begins. All identified potential dens shall be monitored for evidence of kit fox use by placing an inert tracking medium at den entrances and monitoring for at least 3 consecutive nights. If no activity is detected at these den sites, they shall be closed following guidance established in USFWS Standardized Recommendations document. • If kit fox occupancy is determined at a given site, the construction manager should be immediately informed that work should be halted within 200 feet of the den and the USFWS contacted. Depending on the den type, reasonable and prudent measures to avoid effects to kit foxes could include seasonal limitations on project construction at the site (i.e., restricting the construction period to avoid spring-summer pupping season), and/or establishing a construction exclusion zone around the identified site, or resurveying the den a week later to determine species presence or absence. • To minimize the possibility of inadvertent kit fox mortality, project-related vehicles shall observe a maximum 20 miles per hour speed limit on private roads in kit fox habitat. Nighttime vehicle traffic shall be kept to a minimum on nonmaintained roads. Off-road traffic outside the designated project area shall be prohibited in areas of kit fox habitat. • To prevent accidental entrapment of kit fox or other animals during construction, all excavated holes or trenches greater than 2 feet deep shall be covered at the end of each work day by suitable materials, fenced, or escape routes constructed of earthen materials or wooden planks shall be provided. Before filling, such holes shall be thoroughly inspected for trapped animals. 	<p>CCWD, a qualified biologist and construction contractor(s)</p>	<p>Prior to and during construction</p>	<p>Date: _____</p> <p>Action Taken:</p>

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Mitigation Measure	Implementation Responsibility	Timing/Schedule	Record of Implementation
<ul style="list-style-type: none"> • All food-related trash items (such as wrappers, cans, bottles, and food scraps) shall be disposed of in closed containers and removed daily from the project area. • To prevent harassment and mortality of kit foxes or destruction of their dens, no pets shall be allowed in the project area. 			
<p>Measure 4.6.7b: Provide Compensation for Affected Kit Fox Habitat Outside of Dedicated CDFG Conservation Easements</p> <p>To compensate for impacts on San Joaquin kit fox habitat outside of dedicated CDFG conservation easements, CCWD shall provide mitigation either through acquiring and dedicating lands into conservation easements or purchasing mitigation credits at compensation ratios that have been approved by state and federal resource agencies.</p> <p>Consistent with MSCS and USFWS guidance, mitigation ratios applied for impacts on San Joaquin kit fox habitat shall be 1:1 to 1.1:1 for temporary impacts; 1:1 to 2:1 for long-term temporary impacts; and 1:1 to 3:1 for permanent impacts.</p> <p>San Joaquin kit fox mitigation obligations may concurrently satisfy burrowing owl mitigation obligations identified in Mitigation Measure 4.6.8, below, if suitable habitat is present for both species in mitigation lands. The availability of mitigation lands to satisfy mitigation requirements for these species is discussed in the Comprehensive Biological Resources Mitigation and Compensation Program.</p>	CCWD	Compensation land shall be designated and management activities shall commence prior to construction on, or inundation of, the kit fox habitat for which the compensation is being provided	Date: _____ Action Taken: _____
<p>Measure 4.6.7c: Provide Compensation for Affected Acreage Within Existing Kit Fox Easement</p> <p>CCWD shall replace any acreage of existing kit fox easement affected by the project with an equivalent amount of acreage within the watershed to maintain under conservation easement the full amount required for the original Los Vaqueros Reservoir Expansion Project. In addition, CCWD shall provide compensation for conservation easement acreage affected at a ratio of up to 3:1, including conservation easement lands that are isolated by the project. Compensation for temporary impacts to lands within conservation easements shall be provided at a ratio of 1:1 to 1.1:1.</p>	CCWD	Compensation land shall be designated and management activities shall commence prior to construction on, or inundation of, the kit fox habitat for which the compensation is being provided	Date: _____ Action Taken: _____
<p>Measure 4.6.8a: Conduct Surveys and Implement Protective Measures to Minimize Potential Effects on Burrowing Owl</p> <p>The implementation of Mitigation Measure 4.6.8a, which requires preconstruction surveys and protection measures to avoid burrowing owls during the breeding season, and Measure 4.6.8b, which includes the establishment of mitigation lands for loss of habitat as required by regulatory permits, would reduce potential impacts on burrowing owls to a less-than-significant level.</p> <p>CCWD shall implement the measures listed below for grassland habitats to reduce potential impacts to a less-than-significant-level and to avoid incidental take of</p>	CCWD, a qualified biologist and construction contractor(s)	Prior to and during construction	Date: _____ Action Taken: _____

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Mitigation Measure	Implementation Responsibility	Timing/Schedule	Record of Implementation
<p>burrowing owls. In advance of construction, CCWD shall follow the current CDFG burrowing owl survey guidance, presently the Burrowing Owl Consortium multi-phase approach to evaluate burrowing owl use. Measures shall apply to all construction activities near active nests or within potential burrowing owl nesting habitat, to avoid, minimize, or mitigate impacts on burrowing owls:</p> <p><i>Breeding season surveys</i> shall be performed to determine the presence of burrowing owls for the purposes of inventory, monitoring, avoidance of take, and determining appropriate mitigation. In California the breeding season begins as early as February 1 and continues through August 31. Under the Burrowing Owl Consortium's multi-phase survey methodology, for areas within 500 feet of construction boundaries, CCWD shall: 1) perform a habitat assessment to identify essential components of burrowing owl habitat, including artificial nest features; 2) perform intensive burrow surveys in areas that are identified to provide suitable burrowing owl habitat, and; 3) perform at least four appropriately-timed breeding season surveys (four survey visits spread evenly [roughly every 3 weeks] during the peak of the breeding season, from April 15 to July 15) to document habitat use.</p> <p><i>Pre-construction surveys</i> shall be used to assess the owl presence before site modification is scheduled to begin. Initial pre-construction surveys should be conducted outside of the owl breeding season (February 1–August 31), but as close as possible to the date that ground-disturbing activities will begin. Generally, initial pre-construction surveys should be conducted within 7 days, but no more than 30 days prior to ground-disturbing activities. Additional surveys may be required when the initial disturbance is followed by periods of inactivity or the development is phased spatially and/or temporally over the project area. Up to four or more survey visits performed on separate days may be required to assure with a high degree of certainty that site modification and grading will not take owls. The full extent of the pre-construction survey effort shall be described and mapped in detail (e.g., dates, time periods, area[s] covered, and methods employed) in a biological report that will be provided for review to CDFG.</p> <p>In addition to the above survey requirements, the following measures shall be implemented to reduce project impacts to burrowing owls:</p> <ul style="list-style-type: none"> • Construction exclusion areas (e.g., orange exclusion fence or signage) shall be established around occupied burrows, where no disturbance shall be allowed. During the nonbreeding season (September 1 through January 31), the exclusion zone shall extend at least 160 feet around occupied burrows. During the breeding season (February 1 through August 31), exclusion areas shall extend 250 feet around occupied burrows (or farther if warranted to avoid nest abandonment). • If work or exclusion areas conflict with owl burrows, passive relocation of onsite owls could be implemented as an alternative, but only during the 			

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Mitigation Measure	Implementation Responsibility	Timing/Schedule	Record of Implementation
<p>nonbreeding season and only with CDFG approval. The approach to owl relocation and burrow closure will vary depending on the number of occupied burrows. Passive relocation shall be accomplished by installing one-way doors on the entrances of burrows within 160 feet of the project area. The one-way doors shall be left in place for 48 hours to ensure the owls have left the burrow. The burrows shall then be excavated with a qualified biologist present. Construction shall not proceed until the project area is deemed free of owls.</p> <ul style="list-style-type: none"> • Unoccupied burrows within the immediate construction area shall be excavated using hand tools, and then filled to prevent reoccupation. If any burrowing owls are discovered during the excavation, the excavation shall cease and the owl shall be allowed to escape. Excavation could be completed when the biological monitor confirms the burrow is empty. • Artificial nesting burrows will be provided as a temporary measure when natural burrows are lacking. To compensate for lost nest burrows, artificial burrows shall be provided outside the 160-foot buffer zone (CDFG, 1995). The alternate burrows shall be monitored daily for 7 days to confirm that the owls have moved in and acclimated to the new burrow. 			
<p>Measure 4.6.8b: Provide Compensation for Permanent Loss of Burrowing Owl Habitat</p> <p>CCWD shall compensate for permanent habitat losses at a minimum 2:1 ratio (possibly concurrent with other mitigation commitments, such as those for San Joaquin kit fox, provided habitat is present for both species). Compensation could consist of purchasing and enhancing suitable habitat, converting it to a conservation easement, and conveying the easement to a managing agency or institution in perpetuity; participating in a resource agency-approved mitigation bank that provides offset mitigation credits for loss of burrowing owl habitat; or a combination of both. Burrowing owl mitigation areas shall support burrowing owl populations in similar or greater densities to those on impacted burrowing owl habitat.</p>	CCWD	Compensation land shall be designated and management activities shall commence, or mitigation credits shall be obtained, prior to construction on, or inundation of, the burrowing owl habitat site for which compensation is being provided	Date: _____ Action Taken:
<p>Measure 4.6.9a: Conduct Surveys and Implement Protective Measures to Minimize Potential Effects on the Golden Eagle, Bald Eagle, and Swainson's Hawk</p> <p>CCWD shall ensure that nesting golden eagles, bald eagles, and Swainson's hawks are protected. The following measures address potential impacts on nesting golden eagles and Swainson's hawks in the project vicinity. Measures that pertain to golden eagles and their nests would apply to nesting bald eagles, were they found in the Los Vaqueros Watershed prior to construction.</p>	CCWD, a qualified biologist and construction contractor(s)	Prior to and during construction	Date: _____ Action Taken:

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Mitigation Measure	Implementation Responsibility	Timing/Schedule	Record of Implementation
<ul style="list-style-type: none"> • Whenever feasible, construction near recently active nest sites shall start outside the active nesting season. The nesting period for golden eagles is between March 1 and August 15. Bald eagles and Swainson's hawks nest between March 15 and August 15. • If groundbreaking activities begin during the nesting period, a qualified biologist shall perform a preconstruction survey 14 to 30 days before the start of each new construction phase to search for golden eagle and Swainson's hawk nest sites within 0.5 mile of proposed activities. If active nests are not identified, no further action is required and construction may proceed. If active nests are identified, the avoidance guidelines identified below shall be implemented. • For golden eagles, construction contractor(s) shall observe CDFG avoidance guidelines, which stipulate a minimum 500-foot buffer zone around active golden eagle nests. Buffer zones shall remain until young have fledged. For activities conducted with agency approval within this buffer zone, a qualified biologist shall monitor construction activities and the eagle nest(s) to monitor eagle reactions to activities. If activities are deemed to have a negative effect on nesting eagles, the biologist shall immediately inform the construction manager that work should be halted, and CDFG will be consulted. The resource agencies do not issue take authorization for this species. • If construction begins during the Swainson's hawk nesting period, a qualified biologist shall conduct preconstruction surveys at least 2 weeks prior to construction following CDFG guidance (e.g., CDFG, 2000) in areas that potentially provide nesting opportunities to verify species presence or absence. If the survey indicates presence of nesting Swainson's hawks within a 0.5-mile radius, the results shall be coordinated with CDFG to develop and implement suitable avoidance measures that include construction buffers and nest monitoring. • Consistent with the Staff Report Regarding Mitigation for Impacts to Swainson's Hawks in the Central Valley of California (CDFG, 1994), mitigation shall include the following approach: <ul style="list-style-type: none"> ○ No intensive new disturbances or other project-related activities that could cause nest abandonment or forced fledging shall be initiated within 0.25 mile (buffer zone) of an active nest between March 15 and September 15. ○ Nest trees shall not be removed unless no feasible avoidance exists. If a nest tree must be removed, CCWD shall obtain a management authorization (including conditions to offset the 			

**SUMMARY TABLE
MITIGATION MONITORING AND REPORTING PROGRAM FOR THE LOS VAQUEROS RESERVOIR EXPANSION PROJECT**

Mitigation Measure	Implementation Responsibility	Timing/Schedule	Record of Implementation
<p>loss of the nest tree) from CDFG. The tree removal period specified in the management authorization is generally between October 1 and February 1.</p> <ul style="list-style-type: none"> o Monitoring of the nest by a qualified biologist may be required if the project-related activity has the potential to adversely impact the nest. • CDFG often allows construction activities that are initiated outside the nesting season to continue without cessation even if raptors such as golden eagles choose to nest within 500 feet of work activities. Thus, work at the dam construction site may continue without delay if surveys verify the local absence of nesting golden eagles, or if groundbreaking begins outside the nesting period (August 16 through February 28). • After construction, CCWD shall survey for and monitor golden eagle and bald eagle nesting sites in the Los Vaqueros Watershed to ensure that recreational activity and other beneficial uses of the watershed do not disrupt eagle nest sites. Surveys will be performed at the beginning of the nesting season and continue through the nesting season. Consistent with present policy, recreational access and other disruptive activities will be suspended within 500 feet of active eagle nests until the young eagles have fledged. 			
<p>Measure 4.6.9b: Provide Restoration and Compensation for the Loss of Golden Eagle, Bald Eagle, and Swainson's Hawk Foraging Habitat</p> <p>CCWD shall acquire and/or restore foraging habitat for Swainson's hawks and golden eagles in accordance with CALFED and CDFG guidelines, set forth in Staff Report Regarding Mitigation for Impacts to Swainson's Hawks in the Central Valley of California (CDFG, 1994), as follows:</p> <ul style="list-style-type: none"> • Compensate for permanent foraging habitat losses (e.g., agricultural lands and annual grasslands) within 1 mile of active Swainson's hawk nests (acreage to be determined during preconstruction surveys) at a ratio of 1 acre of mitigation lands for each acre of permanent development (i.e., 1:1 replacement ratio). Foraging habitat impacts will be largely limited to valve structures (roughly 10-foot square) every few hundred feet along pipeline routes, with less than an acre of anticipated foraging habitat loss. • Consistent with MSCS guidance, impacts to golden eagle foraging habitat will be provided by enhancing or restoring foraging habitat at ratio from ratio of 1:1 to 5:1. 	CCWD	Compensation land shall be designated and restoration activities shall commence prior to construction on the golden eagle, bald eagle or Swainson's hawk foraging habitat site for which compensation is being provided	Date: _____ Action Taken:
<p>Measure 4.6.10a: Development and Implementation of An Alameda</p>	CCWD, a qualified biologist and	Prior to and during construction	Date: _____

SUMMARY TABLE
MITIGATION MONITORING AND REPORTING PROGRAM FOR THE LOS VAQUEROS RESERVOIR EXPANSION PROJECT

Mitigation Measure	Implementation Responsibility	Timing/Schedule	Record of Implementation
<p>Whipsnake Protection and Monitoring Plan</p> <p>CCWD shall minimize and/or avoid construction-related impacts on Alameda whipsnakes through the development and implementation of an Alameda whipsnake protection and monitoring plan. USFWS shall approve this plan during formal consultation under FESA Section 7, and shall establish a program of preconstruction surveys and construction supervision to identify and prevent potential hazards to individual Alameda whipsnakes that could be present during construction. The plan shall prohibit or restrict activities that could harm or harass this species. Habitat restoration and compensation shall also be included in the plan. Measures in this plan shall include, but are not limited to, the following:</p> <ul style="list-style-type: none"> • A description of the species habitat requirements and movement patterns applicable to the project area. • A procedure for conducting preconstruction surveys and/or trapping surveys before the onset of initial ground-disturbing activities in areas with high quality habitat, as well as monitoring to be conducted before construction and/or restoration begin each day that these activities shall occur. • Direct monitoring by a qualified biologist of the clearing of occupied or potentially occupied coastal scrub in the project area that would be directly affected by project construction (not by inundation). Construction shall not proceed until areas have been surveyed to capture and relocate as many Alameda whipsnakes as reasonably possible to minimize take. However, some individuals may be undetected or move in following surveys and would be subject to take. • A protocol for the selection of USFWS-approved biological monitors who have experience with Alameda whipsnakes to monitor construction activities (such as initial clearing and grading, excavation, and the installation of silt fencing) within and next to Alameda whipsnake habitat. • Worker education materials and procedures for informing construction crews about the potential presence of Alameda whipsnakes, equipment operation procedures to minimize impacts to whipsnakes, responsibilities of project personnel (such as reporting observations of Alameda whipsnakes within or next to the construction area to the biological monitor), observing speed limits, avoiding use of the haul road until cleared by the biological monitor, and other measures to avoid mortality of whipsnakes during construction; and the role of the monitoring staff in advising construction crews of compliance with take-avoidance measures for Alameda whipsnakes, documenting compliance in monitoring reports, and notifying USFWS within 24 hours of observation of whipsnakes within or next to a construction area. 	<p>construction contractor(s)</p>		<p>Action Taken:</p>

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MITIGATION MONITORING AND REPORTING PROGRAM FOR THE LOS VAQUEROS RESERVOIR EXPANSION PROJECT

Mitigation Measure	Implementation Responsibility	Timing/Schedule	Record of Implementation
<ul style="list-style-type: none"> • Limit stockpiling and staging activities and vehicle and equipment refueling and maintenance to occur in nonsensitive areas. • CCWD shall prepare and implement a revegetation plan that describes pre-project conditions and available habitats for Alameda whipsnakes, invasive species control measures, and restoration and monitoring success criteria for undeveloped areas disturbed during project construction. The plan will provide the basis for the reestablishment of scrub habitat in disturbed areas and mitigation sites, and will include at a minimum an identification of mitigation areas, site preparation requirements, specifications for planting and/or seeding (e.g., what species and how many plantings), seasonal considerations for planting and site maintenance, the proposed irrigation strategy, performance criteria (e.g., 70 percent survival of plantings 5 years following installation, and 70 percent of plants exhibiting fair or better condition), any contingency measures that may be anticipated, and a provision for semi-annual monitoring and reporting. 			
<p>Measure 4.6.10b: Provide Compensation for Loss of Upland Scrub Habitat That May Support the Alameda Whipsnake</p> <p>Consistent with MSCS guidelines, CCWD shall provide compensation for permanent and temporary loss of upland scrub habitat that may support Alameda whipsnakes by either (1) compensating for permanent habitat losses by acquiring, protecting, and managing 2 to 5 acres of existing occupied habitat for every acre within the same area of occupied habitat that would be affected, and/or (2) enhancing or restoring 2 to 5 acres of suitable habitat near the affected areas for every acre of occupied habitat affected (CALFED, 2000).</p> <p>Concurrent with other project requirements to mitigate for impacts to grasslands and oak woodland habitat, a portion of the total grassland and oak woodland mitigation requirement shall be chosen and preserved in perpetuity to provide linkages between other chaparral and scrub habitat, or to serve as foraging and movement habitat for Alameda whipsnake near existing scrub habitat patches. Mitigation shall be provided at a 1.1:1 mitigation ratio for all areas within 2,500 feet of core scrub habitat. Under Alternative 4, about 173.9 acres of grassland mitigation lands would be provided for this purpose.</p>	CCWD	Compensation land shall be designated and management activities shall commence prior to construction on, or inundation of, the Alameda whipsnake habitat site for which compensation is being provided	Date: _____ Action Taken:
<p>Measure 4.6.11: Avoid, Minimize, and Mitigate Effects on the Valley Elderberry Longhorn Beetle</p> <p>CCWD shall implement USFWS guidelines (1999 or more current) for avoiding, minimizing, and mitigating project impacts on valley elderberry longhorn beetles. If avoidance is not feasible, USFWS general compensation guidelines call for replacement of elderberry plants in designated mitigation areas at a ratio from 2:1 to 5:1 for each stem greater than 1 inch in diameter. Note that replacement ratios</p>	CCWD and a qualified biologist	Prior to and during construction	Date: _____ Action Taken:

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MITIGATION MONITORING AND REPORTING PROGRAM FOR THE LOS VAQUEROS RESERVOIR EXPANSION PROJECT

Mitigation Measure	Implementation Responsibility	Timing/Schedule	Record of Implementation
<p>are by stem and not by elderberry shrub. Replacement stock shall be obtained from local sources. Plants are generally replaced at a 2:1 ratio for stems greater than 1 inch in diameter at ground level with no adult emergence holes, 3:1 for stems where emergence holes are evident in less than 50 percent of the shrubs, and 5:1 for stems greater than 1 inch in diameter with emergence holes.</p> <p>Measure 4.6.12a: Conduct Surveys and Implement Protective Measures to Minimize Effects on Breeding and Migratory Birds</p> <p>CCWD shall ensure that active nests of raptors and other special-status nesting birds are not disturbed during construction.</p> <p>If active construction work (i.e., ground clearing and grading, including removal of trees or shrubs) is scheduled to take place during the nonbreeding season (September 1 through January 31), no mitigation is required. If such construction activities are scheduled during the breeding season (February 1 through August 31), the following measures shall be implemented to avoid impacts on nesting raptors and other protected birds:</p> <ul style="list-style-type: none"> • Within 30 days of construction, a qualified wildlife biologist shall conduct preconstruction surveys of all potential nesting habitat within 500 feet of construction sites where access is available. • If active nests are found during preconstruction surveys, a no-disturbance buffer (acceptable in size to CDFG) shall be created around active raptor nests and nests of other special-status birds during the breeding season, or until it is determined that all young have fledged. Typical buffers include 500 feet for raptors and 250 feet for other nesting birds (e.g., shorebirds, waterfowl, and passerine birds). The size of these buffer zones and types of construction activities restricted in these areas could be further modified during construction in coordination with CDFG and shall be based on existing noise and human disturbance levels in the project area. • If preconstruction surveys indicate that nests are inactive or potential habitat is unoccupied during the construction period, no further mitigation shall be required. Trees and shrubs within the construction footprint determined to be unoccupied by special-status birds, or that are outside the no-disturbance buffer for active nests, could be removed. • If construction commences during the nonbreeding season and continues into the breeding season, most songbirds that choose to nest next to active construction sites are generally considered to acclimate to construction activities, though nest abandonment may occur in some instances. However, nesting site monitoring shall be conducted by CCWD and no-disturbance buffer zones established in coordination with CDFG around active nests to prevent impacts on nesting birds and their young. 	<p>CCWD, a qualified biologist and construction contractor(s)</p>	<p>Prior to and during construction</p>	<p>Date: _____</p> <p>Action Taken:</p>

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MITIGATION MONITORING AND REPORTING PROGRAM FOR THE LOS VAQUEROS RESERVOIR EXPANSION PROJECT

Mitigation Measure	Implementation Responsibility	Timing/Schedule	Record of Implementation
<p>Measure 4.6.12c: Conduct Surveys and Implement Protective Measures to Reduce Impacts on Nesting Raptors</p> <p>Measures to reduce noise and vibration impact on nesting raptors near the dam.</p> <p>As identified in Measure 4.6.12a, a qualified biologist will conduct preconstruction surveys and establish suitable avoidance buffers around active bird nests. If it appears that noise or vibration from ongoing blasting or jack-hammering at the dam could affect nesting raptors that arrive after the start of construction, specific measures shall be implemented to reduce noise levels.</p> <p>During blasting or jack-hammering, a noise level of no greater than 85 decibels (measured at the nest) will be used as general guidance for raptor nests that are established after construction. This parameter may be met through a variety of standard noise-reducing procedures for construction equipment, including the use of noise dissipaters and blasting mats. Contract specifications will include requirements for the use of blasting methods, including qualifications for the blasting contractor, the use of noise control methods and threshold noise levels, and other limitations. The specifications will also require the submittal of a blasting plan by the contractor that will cover the proposed noise control techniques, blasting charge size and limits, and hours of blasting.</p>	CCWD, a qualified biologist and construction contractor(s)	Prior to and during construction	Date: _____ Action Taken:
<p>Measure 4.6.14: Conduct Surveys and Implement Protective Measures to Reduce Impacts on Nonlisted Special-Status Reptile Species (San Joaquin Coachwhip and Coast Horned Lizard)</p> <p>CCWD shall ensure that habitat disturbances are minimized in areas that are known or suspected to support San Joaquin coachwhip and coast horned lizard. Within 30 days before surface-disturbing activities, concurrent with other preconstruction wildlife surveys, a qualified biologist shall survey for special-status reptile populations. If individuals of these species are found in the project area, they shall be relocated to suitable habitat 0.5 mile or farther from the project area. Some individuals may be undetected or enter sites after surveys and would be subject to harm.</p>	CCWD, a qualified biologist and construction contractor(s)	Prior to construction	Date: _____ Action Taken:
<p>Measure 4.6.15a: Conduct Pre-Construction Surveys and Implement Mitigation Measures as Needed to Reduce Impacts on Nonlisted Special-Status Mammal Species (American Badger, Special-Status Bats, and San Joaquin Pocket Mouse)</p> <p>CCWD shall minimize impacts on badgers through a combination of worker training, preconstruction surveys, and passively or actively relocating animals.</p> <ul style="list-style-type: none"> A qualified biologist shall conduct a training session for all construction personnel focused on the protection and conservation of protected, nonlisted special-status wildlife species, including American badgers. At a minimum, the training shall include a species and habitat description for the American badger 	CCWD, a qualified biologist and Construction Contractor(s)	Prior to and during construction	

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<p>(in addition to other nonlisted special-status species). The training session shall identify the general measures that are being implemented to minimize impacts on these species as they relate to the project, and the boundaries within which the project could be accomplished.</p> <ul style="list-style-type: none"> • Concurrent with other required surveys (e.g., as required for Mitigation Measure 4.7), during winter/spring months before new project activities, and concurrent with other preconstruction surveys (e.g., kit fox and burrowing owl), a qualified biologist shall perform a pre-activity survey to identify the presence of American badgers. If this species is not found, no further mitigation shall be required. If badgers are identified, they shall be passively relocated using burrow exclusion (e.g., installing one-way doors on burrows) or similar CDFG-approved exclusion methods. In unique situations it might be necessary to actively relocate badgers (e.g., using live traps) to protect individuals from potentially harmful situations. Such relocation could be performed with advance CDFG coordination and concurrence. When unoccupied dens are encountered outside of work areas but within 100 feet of proposed activities, vacated dens shall be inspected to ensure they are empty and temporarily covered using plywood sheets or similar materials. • If badger occupancy is determined at a given site within the work area, the construction manager should be informed that work should be halted. Depending on the den type, reasonable and prudent measures to avoid harming badgers will be implemented and may include seasonal limitations on project construction near the site (i.e., restricting the construction period to avoid spring-summer pupping season), and/or establishing a construction exclusion zone around the identified site, or resurveying the den a week later to determine species presence or absence. • To minimize the possibility of inadvertent badger mortality, project-related vehicles shall observe a maximum 20 miles per hour speed limit on private roads. • To prevent accidental entrapment of badgers or other animals during construction, all excavated holes or trenches greater than 2 feet deep shall be covered at the end of each work day by suitable materials, or escape routes constructed of earthen materials or wooden planks shall be provided. Before filling, such holes shall be thoroughly inspected for trapped animals. • All food-related trash items (such as wrappers, cans, bottles, and food scraps) shall be disposed of in closed containers and removed daily from the project area. • To prevent harassment and mortality of badgers or destruction of their dens, no pets shall be allowed in the project area. 			

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MITIGATION MONITORING AND REPORTING PROGRAM FOR THE LOS VAQUEROS RESERVOIR EXPANSION PROJECT

Mitigation Measure	Implementation Responsibility	Timing/Schedule	Record of Implementation
<p>The implementation of Measure 4.6.7b, which provides habitat compensation for temporary and permanent impacts to annual grasslands that are potentially occupied by San Joaquin kit fox, would additionally benefit American badgers and San Joaquin pocket mice.</p>			
<p>Measure 4.6.15b: Conduct Pre-Construction Surveys and Implement Mitigation Measures as Needed to Reduce Impacts on Special-Status Bats</p> <p>CCWD shall minimize impacts on special-status bats by performing preconstruction surveys and creating no-disturbance buffers around active bat roosting sites.</p> <p>Before construction activities (i.e., ground clearing and grading, including trees or shrub removal) within 200 feet of trees that could support special-status bats, a qualified bat biologist shall survey for special-status bats. If no evidence of bats (i.e., direct observation, guano, staining, or strong odors) is observed, no further mitigation shall be required.</p> <p>If evidence of bats is observed, CCWD and its contractors shall implement the following measures to avoid potential impacts on breeding populations:</p> <ul style="list-style-type: none"> • A no-disturbance buffer of 250-feet shall be created around active bat roosts during the breeding season (April 15 through August 15). Bat roosts initiated during construction are presumed to be unaffected by the indirect effects of noise and construction disturbances. However, the direct take of individuals will be prohibited. • Removal of trees showing evidence of active bat activity shall occur during the period least likely to affect bats, as determined by a qualified bat biologist (generally between February 15 and October 15 for winter hibernacula, and between August 15 and April 15 for maternity roosts). If the exclusion of bats from potential roost sites is necessary to prevent indirect impacts due to construction noise and human activity adjacent, bat exclusion activities (e.g., installation of netting to block roost entrances) shall also be conducted during these periods. If special status bats are identified in the dam or special allowances must be made to relocate bats, CCWD will coordinate the effort in advance with CDFG. <p>Implementation of Mitigation Measure 4.6.1b requires the creation, enhancement and preservation of a variety of habitat types, including valley oak, blue oak woodlands and Fremont cottonwood series. These habitats and this mitigation would additionally benefit special status bats and provide potential roosting habitat.</p>	<p>CCWD, a qualified biologist and construction contractor(s)</p>	<p>Prior to and during construction</p>	<p>Date: _____</p> <p>Action Taken:</p>
<p>Land Use</p>			
<p>Measure 4.7.4a: Consult with Contra Costa County Airport Staff to Minimize Light and Glare Impacts to Byron Airport</p> <p>During project design, CCWD shall consult with Contra Costa County Airport staff</p>	<p>CCWD</p>	<p>Prior to construction</p>	<p>Date: _____</p> <p>Action Taken:</p>

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MITIGATION MONITORING AND REPORTING PROGRAM FOR THE LOS VAQUEROS RESERVOIR EXPANSION PROJECT

Mitigation Measure	Implementation Responsibility	Timing/Schedule	Record of Implementation
regarding the location of illuminated equipment staging, storage, and construction areas, and the need to provide a potential Notice to Airmen (NOTAM) during construction activities. CCWD shall instruct its engineer to make appropriate notations on construction drawings and specifications to indicate that illuminated work areas shall incorporate the use of downward facing lights with amber lumens to prevent confusion to pilots.			
<p>Measure 4.7.4b: Prohibit Use of Temporary Sediment Ponds and Use Appropriate Seed Mixtures for Revegetation and Sediment/Erosion Control Measures During Construction to Minimize Attraction for Birds</p> <p>During project design, CCWD shall instruct its engineer to prohibit the use of temporary sediment ponds that could create open water to attract potentially hazardous wildlife. To ensure that an appropriate seed mixture is used during construction, CCWD shall instruct its engineer to make appropriate notations on construction drawings and specifications to indicate that all seed mixtures used for revegetation or for sediment and erosion control purposes should not contain rice, barely, millet, rye, or other potential food sources for avian wildlife.</p>	CCWD	Prior to construction	Date: _____ Action Taken:
Transportation and Circulation			
<p>Measure 4.9.2a: Maintain alternative property access or trench plates on site to restore access for emergency vehicles at all times.</p>	CCWD and construction contractor(s)	During construction	Date: _____ Action Taken:
<p>Measure 4.9.2b: Provide pre-notification to local police, fire and emergency service providers of the timing, location, and duration of construction activities that could affect the movement of emergency vehicles on area roadways.</p>	CCWD and construction contractor(s)	Prior to and during construction	Date: _____ Action Taken:
Air Quality			
<p>Measure 4.10.1: Implement BAAQMD Measures to Control Construction-Generated Fugitive Dust Emissions</p> <p>During construction, CCWD will require the construction contractor(s) to implement the measures that are specified under BAAQMD's basic and enhanced dust control procedures. These include:</p> <ul style="list-style-type: none"> • Basic Control Measures – CCWD and its contractors will implement the following controls at all construction sites: <ul style="list-style-type: none"> ○ Water all active construction areas at least twice daily. ○ Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard. 	CCWD and construction contractor(s)	During construction	Date: _____ Action Taken:

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Mitigation Measure	Implementation Responsibility	Timing/Schedule	Record of Implementation
final design plans and specifications to avoid or minimize potential conflicts with utilities:			
<ul style="list-style-type: none"> a. Utility excavation and encroachment permits will be acquired from the appropriate agencies, including the Public Works Departments of Contra Costa County. CCWD will incorporate permit conditions in contract specifications that are designed to ensure no disruptions in service occur during construction. Contractors will be required to comply with permit conditions contained in contract specifications. b. CCWD shall ensure that Underground Service Alert is notified at least 14 days prior to initiation of construction activities of the underground portions of each transmission lines and utility structures. Underground Service Alert verifies the location of all existing underground utilities and alerts the other utilities to mark their facilities in the area of anticipated construction activities. c. A detailed engineering and construction plan will be prepared as part of the design plans and specifications. This plan will include procedures for the excavation; support, and fill of areas around utility cables and pipes to ensure that utility cables are not damaged. All affected utility service providers will be notified of the construction plans and schedule, and arrangements will be made with these entities regarding the protection, relocation, or temporary disconnection of services. d. In shared utility easement areas where a project pipeline might parallel wastewater mains, the engineering and construction plans will include trench-wall support measures to guard against potential trench wall failure and the resulting loss of structural support for the wastewater main. e. The California Department of Health Services standards will be observed; these standards require: (1) a 10-foot horizontal separation between parallel sewer and water mains (gravity or force mains); (2) a 1-foot vertical separation between perpendicular water and sewer line crossings; and (3) encasing sewer mains in protective sleeves where a new water line crosses under or over an existing wastewater main. If the separation requirements cannot be maintained, a variance will be obtained from the Department of Health Services through the provision of sewer encasement or other means the department deems suitable. f. Final construction plans and specifications will be coordinated with affected utilities including PG&E, Western, and the California Department of Health Services Sanitary Engineering Branch. 			

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Mitigation Measure	Implementation Responsibility	Timing/Schedule	Record of Implementation
g. Emergency response plans and protocols, as required under construction permit conditions, shall be incorporated into project construction specifications.			
<p>Measure 4.12.3: Require the Contractor to Implement Solid Waste Reduction and Debris Recovery Practices</p> <p>CCWD will incorporate into the contract plans and specifications the requirement that the contractor implement solid waste reduction and debris recovery practices as developed by CCWD. The solid waste reduction / debris recovery specifications will include the following items.</p> <p>a. describe the planned management methods for all types of construction and demolition debris (e.g., reuse, recycling, or disposal), and indicate the types of debris expected to be generated by the project (e.g., wood, drywall, concrete, cardboard, and metal)</p> <p>b. name all service providers and/or facilities to be used for debris management (or indicate that the debris, such as dirt, will be reused onsite)</p> <p>c. demonstrate that at least 50 percent (by weight) of jobsite debris is diverted from disposal in a landfill by providing receipts and/or gate-tags from all facilities and service providers used to recycle, reuse, or dispose of jobsite debris.</p> <p>Project waste generation would be avoided or minimized in a number of ways, which would be outlined in the project's solid waste reduction / debris recovery plan, and incorporated into project plans and specifications for implementation by contractors selected to complete project construction. To reduce solid waste generation, a series of practices would be developed, as follows:</p> <p><u>Re-use of excavation backfill.</u> Fill materials excavated during project grading and drilling would be reused as fill materials during project construction, while soils excavated during pipeline construction would be used to backfill trenches after pipeline installation;</p> <p><u>Recycling of materials.</u> Some construction materials, including some wood scraps, metals, and packaging materials could be recycled for later resale e.g. – wood scraps sold as landscape mulch.</p> <p><u>Re-Use of excess fill.</u> Clean fill could be accepted for use at other construction sites, or stored at existing sand and gravel facilities until (re)used as clean fill.</p> <p><u>Roadway sub-base or surface material.</u> Larger waste rock from excavation of tunnels would be placed along project access roads as a roadway sub-base or surface.</p> <p><u>Divert waste to non-landfill locations.</u> Additional amounts of the larger waste rock could be disposed of at a 22-acre area near the terminus of Byron Hot Springs Road.</p>	CCWD and construction contractor(s)	Prior to and during construction	Date: _____ Action Taken:

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Mitigation Measure	Implementation Responsibility	Timing/Schedule	Record of Implementation
Hazardous Materials / Public Health			
<p>Measure 4.13.2: Require Contractor to Enforce Strict Onsite BMPs to Minimize the Potential for Hazardous Materials Release</p> <p>CCWD will incorporate into the contract specifications that require the contractor to enforce strict onsite best management practices (BMPs) to keep hazardous materials from accidental release. These practices will include, without limitation, designating a central storage area to keep hazardous materials away from any waterways and storm drain inlets; refueling equipment in designated areas; containing contaminants away from any waterways or storm drain inlets; preparing a spill prevention, control, and countermeasure plan; and regularly inspecting construction vehicles for leaks.</p>	CCWD and construction contractor(s)	Prior to and during construction	Date: _____ Action Taken:
<p>Implement Mitigation Hydrology Measures 4.5.1a and 4.5.1b Minimize the Potential Contamination of Surface Waters and Comply with Regional Water Quality Control Board Requirements</p> <p>CCWD shall ensure that a SWPPP is prepared in accordance with the requirements of the RWQCB's NPDES General Construction Permit requirements, and shall treat and discharge groundwater extracted during construction to comply with the requirements of RWQCB Order No. 5-00-175.</p>	CCWD and construction contractor(s)	Prior to and during construction	Date: _____ Action Taken:
<p>Measure 4.13.3: Require Contractor to Enforce Strict Onsite BMPs to Minimize the Potential for Accidental Fires</p> <p>CCWD will incorporate into contract specifications the requirement that the contractor enforce strict onsite BMPs to reduce the potential for accidental fires.</p> <ol style="list-style-type: none"> 1) All equipment used during construction must have an approved spark arrestor. 2) The contractor/staff responsible for construction will submit a Fire Safety Plan for review by the Contra Costa County Fire Prevention Bureau. This plan will include precautions to carry out during high-fire danger, a list of fire-suppression equipment and tools to have on hand, a description of available communications, specifications for the supply of water to have on hand, and descriptions of other actions that will reduce the risk of ignition and facilitate immediate control of an incipient fire. 3) Ensuring easily accessible fire-suppression equipment is available at all work locations. 	CCWD and construction contractor(s)	Prior to construction	Date: _____ Action Taken:
Visual / Aesthetic Resources			
<p>Measure 4.14.2a: Develop and Implement a Site Restoration Plan for Borrow Areas</p>	CCWD	Prior to and during construction	Date: _____ Action Taken:

**SUMMARY TABLE
MITIGATION MONITORING AND REPORTING PROGRAM FOR THE LOS VAQUEROS RESERVOIR EXPANSION PROJECT**

Mitigation Measure	Implementation Responsibility	Timing/Schedule	Record of Implementation
<p>CCWD shall develop and implement a site restoration plan specifically for the 160 TAF borrow area that shall provide for finished topography that, while not restored to prior condition, shall blend in with the surrounding landscape, minimizing the visual contrast. The plan shall include a revegetation plan that includes a native seed mix typical of the surrounding area. While these site restoration steps are similar to those that will be required at all project sites, this specific project area requires its own restoration plan because of the extent of ground disturbance that will occur here.</p>			
Recreation			
<p>Measure 4.15.1a: Prepare and Implement a Public Outreach Program to Inform Current and Potential Recreational Users of Temporary Closures</p> <p>Before any recreational facilities are closed in the watershed, CCWD shall prepare and implement a public outreach program and promote the program via the web, billing inserts, and other methods to inform current and potential recreational users of the temporary closure of the Los Vaqueros Reservoir day-use facilities and inform customers of other recreational opportunities in the area.</p>	CCWD	Prior to and during construction	<p>Date: _____</p> <p>Action Taken:</p>
<p>Measure 4.15.1c: Replace Recreational Facilities Displaced By Reservoir Expansion Within One Year of Construction Completion</p> <p>CCWD shall construct proposed recreational facilities to replace those displaced by reservoir expansion within one year of completion of construction activities associated with all major facility components.</p>	CCWD	Prior to and during construction	<p>Date: _____</p> <p>Action Taken:</p>
Cultural and Paleontological Resources			
<p>Measure 4.16.1a: If Feasible, Avoid Impacts to Known Cultural Resources through Project Design Modification</p> <p><i>Los Vaqueros Reservoir Expansion; Dam Modification; and Other Sites Where Cultural Resources Can Be Avoided.</i> The preferred mitigation measure under CEQA is site avoidance. If feasible, avoid impacts to known cultural resources through project design modification. Using GIS mapping techniques, overlay project design plans on boundary maps of known cultural resources and redesign project components to avoid significant cultural resources by ensuring they fall into areas designated as open space or otherwise undeveloped areas. This is the least costly mitigation measure and is favored by archaeologists, local historical societies, and Native American groups.</p>	CCWD	During project design	<p>Date: _____</p> <p>Action Taken:</p>
<p>Measure 4.16.1b: Protect Cultural Resources in Place, If Feasible; Implement Data Recovery Where Resources Cannot Be Protected In Place</p> <p><i>Los Vaqueros Reservoir Expansion; Dam Modification; and Other Sites Where Cultural Resources Cannot Be Avoided.</i> If feasible, protect cultural resources in place. If resources cannot be protected in place, implement data recovery consistent with 14 CCR § 15126.4(b)(3)(c) and with the guidelines set forth in the Secretary of</p>	CCWD and construction contractor(s)	Prior to, during and following construction	<p>Date: _____</p> <p>Action Taken:</p>

SUMMARY TABLE
MITIGATION MONITORING AND REPORTING PROGRAM FOR THE LOS VAQUEROS RESERVOIR EXPANSION PROJECT

Mitigation Measure	Implementation Responsibility	Timing/Schedule	Record of Implementation
<p>Interior's standards and guidelines (Standards I through IV). CCR § 15126.4(b)(3)(c) states that a data recovery plan shall be prepared and adopted prior to any excavation being undertaken. Because the historical significance of most archaeological sites lies in their potential to contribute to scientific research, the data recovery plan shall make provision for adequately recovering the scientifically consequential data from and about the historical resource. Similarly geared toward scientific inquiry, the Secretary of Interior's standards include following an explicit statement of objectives and employing methods that respond to needs identified in the planning process; using methods and techniques of archaeological documentation (data recovery) selected to obtain the information required by the statement of objectives; assessing the results of the archaeological documentation against the statement of objectives and integrating them into the planning process; and reporting and making public the results of the archaeological documentation. To this end, data recovery findings shall be documented in a data recovery report, which shall follow guidelines set forth by SHPO for such reports.</p>			
<p>Measure 4.16.1c: Conduct Subsurface Investigations Prior to Ground Disturbing Activities</p> <p><i>Los Vaqueros Reservoir Expansion; Dam Modification; Marina Access Road; Inlet/Outlet Pipelines; and Western Hiking Trail/Access Road.</i> Prior to ground-disturbing activities, conduct subsurface investigations (i.e., archeological testing) for undiscovered cultural resources in the portions of the APE for the project elements that are identified as having moderate to high potential for undiscovered subsurface cultural resources. Conduct data recovery as described in Mitigation Measure 4.16.1b.</p>	<p>CCWD and a qualified archaeologist</p>	<p>Prior to construction</p>	<p>Date: _____</p> <p>Action Taken:</p>
<p>Measure 4.16.1d: Restrict Ground-Disturbing Activities During Construction and Implement Protection Measures</p> <p><i>All Project Elements Near Known Cultural Resources Or In Areas With High Potential For Undiscovered Cultural Resources.</i> During construction, restrict ground-disturbing activities to the minimum area feasible and fence off known cultural resources and high-potential areas that are outside but near the construction area. To prevent construction-related adverse impacts on historic properties within the APE, CCWD shall instruct its contractors to place fencing or other barriers around sites that could be affected. CCWD shall prepare and implement a cultural resource construction monitoring plan to ensure that monitoring and/or physical barriers adequately protect sites from incidental construction activities.</p>	<p>CCWD and construction contactor(s)</p>	<p>Prior to and during construction</p>	<p>Date: _____</p> <p>Action Taken:</p>
<p>Measure 4.16.1e: Provide Training For All Construction Personnel Regarding Cultural Resources and Relevant Regulations and Procedures</p> <p><i>All Project Elements.</i> All construction personnel who work on the project shall undergo a training session to inform them of the presence and nature of cultural resources and human remains within the project area; of the laws protecting these resources</p>	<p>CCWD and construction contractor(s)</p>	<p>Prior to and during construction</p>	<p>Date: _____</p> <p>Action Taken:</p>

SUMMARY TABLE
MITIGATION MONITORING AND REPORTING PROGRAM FOR THE LOS VAQUEROS RESERVOIR EXPANSION PROJECT

Mitigation Measure	Implementation Responsibility	Timing/Schedule	Record of Implementation
and associated penalties; and of the procedures to follow if they discover cultural resources during project-related work.			
<p>Measure 4.16.1f: Stop Work If Previously Undiscovered Cultural Resources are Discovered During Ground-Disturbing Activities</p> <p><i>All Project Elements.</i> If previously undiscovered cultural resources (e.g., unusual amounts of shell, animal bone, bottle glass, ceramics, structure/building remains, etc.) are discovered during ground-disturbing activities, CCWD shall authorize the construction contractor(s) to stop work in that area and within 100 feet of the find until a qualified archaeologist can assess the significance of the find according to NRHP and CEQA (including CRHR) criteria, and, if necessary, develop appropriate treatment measures in consultation with CCWD. Potential treatment measures for significant and potentially significant resources may include, but would not be limited to, no action (i.e., resources determined not to be significant), avoidance of the resource through changes in construction methods or project design, and implementation of a program of testing and data recovery, in accordance with PRC § 21083.2. Implementation of this mitigation measure would ensure proper identification and treatment of any significant cultural resources uncovered as a result of project-related ground disturbance and would reduce the potential impact resulting from inadvertent damage or destruction of unknown cultural resources during construction to a less-than-significant level.</p>	CCWD and construction contractor(s)	During construction	Date: _____ Action Taken:
<p>Measure 4.16.1g: Update the Cultural Resources Management Plan</p> <p>Impacts on some sites from increased access and vandalism can be minimized by updating the existing Cultural Resources Management Plan. The plan was developed for the original Los Vaqueros Project and it should be updated for the proposed project. To ensure the long-term protection of these sites, the existing plan provides guidelines to prevent impacts on historic properties, such as restrictions for use in areas of sensitivity, and a long-term monitoring program to ensure that cultural resources are protected in the future. The plan states that should vandalism be detected during the long-term monitoring program, a plan should be in place to organize the documentation and investigation of the endangered resource. Such an HPTP would entail elements including complete photographic and mapping documentation of the resource, as well as a phased archaeological testing and data recovery program. Such an HPTP shall be developed for each historic property that is determined to be visible from trails, exposure due to erosion, and vulnerable to vandalism for the proposed project.</p>	CCWD	Prior to reopening the Los Vaqueros Watershed to public access.	Date: _____ Action Taken:
<p>Measure 4.16.1h: Prepare a Comprehensive Study of the Prehistory and History of CCWD</p> <p>Results from the recordation, testing, and data recovery of the prehistoric and historic-era resources within the District shall be synthesized into a comprehensive scholarly study of the prehistory and history of CCWD. Particular attention shall be paid to the change in use through time of the lower elevations of the watershed and</p>	CCWD	Within 1 year of completion of construction	Date: _____ Action Taken:

SUMMARY TABLE
MITIGATION MONITORING AND REPORTING PROGRAM FOR THE LOS VAQUEROS RESERVOIR EXPANSION PROJECT

Mitigation Measure	Implementation Responsibility	Timing/Schedule	Record of Implementation
resources therein within the context of the greater watershed. Additionally, the same information shall be synthesized into a document for public education that can be easily accessed and understood by members of the public including children of grade-school age.			
<p>Measure 4.16.1i: In the Event of Inadvertent Archaeological or Burial Discovery within a State Right-of-Way, Contact Caltrans' Office of Cultural Resources Studies, District 4, Oakland, CA</p> <p><u>Los Vaqueros Reservoir Expansion; Dam Modification; and Other Sites Where Cultural Resources Cannot Be Avoided.</u> In the event there is an inadvertent archaeological or burial discovery within State ROW, the Caltrans Office of Cultural Resources Studies, District 4, Oakland, shall be immediately contacted at (510)286-5618. A staff archaeologist will evaluate the finds within one business day of being contacted by CCWD representatives. A data recovery plan and all subsequent reports for investigations within State ROW will need to be approved by the Office of Cultural Resources Studies, District 4.</p>	CCWD and a qualified archaeologist	During construction	Date: _____ Action Taken:
<p>Measure 4.16.2a: Construction-Related Earth-Moving Activities in Areas Sensitive for Paleontological Resources Shall be Monitored by a Trained Paleontologist</p> <p>A trained paleontologist shall monitor the earth disturbing activities in areas of high and very high sensitivity. If a paleontological resource is encountered during excavation monitoring, the onsite monitor shall halt or divert excavations within 50 feet of the find until the discovery is examined by the monitor in accordance with Society of Vertebrate Paleontology standards. If the resource is determined not to be significant, construction shall resume. If the resource is determined to be significant, construction shall remain halted and the paleontologist shall prepare and implement a salvage plan in accordance with Society of Vertebrate Paleontology standards to recover, remove and/or mold exposed paleontological resources and conduct sampling where necessary to recover microfossil remains (Society of Vertebrate Paleontology, 1995). The paleontologist shall notify CCWD and Reclamation if the find is determined to be significant.</p>	CCWD and a qualified paleontologist and construction contractor(s)	During construction	Date: _____ Action Taken:
<p>Measure 4.16.2b: Provide Training for Construction Personnel Involved with Earth-Moving Activities in Areas with Low to Moderate Sensitivities Regarding Fossils and Notification Procedures</p> <p>Prior to the start of construction on project elements that would require earth disturbing activities in areas of low or moderate paleontological sensitivities, construction personnel involved with earth-moving activities shall be trained regarding the appearance of fossils and proper notification procedures. This worker training shall be prepared and presented by a qualified paleontologist. If workers discover paleontological resources during ground-disturbing activities, work shall stop within 50 feet of the find until a qualified paleontologist can assess the</p>	CCWD, a qualified paleontologist and construction contractor(s)	At the beginning of and during construction	Date: _____ Action Taken:

**SUMMARY TABLE
MITIGATION MONITORING AND REPORTING PROGRAM FOR THE LOS VAQUEROS RESERVOIR EXPANSION PROJECT**

Mitigation Measure	Implementation Responsibility	Timing/Schedule	Record of Implementation
significance of the find and determine the appropriate next steps, depending on the significance of the find as described in Measure 4.16.2a.			
<p>Measure 4.16.3: Stop Work If Human Remains are Discovered During Construction</p> <p><i>Stop Potentially Damaging Work if Human Remains Are Uncovered During Construction, as a Result of Erosion, or of Vandalism, Assess the Significance of the Find, and Pursue Appropriate Management.</i> California law recognizes the need to protect interred human remains, particularly Native American burials and associated items of patrimony, from vandalism and inadvertent destruction. The procedures for the treatment of discovered human remains are contained in California Health and Safety Code §7050.5 and §7052 and California PRC §5097.</p> <p>In accordance with the California Health and Safety Code, if human remains are uncovered during ground-disturbing activities, including construction, erosion, or vandalism, all such activities within a 100-foot radius of the find shall be halted immediately and CCWD's designated representative shall be notified. CCWD shall immediately notify the county coroner and a qualified professional archaeologist. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (Health and Safety Code Section 7050.5[b]). If death appears to have resulted from homicide, suicide, poisoning, accident, violence, or certain contagious diseases and hazards, the coroner is required to investigate as specified in Government Code Section 27491. If the coroner determines that the remains are those of a Native American, he or she must contact the Native American Heritage Commission by phone within 24 hours of making that determination (Health and Safety Code Section 7050[c]). CCWD's responsibilities for acting upon notification of a discovery of Native American human remains are identified in detail in the California PRC Section 5097.98. CCWD or its appointed representative and the professional archaeologist shall contact the Most Likely Descendent (MLD), as determined by the NAHC, regarding the remains. The MLD, in cooperation with the property owner and the lead agencies, shall determine the ultimate disposition of the remains in accord with the provisions of Section 5097.98. If NAHC cannot identify any MLDs, if the MLD fails to make a recommendation, or CCWD disagrees with the MLDs recommendation and mediation fails to resolve the issue, then CCWD must reinter the human remains with appropriate dignity on a part of the property not subject to further subsurface disturbance, as is specified in Section 5097.98(b) and 14 Cal. Code Regs § 1064.5(e)(2).</p>	CCWD, a qualified paleontologist and construction contractor(s)	During construction and operations	Date: _____ Action Taken:

References

- CALFED Bay-Delta Program, 2000. *Multi-Species Conservation Strategy; Final Programmatic EIS/EIR Technical Appendix, 2000a*. Retrieved from: <http://www.delta.dfg.ca.gov/erp/docs/reports_docs/MSCS.pdf>.
- CDFG, 1994. *Staff Report regarding Mitigation for Impacts to Swainson's Hawks (Buteo swainsoni) in the Central Valley of California*, California Department of Fish and Game, Sacramento, CA, 1994.
- CDFG, 1995. *Staff report on burrowing owl mitigation*, California Department of Fish and Game, October 17, 1995.
- CDFG, 2000. *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley*, California Department of Fish and Game, Swainson's Hawk Technical Advisory Committee, Sacramento, CA, 2000.
- Society of Vertebrate Paleontology, 1995. *Assessment and mitigation of adverse impacts to nonrenewable paleontologic resources: standard guidelines*, Society of Vertebrate Paleontology News Bulletin, Vol. 163, p. 22-27, 1995.
- USFWS, 1999a. *San Joaquin Kit Fox Survey Protocol for the Northern Range*, U.S. Department of the Interior, Fish and Wildlife Service, June 1999.
- USFWS, 1999b. *U.S. Fish and Wildlife Service Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance*, U.S. Department of the Interior, Fish and Wildlife Service, April 1999.

Attachment B
Los Vaqueros Expansion
Section 106 of the National Historic Preservation Act Correspondence



United States Department of the Interior

BUREAU OF RECLAMATION
Mid-Pacific Regional Office
2800 Cottage Way
Sacramento, California 95825-1898

IN REPLY
REFER TO:

MP-153
ENV-3.00

NOV 01 2010

CERTIFIED - RETURN RECEIPT REQUESTED

Mr. Milford Wayne Donaldson
State Historic Preservation Officer
Office of Historic Preservation
1725 23rd Street, Suite 100
Sacramento, CA 95816

Subject: National Historic Preservation Act Section 106 Consultation for the Proposed Los Vaqueros Reservoir Expansion Project, Contra Costa County, California (Project #03-SCAO-236)

Dear Mr. Donaldson:

The Bureau of Reclamation is initiating the National Historic Preservation Act (NHPA) Section 106 process seeking your concurrence on a finding of adverse effect for the proposed expansion of Los Vaqueros Reservoir in Contra Costa County, California (see Figure 1 and 2 of enclosed report [Price et al. 2010]). The Los Vaqueros Reservoir is owned and operated by the Contra Costa Water District (CCWD). CCWD is proposing to expand the reservoir storage of Los Vaqueros Reservoir from its current capacity of 100 thousand acre feet (TAF) to 160 TAF. Reclamation's role in the process involves entering into an integrated operations agreement with CCWD to identify how and when Los Vaqueros Reservoir can be filled without interrupting water supply deliveries to the Central Valley Project (CVP) or the California State Water Project (SWP). Reclamation is also providing technical support for environmental compliance efforts for the proposed reservoir expansion. Entering into the integrated operations agreement and Reclamation's technical support of the project constitutes an undertaking pursuant to Section 301(7) of the NHPA (16 U.S.C. 470) as amended. Reclamation is taking the role of the lead Federal agency for compliance with Section 106 for this undertaking. The U.S. Army Corps of Engineers (COE) is proposing to issue a 404 permit for this proposed action and is taking the role as a cooperating agency for this undertaking. As the lead Federal agency for compliance with the Section 106 process, Reclamation is consulting with you in accordance with the regulations at 36 CFR Part 800 implementing Section 106 of the NHPA.

Los Vaqueros was originally constructed in the 1990s and was fully operational in 1998 when the reservoir was filled to capacity. Reclamation was the lead Federal agency for compliance with Section 106 for the original dam construction. Investigations for Los Vaqueros were initiated in the mid 1980s. A Programmatic Agreement (PA) for the project was executed on February 13, 1993. The combined investigations and Historic Properties Treatment Plan (HPTP) resulted in the designation of the Kellogg Creek Historic District which was determined to be eligible for inclusion in the National Register of Historic Places (National Register). A summary of the earlier findings are documented in the enclosed report by Price et al. (2010). During the previous studies, the entire

Kellogg Creek watershed was surveyed for cultural resources and the entire watershed was determined to be the area of potential effects (APE). Prior to the execution of the PA in 1993, several resources were recorded and determinations of eligibility for inclusion in the National Register were reached through consensus. Pursuant to the 1993 PA, resources identified following the execution of the PA were treated as eligible for inclusion in the National Register.

For the current undertaking, Reclamation, in coordination with CCWD and COE, has determined that the APE is comprised of the difference between the current max pool at 100 TAF and 160 TAF, as well as road and trail realignments, borrow areas, staging, and facility upgrades and relocations (see Price et al. [2010:10] for APE discussion). The APE also includes a 200-foot buffer upslope to incorporate all project activities and potential unanticipated actions.

In an effort to coordinate and facilitate the Section 106 process, CCWD contracted William Self Associates, Inc. to assist in the identification of historic properties and prepare recommendations for effects to historic properties that would be impacted by the proposed reservoir expansion. The primary effort to identify historic properties within the APE utilized the extensive existing literature with site inspections to relocate sites and some contemporary reconnaissance level field efforts. These efforts are summarized in the enclosed evaluation and determination report by Price et al. (2010) titled *Evaluation and Request for Determination of Eligibility and Effect for the Los Vaqueros Reservoir Expansion Project, Contra Costa County, California*. In all, there are 33 previous cultural resources studies that cover portions of the APE and the entire APE has been inventoried during the course of these investigations (Price et al. 2010:52,53). Within the current APE, there are 20 previously recorded cultural resources. Fourteen of these resources were determined eligible for inclusion in the National Register by consensus with the State Historic Preservation Office (SHPO); 5 were assumed and treated as eligible for inclusion in the Nation Register pursuant to the 1993 PA; and the historic era component of 1 multi-component site (CA-CCO -458/H) was determined not to be eligible for inclusion in the National Register, while the prehistoric component was determined to be eligible by consensus with the SHPO (Price et al. 2010:54-63). Of the 5 that were treated as eligible for inclusion in the National Register during the original construction, Reclamation concludes that these sites, CA-CCO-696, CA-CCO-725, CA-CCO-726/H, CA-CCO-755, and P-07-000791, are eligible for inclusion in the National Register under Criterion D pursuant to the regulations at 36 CFR Part 60.4 (Price et al. 2010:50-82).

Eleven of the 20 historic properties identified during this process may be adversely affected by the proposed undertaking. These sites include CA-CCO-009, CA-CCO-397, CA-CCO-427/H, CA-CCO-445/H, CA-CCO-450/H (prehistoric only), CA-CCO-459, CA-CCO-468, CA-CCO-469, CA-CCO-535/H, CA-CCO-726/H, and P-07-00791. Of these 11 sites, 3 may have project impacts reduced to no adverse effect through a combination of modified project activities, fencing, education, and archaeological monitoring. These sites include CA-CCO-459, CA-CCO-726/H, and P-07-00791 (Price et al 2010:82-88). Reclamation will continue consultation with you regarding potential methods to reduce or avoid adverse effects to these historic properties. The remaining 9 historic properties will not be impacted during project activities because either they are currently and will continue to be under water, or there is no project actions proposed that will adversely affect them. These sites include CA-CCO-458/H, CA-CCO-462, CA-CCO-463, CA-CCO-470/H, CA-CCO-636, CA-CCO-637, CA-CCO-725, and CA-CCO-755.

Pursuant to the regulations at 36 CFR Part 800.3(f)(2), Reclamation has identified the Buena Vista Rancheria, California Valley Miwok Tribe, Ione Band of Miwok Indians, Jackson Band of Mi-Wuk Indians, and the Wilton Rancheria as Indian tribes likely to have knowledge of historic properties in

the area and who may attach religious and cultural significance to historic properties affected by the proposed undertaking. Reclamation is consulting with these Indian tribes, inviting them to participate in the Section 106 process and seeking their assistance in the identification of sites of religious and cultural significance pursuant to 36 CFR Part 800.4(a)(4). Reclamation has also been attempting to consult with several non-federally recognized Native American organizations potentially related to the Northern Valley Yokuts, the Ohlone, and the Miwok that may have knowledge of historic properties which could be affected by the proposed undertaking pursuant to 36 CFR Part 800.4(a)(3). Reclamation is continuing consultation efforts with the Indian tribes and non-federally recognized Native American organizations throughout the process and will work to address concerns and seek their participation in the resolution of adverse effects pursuant to 36 CFR Part 800.6.

Based on the above discussion and the enclosed materials, Reclamation finds that the proposed undertaking will result in an adverse effect to historic properties pursuant to 36 CFR Part 800.5(d)(2). Reclamation will seek to resolve the adverse effects pursuant to 36 CFR Part 800.6 through mitigation outlined in a proposed Memorandum of Agreement (MOA) in consultation with you and the other cooperating parties. In addition to the MOA, a historic properties treatment plan (HPTP), a pre-construction testing plan (PTP) for sensitive areas, and a discovery plan (DP) for inadvertent discoveries will be prepared in consultation with you and other cooperating parties. Reclamation will notify the Advisory Council on Historic Preservation (ACHP) of the adverse effects to identify their level of participation pursuant to 36 CFR Part 800.6(a)(1) following your concurrence on our finding. Signatories to the MOA will include Reclamation, COE, CCWD, and you. Other potential parties to the MOA may include the ACHP and Indian tribes.

Reclamation invites your comments on the delineation of the APE and the appropriateness of the identification efforts; and requests your consensus that the five sites previously treated as eligible for the National Register are eligible for inclusion in the National Register under Criterion D. Additionally, Reclamation requests your concurrence on our finding that there will be an adverse effect to historic properties as a result of the current proposed undertaking. As previously noted, Reclamation will continue consultation with you under 36 CFR Part 800 in development of the HPTP, PTP, DP, and MOA for this project. If you have any questions or concerns, please contact Mr. Adam Nickels at 916-978-5053 or anickels@usbr.gov. We look forward to resolving adverse effects to historic properties and working with you on this project.

Sincerely,

ANASTASIA T. LEIGH
FOR Michael A. Chotkowski
Regional Environmental Officer

Enclosure

Continued on next page.

Continued from previous page.

cc: Ms. Erin E. Hess
Project Manager – Regulatory Division
U.S. Army Corps of Engineers
1325 J. Street, Room 1480
Sacramento, CA 95814

Dr. Heather Price
Regional Project Director – Pacific Region
William Self Associate, Inc.
P.O. Box 2192
Orinda, CA 94563

Ms. Marguerite Naillon
Special Projects Manager
Contra Costa Water District
2411 Bisso Lane
Concord, CA 94520

Ms. Sharon McHale
Project Manager
Division of Planning
Bureau of Reclamation
2800 Cottage Way, MP700
Sacramento, CA 95825

WBR:ANickels:mjames:10-29-2010:916-978-5053
I:153/Adam/2010/03-SCAO-236/03-SCAO-236 SHPO consultation Adverse Effect.doc

**OFFICE OF HISTORIC PRESERVATION
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November 16, 2010

In Reply Refer To: BUR101103C

Michael A. Chotkowski
Regional Environmental Officer
United States Department of the Interior
Bureau of Reclamation
Mid-Pacific Regional Office
2800 Cottage Way
Sacramento, CA 95825-1898

BUREAU OF RECLAMATION OFFICIAL FILE COPY		
NOV 19 2010		
CODE	ACTION	SURNAME & DATE
153	✓	my 11/19/2010

Re: Los Vaqueros Reservoir Expansion Project, Contra Costa County, California (Project No.03-SCAO-236)

Project	214
Control No.	10084588
Folder I.D.	1114652-2
Date Input & Initials	11-19-10 B

Dear Mr. Chotkowski:

Thank you for consulting with me regarding the above noted undertaking. Pursuant to 36 CFR Part 800 (as amended 8-05-04) regulations implementing Section 106 of the National Historic Preservation Act (NHPA), the Bureau of Reclamation (BUR) is the lead federal agency for this undertaking and is seeking my comments on the effects that the proposed project will have on historic properties. Los Vaqueros Reservoir is owned and operated by the Contra Costa Water District (CCWD). The proposed project is the expansion of the reservoir capacity from the current 100,000 acre-feet (AF) to 160,000 AF. The BUR will be entering into an Integrated Operations Agreement with the CCWD regarding the coordination of reservoir operations (i.e., filling) with the operations of the Central Valley Project (CVP) and the California State Water Project (SWP). The BUR will also be providing technical support for environmental compliance of the reservoir expansion project. The BUR has determined that these actions constitute an undertaking subject to review under the Section 106 regulations. In addition to your letter of November 01, 2010, you have submitted the following document as evidence of your efforts to identify and evaluate historic properties in the project APE:

- *Evaluation and Request for Determination of Eligibility and Effect for the Los Vaqueros Reservoir Expansion Project, Contra Costa County, California* (Heather Price, Thomas Young, Angela Cook, and Drew Bailey; William Self Associates, Inc.: September 16, 2010).

The Area of Potential Effects (APE) has been configured as the zone that encompasses the difference between the current maximum reservoir pool (100,000 AF) and the new proposed expanded reservoir pool (160,000 AF), all road and trail realignments, all borrow areas and staging locations, and all facility upgrades and relocations. A 200-foot wide buffer zone is also included in the project APE.

Identification efforts by the BUR concluded that there are 20 historic properties in the APE, fourteen of which have been previously determined eligible for the National Register of Historic Places (NRHP) by Section 106 consensus during consultation for the initial reservoir planning/construction in the 1990's. NRHP eligibility was assumed by the BUR for five of the remaining properties, CA-CCO-696, CA-CCO-725, CA-CCO-726/H, CA-CCO-755, and P-07-000791. The BUR has now concluded that all five of these sites are eligible for the NRHP under criterion D for data potential. Additionally, the prehistoric component of CA-CCO-458/H was determined NRHP-eligible while the historic component was determined to be ineligible.

The BUR has also determined that 11 of the 20 NRHP-eligible historic properties in the APE may be adversely affected by the undertaking as proposed. These sites are CA-CCO-009, CA-CCO-397, CA-CCO-427/H, CA-CCO-445/H, CA-CCO-450/H (prehistoric component only), CA-CCO-459, CA-CCO-468, CA-CCO-469, CA-CCO-535H, CA-CCO-726/H, and P-07-000791. The BUR has concluded that adverse effects to three of these sites, CA-CCO-459, CA-CCO-726/H and P-07-000791, may be prevented through the implementation of avoidance/protection measures, construction crew education, and archaeological monitoring. Adverse effects to eight sites appear to be unavoidable.

Regarding the remaining nine NRHP-eligible historic properties, they are either currently inundated by the existing reservoir, and will continue to be, or they will not be adversely affected by project activities as currently proposed. These are CA-CCO-458/H, CA-CCO-462, CA-CCO-463, CA-CCO-470/H, CA-CCO-636, CA-CCO-637, CA-CCO-696, CA-CCO-725, and CA-CCO-755. After reviewing your letter and supporting documentation, I have the following comments:

- 1) I concur that the Area of Potential Effects has been appropriately determined in accordance with 36 CFR Part 800.4(a)(1).
- 2) I further concur that archaeological sites CA-CCO-696, CA-CCO-725, CA-CCO-726/H, CA-CCO-755, and P-07-000791 are eligible for the National Register of Historic Places under criterion D.
- 3) I further concur that a finding of Adverse Effect is appropriate for this undertaking pursuant to 36 CFR Part 800.5(d)(2).

Please continue your consultations with both federally-recognized and non-recognized Native American tribes and organizations regarding their knowledge of historic properties in the APE and continue to request their participation in the Section 106 process for this undertaking. I will be available to continue this consultation following your submittal of a draft Memorandum of Agreement (MOA) that will evidence the BUR's continued compliance with Section 106 in accordance with 36 CFR Part 800.6(c) and an Historic Properties Treatment Plan (HPTP) that will be implemented by the MOA and that will specify the resolution of adverse effects pursuant to 36 CFR Part 800.6. Please also keep me apprised of the decision by the Advisory Council on Historic Preservation regarding their participation in this consultation and agreement document.

Thank you for seeking my comments and for considering historic properties in planning your project. If you require further information, please contact William Soule, Associate State Archeologist, at phone 916-445-7022 or email wsoule@parks.ca.gov.

Sincerely,

Susan K Stratton for

Milford Wayne Donaldson, FAIA
State Historic Preservation Officer



United States Department of the Interior

BUREAU OF RECLAMATION
Mid-Pacific Regional Office
2800 Cottage Way
Sacramento, California 95825-1898

IN REPLY
REFER TO:
MP-153
ENV-3.00

CERTIFIED - RETURN RECEIPT REQUESTED

Mr. Reid Nelson
Director – Office of Federal Programs
Advisory Council on Historic Preservation
Old Post Office Building
1100 Pennsylvania Avenue, NW, Suite 803
Washington, DC 20004

Subject: Notification of an Adverse Effect Finding Under the National Historic Preservation Act (NHPA) Section 106 for the Proposed Los Vaqueros Reservoir Expansion Project, Contra Costa County, California (Project #03-SCAO-236)

Dear Mr. Nelson:

The Bureau of Reclamation is notifying your office of a finding of adverse effect to historic properties pursuant to the regulations at 36 CFR Part 800.6(a)(1), implementing Section 106 of the NHPA for the proposed expansion of Los Vaqueros Reservoir in Contra Costa County, California (see Figure 1 and 2 of enclosed report [Price et al. 2010]). The Los Vaqueros Reservoir is owned and operated by the Contra Costa Water District (CCWD). CCWD is proposing to expand the reservoir storage of Los Vaqueros Reservoir from its current capacity of 100 thousand acre feet (TAF) to 160 TAF. Reclamation's role in the process involves entering into an integrated operations agreement with CCWD to identify how and when Los Vaqueros Reservoir can be filled without interrupting water supply deliveries to the Central Valley Water Project (CVP) or the California State Water Project. Reclamation is also providing technical support for environmental compliance efforts for the proposed reservoir expansion. Entering into the integrated operations agreement and providing technical support of the project by Reclamation constitutes an undertaking pursuant to Section 301(7) of the NHPA (16 U.S.C. 470) as amended. Reclamation is taking the role of the lead Federal agency for compliance with Section 106 for this undertaking. The U.S. Army Corps of Engineers (Corps) is proposing to issue a 404 permit for this proposed action and is taking the role as a cooperating agency for this undertaking. As the lead Federal agency for compliance with Section 106 process, Reclamation has consulted with the California State Historic Preservation Officer (SHPO) and requested their concurrence on our finding of adverse effect receiving their concurrence on November 16, 2010 (consultation and response enclosed).

Los Vaqueros Dam was originally constructed in the 1990s and was fully operational in 1998 when the reservoir was filled to capacity. Reclamation was the lead Federal agency for compliance with Section 106 for the original dam construction. Investigations for Los Vaqueros were initiated in the mid 1980s. A Programmatic Agreement (PA) for the project was executed on February 13, 1993. The combined investigations and Historic Properties Treatment Plan (HPTP) resulted in the designation of the Kellogg Creek Historic District which was determined to be eligible for inclusion in the National Register of Historic Places (National Register). A summary of the earlier findings are documented in the enclosed report by Price et al. (2010). During the previous studies, the entire Kellogg Creek watershed was

surveyed for cultural resources and the entire watershed was determined to be the area of potential effects (APE). Prior to the execution of the PA in 1993, several resources were recorded and determinations of eligibility for inclusion in the National Register were reached through consensus. Pursuant to the 1993 PA, resources identified following the execution of the PA were treated as eligible for inclusion in the National Register.

For the current undertaking, Reclamation, in coordination with CCWD and the Corps, and in consultation with the SHPO, has determined that the area of potential effects (APE) is comprised of the difference between the current max pool at 100 TAF and 160 TAF, as well as road and trail realignments, borrow areas, staging, and facility upgrades and relocations (see Price et al. [2010:10] for APE discussion). The APE also includes a 200 foot buffer upslope to incorporate all project activities and potential unanticipated actions.

In an effort to coordinate and facilitate the Section 106 process, CCWD contracted William Self Associates, Inc. to assist in the identification of historic properties and prepare recommendations for effects to historic properties that would be impacted by the proposed reservoir expansion. The primary effort to identify historic properties within the APE utilized the extensive existing literature with site inspections to relocate sites and some contemporary reconnaissance level field efforts. These efforts are summarized in the enclosed evaluation and determination report by Price et al. (2010) titled *Evaluation and Request for Determination of Eligibility and Effect for the Los Vaqueros Reservoir Expansion Project, Contra Costa County, California*. In all, there are 33 previous cultural resources studies that cover portions of the APE and the entire APE has been inventoried during the course of these investigations (Price et al. 2010:52, 53). Within the current APE, there are 20 previously recorded cultural resources. Fourteen of these resources were determined eligible for inclusion in the National Register by consensus with the SHPO; five were assumed and treated as eligible for inclusion in the National Register pursuant to the 1993 PA; and the historic era component of one multi-component site (CA-CCO -458/H) was determined not to be eligible for inclusion in the National Register, while the prehistoric component was determined to be eligible by consensus with the SHPO (Price et al. 2010:54-63). Of the five that were treated as eligible for inclusion in the National Register during the original construction, Reclamation concluded through consensus that CA-CCO-696, CA-CCO-725, CA-CCO-726/H, CA-CCO-755, and P-07-000791 are eligible for inclusion in the National Register under Criterion D pursuant to the regulations at 36 CFR Part 60.4 as contributing elements to the Kellogg Creek National Historic District and in some cases individually eligible for inclusion in the National Register (Price et al. 2010:50-82).

Eleven of the 20 historic properties identified during this process have been determined through consultation with the SHPO to be adversely effected by the proposed undertaking. These sites include CA-CCO-009, CA-CCO-397, CA-CCO-427/H, CA-CCO-445/H, CA-CCO-450/H (prehistoric only), CA-CCO-459, CA-CCO-468, CA-CCO-469, CA-CCO-535/H, CA-CCO-726/H, and P-07-00791). Of these 11 sites, three of them may have project impacts reduced to no adverse effect through a combination of modified project activities, fencing, education, and archaeological monitoring. These sites include CA-CCO-459, CA-CCO-726/H, and P-07-00791. The remaining nine historic properties will not be impacted during project activities because they are either currently and will continue to be under water or there are no project actions proposed that will affect them. These sites include CA-CCO-458/H, CA-CCO-462, CA-CCO-463, CA-CCO-470/H, CA-CCO-636, CA-CCO-637, CA-CCO-696, CA-CCO-725, and CA-CCO-755. Note that site P-07-000532 is identified as a sensitive site in Price et al. (2010). This site depicts the location of where exhumed human remains and funerary objects were reburied pursuant to the 1993 PA and cultural resources management plan. This site does not constitute a historic property as defined by the regulations at 36 CFR Part 60.4 but is a site of significant sensitivity. The proposed reservoir expansion will have no additional impacts since the site will remain under water.

Pursuant to the regulations at 36 CFR Part 800.3(f)(2), Reclamation has identified the Buena Vista Rancheria, California Valley Miwok Tribe, Ione Band of Miwok Indians, Jackson Band of Mi-Wuk Indians, and the Wilton Rancheria as Indian tribes likely to have knowledge of historic properties in the area and who may attach religious and cultural significance to historic properties affected by the proposed undertaking. Reclamation is consulting with these Indian tribes inviting them to participate in the Section 106 process and seeking their assistance in the identification of sites of religious and cultural significance pursuant to 36 CFR Part 800.4(a)(4). Reclamation has also been attempting to consult with several non-federally recognized Native American organizations potentially related to the Northern Valley Yokuts, the Ohlone, and the Miwok that may have knowledge of historic properties which could be affected by the proposed undertaking pursuant to 36 CFR Part 800.4(a)(3). Reclamation is continuing consultation efforts with the Indian tribes and non-federally recognized Native American organizations throughout the process and will work to address concerns and seek their participation in the resolution of adverse effects pursuant to 36 CFR Part 800.6.

Through consultation with the SHPO and continued consultation efforts with Indian tribes and interested parties, Reclamation finds that the proposed undertaking will result in an adverse effect to historic properties pursuant to 36 CFR Part 800.5(d)(2). Reclamation will seek to resolve adverse effects pursuant to 36 CFR Part 800.6 through mitigation outlined in a proposed Memorandum of Agreement (MOA) in consultation with the SHPO and the other cooperating parties. In addition to the MOA, a historic properties treatment plan, a pre-construction testing plan for sensitive areas, and a discovery plan for inadvertent discoveries will be prepared in consultation with SHPO and other cooperating parties.

Reclamation requests that you inform us whether or not your office will participate in resolution of adverse effect process pursuant to 36 CFR Part 800.6(a)(1). Based on the project impacts outlined in the documentation provided it does not appear that the proposed undertaking meets the Appendix A(c)(1) criteria of the 36 CFR Part 800 regulations for the Advisory Council on Historic Preservation (ACHP) participation in this action. That noted, we understand that the ACHP may still elect to participate. If you have any questions or concerns, please contact Mr. Adam Nickels at 916-978-5053 or anickels@usbr.gov. We look forward to resolving adverse effects to historic properties and to your response. For your convenience, when responding to this request my email is mchotkowski@usbr.gov.

Sincerely,

Michael A. Chotkowski
Regional Environmental Officer

Enclosures – 2

cc: See next page.

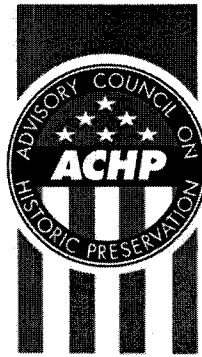
cc: Ms. Erin E. Hess
Project Manager – Regulatory Division
U.S. Army Corps of Engineers
1325 J. Street, Room 1480
Sacramento, CA 95814

Dr. Heather Price
Regional Project Director – Pacific Region
William Self Associate, Inc.
P.O. Box 2192
Orinda, CA 94563

Ms. Marguerite Naillon
Special Projects Manager
Contra Costa Water District
2411 Bisso Lane
Concord, CA 94520
(w/o encl to each)

WBR:ANickels:mjames:11-24-2010:916-978-5053

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Preserving America's Heritage

December 15, 2010

Mr. Michael A. Chotkowski
Regional Environmental Officer
Bureau of Reclamation
Mid-Pacific Regional Office
2800 Cottage Way
Sacramento, CA 95825-1898

**Ref: *Proposed Los Vaqueros Reservoir Expansion Project
Contra Costa County, California (Project #03-SCAO-236)***

Dear Mr. Chotowski:

On December 5, 2010, the Advisory Council on Historic Preservation (ACHP) received your notification and supporting documentation regarding the adverse effects of the referenced undertaking on properties listed on and eligible for listing in the National Register of Historic Places. Based upon the information you provided, we have concluded that Appendix A, *Criteria for Council Involvement in Reviewing Individual Section 106 Cases*, of our regulations, "Protection of Historic Properties" (36 CFR Part 800), does not apply to this undertaking. Accordingly, we do not believe that our participation in the consultation to resolve adverse effects is needed. However, if we receive a request for participation from the State Historic Preservation Officer (SHPO), Tribal Historic Preservation Officer, affected Indian tribe, a consulting party, or other party, we may reconsider this decision. Additionally, should circumstances change, and you determine that our participation is needed to conclude the consultation process, please notify us.

Pursuant to 36 CFR §800.6(b)(1)(iv), you will need to file the final Memorandum of Agreement (MOA), developed in consultation with the California SHPO and any other consulting parties, and related documentation with the ACHP at the conclusion of the consultation process. The filing of the MOA and supporting documentation with the ACHP is required in order to complete the requirements of Section 106 of the National Historic Preservation Act.

Thank you for providing us with the opportunity to review this undertaking. Should you have any questions or need additional assistance, please contact Tom McCulloch at 202-606-8554, or via email at tmcculloch@achp.gov.

Sincerely,

Raymond V. Wallace
Historic Preservation Technician
Office of Federal Agency Programs



United States Department of the Interior

BUREAU OF RECLAMATION
Mid-Pacific Regional Office
2800 Cottage Way
Sacramento, California 95825-1898

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REFER TO:
MP-153
ENV-3.00

FEB 02 2011

SPECIAL DELIVERY—HAND DELIVERED

Mr. Milford Wayne Donaldson
State Historic Preservation Officer
Office of Historic Preservation
1725 23rd Street, Suite 100
Sacramento, California 95816

Subject: Draft Memorandum of Agreement (MOA) and Historic Properties Treatment Plan (HPTP) for Resolving Adverse Effects to Historic Properties Resulting in the Proposed Expansion of the Los Vaqueros Reservoir, Contra Costa County, California (Project 03-SCAO-236) (BUR101103C)

Dear Mr. Donaldson:

The Bureau of Reclamation is continuing consultation under Section 106 of the National Historic Preservation Act for the proposed expansion of the Los Vaqueros Reservoir in Contra Costa County, California. Pursuant to Reclamation's finding of adverse effects consultation letter sent November 1, 2010, and your concurrence response dated November 16, 2010 (both consultation enclosed in Exhibit A), Reclamation is submitting a draft MOA, draft Pre-construction Testing Plan (PTP), draft HPTP, and a draft Historic Properties Discovery Plan (HPDP) for your review. These documents represent Reclamation's proposal to resolve adverse effects to historic properties resulting from the proposed undertaking. Signatories to the MOA include Reclamation, Army Corps of Engineers, Contra Costa Water District, and you. In a letter dated December 15, 2010, the Advisory Council on Historic Preservation declined to participate in the resolution of adverse effects for this undertaking (letter enclosed in Exhibit A).

Enclosed in Exhibit B, please find the draft *Memorandum of Agreement Between the Bureau of Reclamation, U.S. Army Corps of Engineers, the Contra Costa Water District, and the California State Historic Preservation Officer Regarding the Resolution of Adverse Effects to Historic Properties from the Expansion of the Los Vaqueros Reservoir Contra Costa County, California*; the draft *Preconstruction Testing Plan for the 160 TAF Reservoir Primary Core Borrow Area Los Vaqueros Reservoir Expansion Project Contra Costa County, California*; the draft *Historic Property Treatment Plan Los Vaqueros Reservoir Expansion Project Contra Costa County, California*; and the *Historic Properties Discovery Plan Los Vaqueros Reservoir Expansion Project Contra Costa County, California* (located in Appendix A of the HPTP). At your request, electronic copies can also be submitted for your review.

Reclamation has continued to consult with the Buena Vista Rancheria, California Valley Miwok Tribe, Ione Band of Miwok Indians, Jackson Band of Mi-Wuk Indians, and the Wilton Rancheria pursuant to 36 CFR 800.4(a)(4). There has been limited response to our requests to participate in the Section 106 process by these Indian tribes. Reclamation has requested their review of the MOA and requested that they express their interest in being a concurring party to this MOA pursuant to 36 CFR Part 800.6.

Reclamation requests your participation in this MOA and we look forward to receiving any comments you may have on the draft MOA, PTP, HPTP, and HPDP. Please contact Mr. Adam Nickels, at 916-978-5053 or email anickesl@usbr.gov, if you have any questions about the MOA, the HPTP, or the undertaking in general.

Sincerely,

ANASTASIA T. LEIGH

FOR

Michael A. Chotkowski
Regional Environmental Officer

Enclosures - 2

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United States Department of the Interior

BUREAU OF RECLAMATION
Mid-Pacific Regional Office
2800 Cottage Way
Sacramento, California 95825-1898

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REFER TO:

MP-153
ENV-3.00

FEB 02 2011

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Honorable Rhonda Morningstar Pope
Chairperson
Buena Vista Rancheria
P.O. Box 162283
Sacramento, California 95816

Subject: National Historic Preservation Act (NHPA) Section 106 Consultation for the Proposed Los Vaqueros Reservoir Expansion Project Memorandum of Agreement (MOA) for the Resolution of Adverse Effect to Historic Properties, Contra Costa County, California (Project #03-SCAO-236)

Dear Chairperson Pope:

The Bureau of Reclamation is continuing consultation under Section 106 of the NHPA regarding the proposed expansion of Los Vaqueros Reservoir, Contra Costa County, California (Figure 1 and Appendix 1 of enclosed MOA) and is requesting your review of an MOA outlining the efforts to resolve adverse effects to historic properties as a result of the proposed reservoir expansion. Reclamation has previously requested your participation in the Section 106 process. Reclamation's initial effort was sent on June 30, 2010, and a second effort was made on October 19, 2010. Those previous efforts were attempts to solicit your participation in the Section 106 process through the identification of sites of religious and cultural significance and knowledge of potentially significant cultural resources.

In consultation with the California State Historic Preservation Officer (SHPO) and the Advisory Council, Reclamation and the cooperating agencies (U.S. Army Corps of Engineers [USACE] and Contra Costa Water District [CCWD]) have found that the proposed reservoir rise will result in an adverse effect to historic properties pursuant to 36 CFR Part 800.5(d)(2). Reclamation, the SHPO, and the cooperating agencies are proposing to enter into an MOA to resolve adverse effects to historic properties that will occur as a result of the proposed expansion. Reclamation is requesting your review and comment on the enclosed MOA. Additionally, Reclamation would like to invite you, as the representative for your tribe, to be a concurring part to this MOA.

The Los Vaqueros Reservoir is owned and operated by the CCWD. CCWD is proposing to expand the reservoir storage of Los Vaqueros Reservoir from its current capacity at 100 thousand acre feet (TAF) to 160 TAF. For reference, an acre foot roughly equates to a football field covered 1-foot deep in water. As part of the proposed expansion of the Los Vaqueros Reservoir, facilities will be upgraded, new borrow areas will be excavated, roads and trails will be relocated, and acquisition of

new lands for biological mitigation will occur. Reclamation has been determined to be the lead Federal agency responsible for compliance with Section 106 of NHPA (16 U.S.C. 470) as amended. Our role in the process involves entering into an integrated operations agreement with CCWD to identify how and when Los Vaqueros Reservoir can be filled without interrupting water supply deliveries to the Central Valley Water Project (CVP) or the California State Water Project (SWP). Reclamation is also providing technical support for environmental compliance efforts for the proposed reservoir expansion. Entering into the integrated operations agreement and Reclamation's technical support of the project constitutes an undertaking pursuant to Section 301(7) of the NHPA.

As part of the Section 106 process, Federal agencies must make a reasonable and good faith effort to identify Indian tribes that might attach religious and cultural significance to historic properties which may be affected by a proposed undertaking (36 CFR Part 800.3[f][2]). Federal agencies must also make a good faith effort to seek input from tribes on the resolution of adverse effect. Your tribe has been identified as having potential knowledge of cultural resources that may have religious and cultural significance attached to them. Reclamation is continuing to solicit information on sites of religious and cultural significance pursuant to 36 CFR Part 800.4(a)(4) and sites of a sacred nature pursuant to Executive Order 13007 in an effort to incorporate these places into our planning efforts and minimize significant impacts to resources by the proposed action. If the location and nature of these areas is sensitive in nature or confidential, this information may be withheld from the public as outlined in the regulations at 36 CFR Part 800.11(c).

As previously noted, Reclamation continues to request your participation in the Section 106 process, is requesting your review of the enclosed MOA, and is inviting you to be a concurring party to this agreement. If you would like to comment on the MOA, express your interest in being a concurring party to the MOA, identify and discuss effects to resources of religious and cultural significance or sacred nature within the project area, or have questions or comments regarding this effort please contact Mr. Adam Nickels, Reclamation Archaeologist, at 916-978-5053, or anickels@usbr.gov. If you would like to discuss project details or find out more about the Los Vaqueros expansion project please contact Ms. Marguerite Naillon with CCWD at 925-688-8018, or mnaillon@ccwater.com. We look forward to hearing from you.

Sincerely,

ANASTASIA T. LEIGH

~~FOR~~ Michael A. Chotkowski
Regional Environmental Officer

Enclosures - 2

WBR:ANickels:mjames:01-31-2011:916-978-5053
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United States Department of the Interior

BUREAU OF RECLAMATION
Mid-Pacific Regional Office
2800 Cottage Way
Sacramento, California 95825-1898

IN REPLY
REFER TO:

MP-153
ENV-3.00

FEB 02 2011

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Honorable Silvia Burley
Chairperson
California Valley Miwok Tribe
1163 E. March Lane, Ste D
Stockton, California 95669

Subject: National Historic Preservation Act (NHPA) Section 106 Consultation for the Proposed Los Vaqueros Reservoir Expansion Project Memorandum of Agreement (MOA) for the Resolution of Adverse Effect to Historic Properties, Contra Costa County, California (Project #03-SCAO-236)

Dear Chairperson Burley:

The Bureau of Reclamation is continuing consultation under Section 106 of the NHPA regarding the proposed expansion of Los Vaqueros Reservoir, Contra Costa County, California (Figure 1 and Appendix 1 of enclosed MOA) and is requesting your review of an MOA outlining the efforts to resolve adverse effects to historic properties as a result of the proposed reservoir expansion. Reclamation has previously requested your participation in the Section 106 process. Reclamation's initial effort was sent on June 30, 2010, and a second effort was made on October 19, 2010. Those previous efforts were attempts to solicit your participation in the Section 106 process through the identification of sites of religious and cultural significance and knowledge of potentially significant cultural resources.

In consultation with the California State Historic Preservation Officer (SHPO) and the Advisory Council, Reclamation and the cooperating agencies (U.S. Army Corps of Engineers [USACE] and Contra Costa Water District [CCWD]) have found that the proposed reservoir rise will result in an adverse effect to historic properties pursuant to 36 CFR Part 800.5(d)(2). Reclamation, the SHPO, and the cooperating agencies are proposing to enter into an MOA to resolve adverse effects to historic properties that will occur as a result of the proposed expansion. Reclamation is requesting your review and comment on the enclosed MOA. Additionally, Reclamation would like to invite you, as the representative for your tribe, to be a concurring part to this MOA.

The Los Vaqueros Reservoir is owned and operated by the CCWD. CCWD is proposing to expand the reservoir storage of Los Vaqueros Reservoir from its current capacity at 100 thousand acre feet (TAF) to 160 TAF. For reference, an acre foot roughly equates to a football field covered 1-foot deep in water. As part of the proposed expansion of the Los Vaqueros Reservoir, facilities will be upgraded, new borrow areas will be excavated, roads and trails will be relocated, and acquisition of new lands for biological mitigation will occur. Reclamation has been determined to be the lead Federal agency responsible for compliance with Section 106 of NHPA (16 U.S.C. 470) as amended.

Our role in the process involves entering into an integrated operations agreement with CCWD to identify how and when Los Vaqueros Reservoir can be filled without interrupting water supply deliveries to the Central Valley Water Project (CVP) or the California State Water Project (SWP). Reclamation is also providing technical support for environmental compliance efforts for the proposed reservoir expansion. Entering into the integrated operations agreement and Reclamation's technical support of the project constitutes an undertaking pursuant to Section 301(7) of the NHPA.

As part of the Section 106 process, Federal agencies must make a reasonable and good faith effort to identify Indian tribes that might attach religious and cultural significance to historic properties which may be affected by a proposed undertaking (36 CFR Part 800.3[f][2]). Federal agencies must also make a good faith effort to seek input from tribes on the resolution of adverse effect. Your tribe has been identified as having potential knowledge of cultural resources that may have religious and cultural significance attached to them. Reclamation is continuing to solicit information on sites of religious and cultural significance pursuant to 36 CFR Part 800.4(a)(4) and sites of a sacred nature pursuant to Executive Order 13007 in an effort to incorporate these places into our planning efforts and minimize significant impacts to resources by the proposed action. If the location and nature of these areas is sensitive in nature or confidential, this information may be withheld from the public as outlined in the regulations at 36 CFR Part 800.11(c).

As previously noted, Reclamation continues to request your participation in the Section 106 process, is requesting your review of the enclosed MOA, and is inviting you to be a concurring party to this agreement. If you would like to comment on the MOA, express your interest in being a concurring party to the MOA, identify and discuss effects to resources of religious and cultural significance or sacred nature within the project area, or have questions or comments regarding this effort please contact Mr. Adam Nickels, Reclamation Archaeologist, at 916-978-5053, or anickels@usbr.gov. If you would like to discuss project details or find out more about the Los Vaqueros expansion project please contact Ms. Marguerite Naillon with CCWD at 925-688-8018, or mnaillon@ccwater.com. We look forward to hearing from you.

Sincerely,

ANASTASIA T. LEIGH

FOR Michael A. Chotkowski
Regional Environmental Officer

Enclosures - 2

cc: Ms. Debra Grimes
Cultural Preservation Specialist
California Valley Miwok Tribe
P.O. Box 1015
West Point, California 95255
(w/encl)

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2800 Cottage Way
Sacramento, California 95825-1898

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CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Honorable Mathew Franklin
Chairperson
Ione Band of Miwok Indians
P.O. Box 699
Plymouth, California 95669

Subject: National Historic Preservation Act (NHPA) Section 106 Consultation for the Proposed Los Vaqueros Reservoir Expansion Project Memorandum of Agreement (MOA) for the Resolution of Adverse Effect to Historic Properties, Contra Costa County, California (Project #03-SCAO-236)

Dear Chairperson Franklin:

The Bureau of Reclamation is continuing consultation under Section 106 of the NHPA regarding the proposed expansion of Los Vaqueros Reservoir, Contra Costa County, California (Figure 1 and Appendix 1 of enclosed MOA) and is requesting your review of an MOA outlining the efforts to resolve adverse effects to historic properties as a result of the proposed reservoir expansion. Reclamation has previously requested your participation in the Section 106 process. Reclamation's initial effort was sent on June 30, 2010, and a second effort was made on October 19, 2010. Those previous efforts were attempts to solicit your participation in the Section 106 process through the identification of sites of religious and cultural significance and knowledge of potentially significant cultural resources.

In consultation with the California State Historic Preservation Officer (SHPO) and the Advisory Council, Reclamation and the cooperating agencies (U.S. Army Corps of Engineers [USACE] and Contra Costa Water District [CCWD]) have found that the proposed reservoir rise will result in an adverse effect to historic properties pursuant to 36 CFR Part 800.5(d)(2). Reclamation, the SHPO, and the cooperating agencies are proposing to enter into an MOA to resolve adverse effects to historic properties that will occur as a result of the proposed expansion. Reclamation is requesting your review and comment on the enclosed MOA. Additionally, Reclamation would like to invite you, as the representative for your tribe, to be a concurring part to this MOA.

The Los Vaqueros Reservoir is owned and operated by the CCWD. CCWD is proposing to expand the reservoir storage of Los Vaqueros Reservoir from its current capacity at 100 thousand acre feet (TAF) to 160 TAF. For reference, an acre foot roughly equates to a football field covered 1-foot deep in water. As part of the proposed expansion of the Los Vaqueros Reservoir, facilities will be upgraded, new borrow areas will be excavated, roads and trails will be relocated, and acquisition of

new lands for biological mitigation will occur. Reclamation has been determined to be the lead Federal agency responsible for compliance with Section 106 of NHPA (16 U.S.C. 470) as amended. Our role in the process involves entering into an integrated operations agreement with CCWD to identify how and when Los Vaqueros Reservoir can be filled without interrupting water supply deliveries to the Central Valley Water Project (CVP) or the California State Water Project (SWP). Reclamation is also providing technical support for environmental compliance efforts for the proposed reservoir expansion. Entering into the integrated operations agreement and Reclamation's technical support of the project constitutes an undertaking pursuant to Section 301(7) of the NHPA.

As part of the Section 106 process, Federal agencies must make a reasonable and good faith effort to identify Indian tribes that might attach religious and cultural significance to historic properties which may be affected by a proposed undertaking (36 CFR Part 800.3[f][2]). Federal agencies must also make a good faith effort to seek input from tribes on the resolution of adverse effect. Your tribe has been identified as having potential knowledge of cultural resources that may have religious and cultural significance attached to them. Reclamation is continuing to solicit information on sites of religious and cultural significance pursuant to 36 CFR Part 800.4(a)(4) and sites of a sacred nature pursuant to Executive Order 13007 in an effort to incorporate these places into our planning efforts and minimize significant impacts to resources by the proposed action. If the location and nature of these areas is sensitive in nature or confidential, this information may be withheld from the public as outlined in the regulations at 36 CFR Part 800.11(c).

As previously noted, Reclamation continues to request your participation in the Section 106 process, is requesting your review of the enclosed MOA, and is inviting you to be a concurring party to this agreement. If you would like to comment on the MOA, express your interest in being a concurring party to the MOA, identify and discuss effects to resources of religious and cultural significance or sacred nature within the project area, or have questions or comments regarding this effort please contact Mr. Adam Nickels, Reclamation Archaeologist, at 916-978-5053, or anickels@usbr.gov. If you would like to discuss project details or find out more about the Los Vaqueros expansion project please contact Ms. Marguerite Naillon with CCWD at 925-688-8018, or mnaillon@ccwater.com. We look forward to hearing from you.

Sincerely,

ANASTASIA T. LEIGH

FOR Michael A. Chotkowski
Regional Environmental Officer

Enclosures - 2

cc: Ms. Billie Blue
Chairperson, Cultural Committee
Ione Band of Miwok Indians
604 Pringle Avenue, #42
Galt, California 95632
(w/encl)

WBR:ANickels:mjames:01-31-2011:916-978-5053
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United States Department of the Interior

BUREAU OF RECLAMATION
Mid-Pacific Regional Office
2800 Cottage Way
Sacramento, California 95825-1898

IN REPLY
REFER TO:

MP-153
ENV-3.00

FEB 02 2011

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Honorable Irvin Marks
Chairperson
Jackson Band of Mi-Wuk Indians
P.O. Box 1090
Jackson, California 95669

Subject: National Historic Preservation Act (NHPA) Section 106 Consultation for the Proposed Los Vaqueros Reservoir Expansion Project Memorandum of Agreement (MOA) for the Resolution of Adverse Effect to Historic Properties, Contra Costa County, California (Project #03-SCAO-236)

Dear Chairperson Marks:

The Bureau of Reclamation is continuing consultation under Section 106 of the NHPA regarding the proposed expansion of Los Vaqueros Reservoir, Contra Costa County, California (Figure 1 and Appendix 1 of enclosed MOA) and is requesting your review of an MOA outlining the efforts to resolve adverse effects to historic properties as a result of the proposed reservoir expansion. Reclamation has previously requested your participation in the Section 106 process. Reclamation's initial effort was sent on June 30, 2010, and a second effort was made on October 19, 2010. Those previous efforts were attempts to solicit your participation in the Section 106 process through the identification of sites of religious and cultural significance and knowledge of potentially significant cultural resources.

In consultation with the California State Historic Preservation Officer (SHPO) and the Advisory Council, Reclamation and the cooperating agencies (U.S. Army Corps of Engineers [USACE] and Contra Costa Water District [CCWD]) have found that the proposed reservoir rise will result in an adverse effect to historic properties pursuant to 36 CFR Part 800.5(d)(2). Reclamation, the SHPO, and the cooperating agencies are proposing to enter into an MOA to resolve adverse effects to historic properties that will occur as a result of the proposed expansion. Reclamation is requesting your review and comment on the enclosed MOA. Additionally, Reclamation would like to invite you, as the representative for your tribe, to be a concurring part to this MOA.

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new lands for biological mitigation will occur. Reclamation has been determined to be the lead Federal agency responsible for compliance with Section 106 of NHPA (16 U.S.C. 470) as amended. Our role in the process involves entering into an integrated operations agreement with CCWD to identify how and when Los Vaqueros Reservoir can be filled without interrupting water supply deliveries to the Central Valley Water Project (CVP) or the California State Water Project (SWP). Reclamation is also providing technical support for environmental compliance efforts for the proposed reservoir expansion. Entering into the integrated operations agreement and Reclamation's technical support of the project constitutes an undertaking pursuant to Section 301(7) of the NHPA.

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As previously noted, Reclamation continues to request your participation in the Section 106 process, is requesting your review of the enclosed MOA, and is inviting you to be a concurring party to this agreement. If you would like to comment on the MOA, express your interest in being a concurring party to the MOA, identify and discuss effects to resources of religious and cultural significance or sacred nature within the project area, or have questions or comments regarding this effort please contact Mr. Adam Nickels, Reclamation Archaeologist, at 916-978-5053, or anickels@usbr.gov. If you would like to discuss project details or find out more about the Los Vaqueros expansion project please contact Ms. Marguerite Naillon with CCWD at 925-688-8018, or mnaillon@ccwater.com. We look forward to hearing from you.

Sincerely,

ANASTASIA T. LEIGH

FOR

Michael A. Chotkowski
Regional Environmental Officer

Enclosures - 2

cc: Mr. Sam Baugh
Cultural Resourced Representative
Jackson Band of Mi-Wuk Indians
1582 Long Gate Road
Plymouth, California 95669
(w/encl)

WBR:ANickels:mjames:01-31-2011:916-978-5053
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United States Department of the Interior

BUREAU OF RECLAMATION
Mid-Pacific Regional Office
2800 Cottage Way
Sacramento, California 95825-1898

IN REPLY
REFER TO:

MP-153
ENV-3.00

FEB 02 2011

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Honorable Mary Daniels-Tarango
Chairperson
Wilton Rancheria
7916 Farnell Way
Sacramento, California 95823

Subject: National Historic Preservation Act (NHPA) Section 106 Consultation for the Proposed Los Vaqueros Reservoir Expansion Project Memorandum of Agreement (MOA) for the Resolution of Adverse Effect to Historic Properties, Contra Costa County, California (Project #03-SCAO-236)

Dear Chairperson Daniels-Tarango:

The Bureau of Reclamation is continuing consultation under Section 106 of the NHPA regarding the proposed expansion of Los Vaqueros Reservoir, Contra Costa County, California (Figure 1 and Appendix 1 of enclosed MOA) and is requesting your review of an MOA outlining the efforts to resolve adverse effects to historic properties as a result of the proposed reservoir expansion. Reclamation has previously requested your participation in the Section 106 process. Reclamation's initial effort was sent on June 30, 2010, and a second effort was made on October 19, 2010. Those previous efforts were attempts to solicit your participation in the Section 106 process through the identification of sites of religious and cultural significance and knowledge of potentially significant cultural resources.

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new lands for biological mitigation will occur. Reclamation has been determined to be the lead Federal agency responsible for compliance with Section 106 of NHPA (16 U.S.C. 470) as amended. Our role in the process involves entering into an integrated operations agreement with CCWD to identify how and when Los Vaqueros Reservoir can be filled without interrupting water supply deliveries to the Central Valley Water Project (CVP) or the California State Water Project (SWP). Reclamation is also providing technical support for environmental compliance efforts for the proposed reservoir expansion. Entering into the integrated operations agreement and Reclamation's technical support of the project constitutes an undertaking pursuant to Section 301(7) of the NHPA.

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Sincerely,

ANASTASIA T. LEIGH

FOR Michael A. Chotkowski
Regional Environmental Officer

Enclosures - 2

cc: Mr. Leland Daniels
Cultural Resources Representative
Wilton Rancheria
7531 Maple Leaf Lane
Sacramento, California 95823
(w/encl)

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United States Department of the Interior

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Mid-Pacific Regional Office
2800 Cottage Way
Sacramento, California 95825-1898

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MPER 59:
ENV-3.00

FEB 02 2011

CERTIFIED - RETURN RECEIPT REQUESTED

Ms. Erin E. Hess
Project Manager - Regulatory Division
U.S. Army Corps of Engineers
1325 J Street, Room 1480
Sacramento, CA 95814

Subject: Draft Memorandum of Agreement and Historic Properties Treatment Plan for Resolving Adverse Effects to Historic Properties Resulting in the Proposed Expansion of the Los Vaqueros Reservoir, Contra Costa County, California (Project 03-SCAO-236)

Dear Ms. Hess:


The Bureau of Reclamation, as the lead Federal agency for compliance with Section 106 regarding the Los Vaqueros Reservoir Expansion, is requesting your review of the enclosed documents. Enclosed in Exhibit A, please find the draft *Memorandum of Agreement Between the Bureau of Reclamation, U.S. Army Corps of Engineers, the Contra Costa Water District, and the California State Historic Preservation Officer Regarding the Resolution of Adverse Effects to Historic Properties from the Expansion of the Los Vaqueros Reservoir Contra Costa County, California*; the draft *Preconstruction Testing Plan for the 160 TAF Reservoir Primary Core Borrow Area Los Vaqueros Reservoir Expansion Project Contra Costa County, California*; the draft *Historic Property Treatment Plan Los Vaqueros Reservoir Expansion Project Contra Costa County, California*; and the *Historic Properties Discovery Plan Los Vaqueros Reservoir Expansion Project Contra Costa County, California* (located in Appendix A of the HPTP). At your request, electronic copies can also be submitted for your review. Enclosed in Exhibit B, you will find the associated correspondence with the California State Historic Preservation Officer (SHPO) regarding this project including our efforts to invite Indian tribes to participate in the Section 106 process.

As a cooperating agency in the Section 106 process we are requesting your review of the above described documents that outline the process for resolving adverse effects to historic properties as a result the proposed action to raise the Los Vaqueros reservoir from 100 thousand acre feet (TAF) to 160 TAF. In previous correspondence you have indicated that Mr. Michael Jewell, Chief, Regulatory Division will be the signatory on the final Memorandum of Agreement (MOA). Please note that his name is not on the enclosed review draft of the MOA. He will,

however, be added to the final MOA. Also please note, Reclamation has requested that the Buena Vista Rancheria, California Valley Miwok Tribe, Ione Band of Miwok Indians, Jackson Band of Mi-Wuk Indians, and the Wilton Rancheria review and comment on the MOA. We have also asked these Indian tribes to indicate if they would like to be concurring parties to the MOA.

Thank you for taking the time to review these documents. I look forward to receiving your comments and moving forward with the resolution of adverse effects for this project. If you have any questions please feel free to call me at 916-978-5053 or email anickels@usbr.gov.

Sincerely,


Adam M. Nickels
Archaeologist

Enclosures - 2

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