



# PUBLIC NOTICE

U.S. ARMY CORPS OF ENGINEERS  
LOS ANGELES DISTRICT

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## APPLICATION FOR PERMIT Perris Dam Remediation Project

**Public Notice/Application No.:** SPL-2012-00885-JEM

**Project:** DWR Perris Dam Remediation Project – Seismic Retrofit, Lake Perris, Riverside County, CA

**Comment Period:** January 18, 2012 through February 17, 2012

**Project Manager:** James Mace; 951-276-6624 x263; [James.E.Mace@usace.army.mil](mailto:James.E.Mace@usace.army.mil)

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### **Applicant**

Jeanne Kuttel  
California Dept. of Water Resources  
1416 9th St., Room 538-3  
Sacramento, California 95814

### **Contact**

Tom Barnes  
ESA  
626 Wilshire Blvd., Suite 1100  
Los Angeles, California 90017

### **Location**

The project site is located within the Lake Perris State Recreation Area (SRA) between the cities of Moreno Valley and Perris, in Riverside County, California (at 33.8519, -117.1930), see Figure 1.

### **Activity**

To permanently discharge fill material onto 10.68 acres of wetland waters of the United States during the implementation of the Perris Dam Remediation Project, a seismic retrofit of Perris Dam at Lake Perris (see attached drawings). For more information see page 3 of this notice.

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Interested parties are hereby notified that an application has been received for a Department of the Army permit for the activity described herein and shown on the attached drawing(s). We invite you to review today's public notice and provide views on the proposed work. By providing substantive, site-specific comments to the Corps Regulatory Division, you provide information that support the Corps' decision-making process. All comments received during the comment period become part of the record and will be considered in the decision. This permit will be issued, issued with special conditions, or denied under Section 404 of the Clean Water Act of 1972 (33 U.S.C. 1344). Comments should be mailed to:

LOS ANGELES DISTRICT, CORPS OF ENGINEERS  
RIVERSIDE REGULATORY FIELD OFFICE  
ATTN: JAMES MACE  
1451 RESEARCH PARK DRIVE, SUITE 100  
RIVERSIDE, CALIFORNIA 92507-2154

Alternatively, comments can be sent electronically to: [James.E.Mace@usace.army.mil](mailto:James.E.Mace@usace.army.mil)

The mission of the U.S. Army Corps of Engineers Regulatory Program is to protect the Nation's aquatic resources, while allowing reasonable development through fair, flexible and balanced permit decisions. The Corps evaluates permit applications for essentially all construction activities that occur in the Nation's waters, including wetlands. The Regulatory Program in the Los Angeles District is executed to protect aquatic resources by developing and implementing short- and long-term initiatives to improve regulatory products, processes, program transparency, and customer feedback considering current staffing levels and historical funding trends.

Corps permits are necessary for any work, including construction and dredging, in the Nation's navigable water and their tributary waters. The Corps balances the reasonably foreseeable benefits and detriments of proposed projects, and makes permit decisions that recognize the essential values of the Nation's aquatic ecosystems to the general public, as well as the property rights of private citizens who want to use their land. The Corps strives to make its permit decisions in a timely manner that minimizes impacts to the regulated public.

During the permit process, the Corps considers the views of other Federal, state and local agencies, interest groups, and the general public. The results of this careful public interest review are fair and equitable decisions that allow reasonable use of private property, infrastructure development, and growth of the economy, while offsetting the authorized impacts to the waters of the United States. The permit review process serves to first avoid and then minimize adverse effects of projects on aquatic resources to the maximum practicable extent. Any remaining unavoidable adverse impacts to the aquatic environment are offset by compensatory mitigation requirements, which may include restoration, enhancement, establishment, and/or preservation of aquatic ecosystem system functions and services.

### **Evaluation Factors**

The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit, which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof. Factors that will be considered include conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food production and, in general, the needs and welfare of the people. In addition, if the proposal would discharge dredged or fill material, the evaluation of the activity will include application of the EPA Guidelines (40 CFR Part 230) as required by Section 404 (b)(1) of the Clean Water Act.

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

## **Preliminary Review of Selected Factors**

**EIS Determination**- A preliminary determination has been made that an environmental impact statement is not required for the proposed work.

**Water Quality**- The applicant is required to obtain water quality certification, under Section 401 of the Clean Water Act, from the California Regional Water Quality Control Board (RWQCB). Section 401 requires that any applicant for an individual Section 404 permit provide proof of water quality certification to the Corps of Engineers prior to permit issuance. For any proposed activity on Tribal land that is subject to Section 404 jurisdiction, the applicant will be required to obtain water quality certification from the U.S. Environmental Protection Agency.

**Coastal Zone Management**- This project is located outside the coastal zone and preliminary review indicates that it would not affect coastal zone resources. After a review of the comments received on this public notice and in consultation with the California Coastal Commission, the Corps will make a final determination of whether this project affects coastal zone resources after review of the comments received on this Public Notice.

**Essential Fish Habitat**- Preliminary determinations indicate the proposed activity would not adversely affect essential Fish Habitat. Therefore, formal consultation under Section 305(b)(2) of the Magnuson-Stevens Fishery Conservation and Management Act (MSA) is not required at this time.

**Cultural Resources**- The California Department of Water Resources (DWR) conducted an Archaeological Assessment, dated July 2008. This assessment included a records search and field surveys of the project site conducted in May and September 2007. Two cultural resources were identified on the project site through the records search and only one verified during the field survey. Both sites are located outside of the project impact area. Therefore, it is anticipated that no cultural resources sites will be impacted by the project.

In addition, Environmental Science Associates prepared a Historic Resource Evaluation Report (HRER) for the project, dated September, 2012. The evaluation included a records search and field survey of the project site conducted in July, 2012 to identify historic architectural resources potentially impacted by the project. No historic architectural resources found in the project's Area of Potential Effect are listed in the National Register of Historic Places (NHPA) or the California Register of Historical Resources (CRHR). However, Perris dam is part of the California Aqueduct that was found eligible for both the NRHP and CRHR in July, 2012. The dam and associated outlet tower are recommended eligible for the NRHP and CRHR as a contributing element of the California Aqueduct; however, they are not considered eligible as an individual historical resource. After completion of the project, Perris Dam would continue its basic function of impounding water, and none of the changes resulting from the project would alter its representation as the terminal reservoir of the State Water Project, because all basic facilities completed and operational in 1973 would remain intact after implementation of the project. As such, these changes would not have an adverse effect on the California Aqueduct as a historic resource.

**Endangered Species**- The following information is based on the Biological Resources Section of the Final Environmental Impact Report (EIR) for the proposed project, prepared by ESA, dated September 2011.

## Habitat Conservation Plans:

### *Western Riverside County Multiple Species Habitat Conservation Plan*

The proposed project falls within Core H of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), which is comprised of the Lake Perris SRA, San Jacinto Wildlife Area, private lands and lands with pre-existing conservation agreements. The project does not lie within any of the proposed or existing criteria cells or any wildlife movement corridors.

The MSHCP involves the assembly and management of a 500,000-acre Conservation Area for the conservation of natural habitats and their constituent wildlife populations. The approval of the MSHCP and the Implementing Agreement (IA) by the U.S. Fish and Wildlife Service and the California Department of Fish and Game allows signatories of the IA to issue "take" authorizations for the 146 species covered by the MSHCP (termed "covered species"), including state and federally listed species as well as other identified sensitive species. The "take" authorization includes impacts to the habitats of the covered species. DWR is not a permittee under the MSHCP, however, any regional public facility provider such as a utility or a public district or agency, including a school, water or irrigation district, that operates and/or owns land within the MSHCP Plan Area and that applies for Take Authorization is defined as a Participating Special Entity. DWR as a Participating Special Entity may request Take Authorization for its activities pursuant to the permits.

The proposed project site lies within the Lake Perris SRA, which is designated a Public/Quasi-Public Land by the MSHCP. The SRA is under the jurisdiction of the California Department of Parks and Recreation (State Parks). Maintenance of existing public facilities in Public/Quasi-Public Lands is permitted by the MSHCP, provided that maintenance occurs within existing disturbance areas and without any changes in facility operation that would affect covered species.

If Public/Quasi-Public Lands would be used in a way that alters the land use so that the land would not contribute to covered species conservation, then replacement land must be acquired or otherwise permanently protected at a minimum ratio of 1:1 with other Public/Quasi-Public Lands at a biologically equivalent or superior value. An analysis describing the equivalent conservation must be approved by the USFWS and CDFG. The analysis must compare the effects and benefits of the proposed project, including design features and specific mitigation and compensation for lost conservation values, with the conditions prior to development.

### *Stephens' Kangaroo Rat Habitat Conservation Plan*

The proposed project is located within the boundary of the adopted Habitat Conservation Plan (HCP) for the endangered Stephens' kangaroo rat (SKR) implemented by the Riverside County Habitat Conservation Agency (RCHCA). The SKR HCP mitigates impacts on the SKR by establishing a network of preserves and a system for managing and monitoring them to ensure its continuing ability to support the species. This effort has resulted in the permanent conservation of approximately 50 percent of the SKR occupied habitat remaining in the HCP area. The proposed project falls within the SKR HCP fee area. Any impacts to occupied SKR habitat must be replaced at a 1:1 ratio.

### Special Status Plant Species

No plant species listed as endangered, threatened, candidate, or state rare pursuant to the federal or state Endangered Species Act were observed within the project impact area during surveys conducted in 2007 and 2012.

## Special Status Wildlife Species

### *Bald Eagle*

The bald eagle is covered under the Western Riverside County MSHCP and is a federal fully protected species. The bald eagle has been observed on Lake Perris mostly as a winter migrant. Bald eagles typically require large bodies of water or free flowing rivers containing fish, with adjacent snags or other perches. No bald eagles were observed during field surveys conducted for this project.

### *Southwestern Willow Flycatcher*

Southwestern willow flycatcher is covered under the Western Riverside County MSHCP and is federally endangered. The species is restricted to riparian woodlands along streams, rivers, wetlands and marshes with mature, dense stands of willows, cottonwoods, or smaller spring fed or boggy areas with willows or alders. Southwestern willow flycatchers have been recorded in western Riverside County from the Prado Basin area eastward to the vicinity of Vail Lake (RCIP, 2003). A small number of occurrences have been recorded historically near Lake Perris but there have been no known territories on-site since 1990 (RCIP, 2003). Southwestern willow flycatchers were not observed during protocol surveys in 2007. However, one individual was heard in the riparian vegetation near the drawdown area in 2012 and was determined to be a migrant based on subsequent surveys.

### *Least Bell's Vireo*

The least Bell's vireo is covered under the Western Riverside County MSHCP and is federally endangered. The species requires riparian woodlands with a dense understory and stratified canopy for breeding and foraging. Protocol least Bell's vireo surveys were conducted annually between 2007 and 2012 for all riparian habitat within the project impact areas. Least Bell's vireo were recorded utilizing the riparian area below the dam in 2007, 2008, 2011 and 2012.

### *Coastal California Gnatcatcher*

The coastal California gnatcatcher is covered under the Western Riverside County MSHCP and is listed as a federally threatened species. The species is a resident species in Southern California restricted to coastal sage scrub habitats generally below 750 feet elevation in coastal regions and below 1500 feet inland (Atwood and Boisinger, 1992). California gnatcatchers are found in sage scrub habitats throughout western Riverside County with high densities in the area between Lake Elsinore, Lake Skinner, and Temecula (RCIP, 2003). Protocol surveys conducted within the project impact areas during 2007, 2008, and 2012 resulted in no observations of the coastal California gnatcatcher.

### *Stephens' Kangaroo Rat*

The federally endangered SKR is covered under the Western Riverside County MSHCP and is a small burrowing rodent adapted for arid environments with long, strong hind legs, and short, relatively small front legs. SKR is found almost exclusively in open grasslands or sparse shrublands such as coastal sage scrub with cover of less than 50 percent. They prefer areas with buckwheat, chamise, brome grasses and filaree. They avoid areas with dense grass cover. As a fossorial (burrowing) animal, it typically is found in well drained, gravelly or sandy and sandy loam soils with a low clay content, and avoid rocky soils. However, there are exceptions where they can utilize the burrows of pocket gophers and California ground squirrels. The species is found in western Riverside County in patches from the Corona Hills to Anza Valley, in the Temecula area to Potrero Valley, and

in the Badlands (RCIP, 2003). The San Jacinto Wildlife Area-Lake Perris SRA is a core reserve area for SKR (RCIP, 2003). SKR has been found in the grassland habitat east of Lake Perris and in portions of Riversidean sage scrub habitat below the dam. Historically no SKR have been found within the proposed project impact areas (SKR HCP, RCA surveys in 2006, Psomas surveys in 2008). However, in 2012, approximately 1.62 acres of SKR-occupied habitat was located south of the furthestmost left reach of the dam.

### *Los Angeles Pocket Mouse*

Little is known about the Los Angeles pocket mouse (LAPM). Though not listed as threatened or endangered under the federal Endangered Species Act, this species is covered under the Western Riverside County MSHCP and is a species of special concern in California. The geographic range of Los Angeles Pocket mice is restricted to lower elevation grasslands and coastal sage associations in the Los Angeles Basin, from approximately Burbank and San Fernando (Los Angeles County) on the northwest to San Bernardino (San Bernardino County) on the northeast, and Cabazon, Hemet, and Aguanga (Riverside County) on the east and southeast. The LAPM probably inhabits open ground of fine, sandy soils and may utilize these soil types for burrowing. It may be restricted to lower elevation grassland and coastal sage scrub. It probably prefers sparsely vegetated habitats. LAPM has been observed in the grassland habitat found below the dam within the project impact areas.

### **Summary of Impacts**

Impacts to special status wildlife species and their habitat are expected to occur from project activities. These impacts include permanent and temporary impacts to habitat presumed to support SKR and the LAPM. In addition, the permanent reduction of habitat used by the least Bell's vireo below Perris Dam, where approximately 11 acres of southern willow woodland and scrub would be removed for the construction of the stability berm and monitoring zone, is considered a potentially significant permanent impact.

No direct or indirect impacts to plant species listed as endangered, threatened, candidate, or state rare, pursuant to the federal or state Endangered Species Act, are anticipated with implementation of the proposed project.

Impacts potentially associated with a permit decision to federally listed endangered or threatened species, and/or their designated critical habitats (if applicable) would be resolved through either formal or informal consultation under Section 7 of the Endangered Species Act with the U.S. Fish and Wildlife Service.

**Public Hearing-** Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearing shall state with particularity the reasons for holding a public hearing.

### **Proposed Activity for Which a Permit is Required**

**Basic Project Purpose-** The basic project purpose comprises the fundamental, essential, or irreducible purpose of the proposed project, and is used by the Corps to determine whether the applicant's project is water dependent (i.e., requires access or proximity to or siting within the special aquatic site to fulfill its basic purpose). Establishment of the basic project purpose is necessary only when the proposed activity would discharge dredged or fill material in to a special aquatic site (e.g., wetlands, pool and riffle complex, mudflats, coral reefs). The basic purpose of the proposed project is to improve the safety of the dam at Lake Perris. The project is water dependent.

**Overall Project Purpose-** The overall project purpose serves as the basis for the Corps' 404(b)(1) alternatives analysis and is determined by further defining the basic project purpose in a manner that more specifically describes the applicant's goals for the project, and which allows a reasonable range of alternatives to be analyzed. The overall project purpose for the proposed project is to:

- Upgrade State Water Project (SWP) infrastructure to meet current seismic standards;
- Maintain SWP delivery commitments;
- Maintain maximum access to beneficial uses at Lake Perris SRA during the period of drawdown while ensuring public safety during construction;
- Minimize risks associated with seismic hazards;
- Enhance and restore public safety;
- Maximize the beneficial use of Lake Perris SRA by restoring reservoir to pre-drawdown water levels; and
- Minimize environmental impacts.

### **Additional Project Information**

**Baseline information-** Psomas conducted a jurisdictional delineation in May, 2007 to determine the extent of waters of the United States on the project site. ESA delineated a single ephemeral channel in the vicinity of the existing quarry and rock processing area in 2012. In addition, the pre-drawdown operational reservoir water level of 1588 feet above mean sea level (amsl) was established as the ordinary high water mark (OHWM) for the reservoir, representing the extent of jurisdiction for the CDFG, USFWS, Corps, and RWQCB. In total, 2,308.12 acres of Waters of the U.S. are located within the boundaries of the broader study area. This total includes 25.4 acres of wetlands located below the dam (which are hydrologically connected to Lake Perris through persistent seepage below the dam), 0.28 acre (1580 lf) of ephemeral channel, and 2,282.44 acres of open water below the OHWM.

**Project description-** DWR proposes to seismically upgrade the dam by excavating a portion of the dam toe, excavating some of the upper foundation soils, and replacing the foundation material with re-compacted engineered fill. In addition, deeper foundation soils would be strengthened with cement-deep-soil-mixing (CDSM) methods, a stability berm would be constructed on top of the improved foundation, and a required monitoring zone would be created adjacent to the berm. A small repair to the dam's right abutment would also be needed.

Similar to the original construction of the dam, material for the stability berm would be excavated from a borrow area within the exposed lakebed at the east end of the lake using dry construction methods. In addition, rock would be quarried from the original rock quarry, located immediately south of the lake in the Bernasconi Hills. To convey the material to the downstream face of the dam, a haul road would be constructed along the south-east side of the lake. The haul road would extend through the Bernasconi Hills near the dam's left abutment (along one of two alternative

routes proposed). The transported material would be stockpiled within an area south of the berm (see Figures 2 and 3 for a depiction of the proposed borrow area, rock quarry, haul road, and alternative haul road segment). Following project completion, the lake level would be restored to its original operating elevation. The project is expected to require approximately two years to complete. The proposed project would allow DWR to remediate the existing dam, which provides water supply and recreation, to improve the stability and performance of the dam and address documented instability that could occur during a seismic event. The proposed remediation project would allow Lake Perris to safely return to its previous maximum operating pool elevation of 1588 feet amsl after construction. The proposed project does not propose any change to the minimum or maximum water elevations, nor does it propose any increase in dam capacity.

Impacts to Waters of the United States (WoUS)- Approximately 2,308.12 acres of WoUS are located within the boundaries of the project site; this includes 0.28 acre (1580 lf) of ephemeral channel, 25.4 acres of wetlands, and 2,282.44 acres of open water. Implementation of the proposed seismic remediation project would involve earthmoving activities such as excavation, grading, soil stockpiling, and filling. Approximately 10,000 cubic yards of fill would be placed in WoUS associated with dam remediation activities. As proposed, the project would impact a total of approximately 10.78 acres of Corps WoUS, of which 0.10 acre (560 lf) would be temporary impacts to the ephemeral channel, and 10.68 acres would be permanent impacts to wetlands (Figure 3).

### Project Alternatives

Due to the site-specific nature of the project and the need to address the instability of the existing dam, off-site alternatives were not considered. Therefore, this alternatives analysis only considers on-site alternatives to address the overall project purpose. Details on alternatives considered for the project are provided below.

#### **Alternatives to the Project (No Remediation of the Existing Dam)**

Alternative 1 - Decommission and Draining of Lake Perris Reservoir- Decommissioning the dam would preclude the need for any seismic upgrade of the dam facilities. The decommissioning of Perris Dam would require draining the reservoir and retrofitting the dam to prevent impounding storm water runoff. It is assumed that much of the earthen dam would remain in place, thereby reducing impacts to wetlands associated with the proposed project. However, removal of the water source (currently the persistent seepage from the dam) would lead to the desiccation of the wetlands, and would eventually result in a similar impact. In addition, the removal of the water source would impact the riparian fringe habitat surrounding the northeast shore of the lake. The facility would no longer be used for water supply storage. The Lake Perris SRA would continue to exist and operate; water-based recreation would no longer be available, but land-based recreation opportunities could be enhanced. Based on the above, this alternative would result in greater impacts to WoUS, and would not meet the overall project purpose.

Alternative 2 - Permanently Reduce the Operating Level of the Reservoir- This alternative would permanently reduce the reservoir operating level to elevation 1542 amsl, which is approximately 46 feet below the lake's normal operating level of 1588 feet amsl, and 21 feet below current lake levels. Under this alternative, the reservoir would be drained to be significantly smaller and used for recreation purposes only, not for water storage. A new spillway would be constructed at elevation 1542 feet. Water would continue to be fed into the lake and withdrawn at a rate intended to prevent stagnation and provide acceptable recreational water quality. It is assumed that much of the earthen dam would remain in place, and there would be no need to remediate the dam, a new berm would not be constructed. Therefore, impacts to WoUS at the dam toe would be significantly reduced



or eliminated. Metropolitan Water District would continue to serve customers via the Santa Ana Pipeline, but would not be able to use the reservoir for water storage. Recreation facilities would have to be extensively modified because of the change in shoreline location, which may result in new impacts to WoUS. Based on the above, this alternative would result in less impact to WoUS, but would not meet the overall project purpose.

### **Alternatives for Dam Improvement**

Alternative 3 – Reduced Operating Level and Seismic Upgrade of the Dam- This alternative would entail keeping the Lake Perris reservoir at the existing emergency drawdown lake elevation of 1563, stabilizing the underlying foundation soils, and reinforcing the downstream buttress. Under this alternative, the reservoir would be permanently smaller. Remediation of the dam would still be required, perhaps with less construction than required for the proposed project, but somewhat similar impacts to WoUS would still occur. A new spillway would be constructed at approximately 1565 feet amsl. The reservoir would continue to be used by the SWP, but would have a permanently reduced storage capacity. The inlet would be extended to the northeast end of the reservoir to improve circulation and water quality in the reservoir and for water withdrawal for water supply. Recreation facilities would need to be permanently modified for the change in shoreline location to 1563 feet amsl, which may result in new impacts to WoUS. Based on the above, this alternative would result in somewhat less impacts to WoUS, but would not meet the overall project purpose.

Alternative 4 – Increased Dam Capacity- Under this alternative, the existing dam would be raised, creating a larger reservoir. Dam remediation would be required, involving the same proposed components as the Preferred Alternative, including CDSM, soil re-compaction, and the stability berm, but the extent of these activities would be increased, resulting in an associated increase in impacts to WoUS when compared to the proposed project. Enlarging the reservoir would inundate existing habitat for the following sensitive species that occur in the northeast end of the reservoir: Stephen's kangaroo rat, least Bell's vireo, and California coastal gnatcatcher. Therefore, under this alternative, a saddle dam would be constructed at the northeast end of the reservoir to protect such habitat. A second saddle dam would also be required at the Bernasconi Pass on the south side of the lake. Based on the above, this alternative would meet the overall project purpose, but would result in increased impacts to WoUS.

### **Proposed Mitigation**

The proposed mitigation may change as a result of comments received in response to this public notice, the applicant's response to those comments, and/or the need for the project to comply with the 404(b)(1) Guidelines. In consideration of the above, the proposed mitigation sequence (avoidance/minimization/compensation), as applied to the proposed project is summarized below:

Avoidance: Complete avoidance of impacts to wetlands and non-wetland WoUS is not considered feasible, based on the nature of the on-site work that is required to ensure public safety. However, the Perris Dam Remediation Project has been designed to avoid approximately 14.72 acres of the 25.40 acres (58 percent) of riparian habitat (jurisdictional wetlands) below the dam. Above the dam, the project has been designed to avoid permanent impacts to all jurisdictional resources. In addition, to avoid potential impacts to the fringe riparian habitat that persists at the original operational lake level, DWR installed a two-mile-long drip-line irrigation system connected to State Park water pumps to convey water to this riparian habitat. Following project completion, this artificially supported habitat would be re-connected to the original lake level and is anticipated to recover and be self-sustaining.

Finally, to avoid impacts to fisheries to the extent practicable, DWR has designed the borrow area excavation to occur below 1578 feet amsl to avoid potential impacts to shallow water habitat (3 to 10 feet in depth), which normally provides important spawning and rearing areas for resident fish.

**Minimization:** The proposed project has been designed to minimize impacts to WoUS and riparian habitat that occur within project impact areas. This includes design of haul roads, access routes, staging areas and work areas that both avoid WoUS and minimize impacts to WoUS, while accomplishing the goals of the Dam Remediation Project. To minimize potential impacts to WoUS and water quality that may result from project initiation, DWR would implement Best Management Practices (BMPs) while construction is underway, including but not limited to the construction of exclusionary fences to avoid inadvertent impacts to jurisdictional resources, and implementing the measures outlined in their Storm Water Pollution Prevention Plan (SWPPP), which is being prepared in accordance with all National Pollutant Discharge Elimination System regulations.

**Compensation:** To summarize, the proposed project would permanently impact 10.68 acres of southern willow woodland and scrub habitat (wetlands) and temporarily impact 0.10 acre of an existing unvegetated ephemeral drainage. Jurisdictional impacts are associated with the expanded stability berm size necessary for public safety and the temporary filling of a small drainage for staging and stockpiling material during construction. Temporary impacts to the 0.10 acre of ephemeral drainage would be mitigated through the restoration of the channel to pre-project conditions. Compensatory mitigation for permanent impacts is described below:

#### Riparian Habitat (Wetlands) Mitigation

To mitigate for impacts to WoUS, habitat creation/restoration is proposed at a ratio of at least 2 acres for 1 acre of impact, of which at least half, or a ratio of 1:1, would be habitat creation. The proposed riparian habitat mitigation site is located offsite on lands already preserved by the Western Riverside County Regional Conservation Authority (RCA), in an area west of the City of Beaumont, within the Santa Ana River watershed (the same watershed as the Lake Perris Reservoir, see Figure 1). This mitigation site (Oak Valley) contains a degraded stream that is tributary to San Timoteo Creek. Proposed mitigation activities would include restoring a degraded, eroding stream channel by laying back slopes within an existing flood plain and creating a new braided channel to foster creek sinuosity and hydrological conditions that encourage the establishment of riparian habitat. Focused least Bell's vireo (LBV) surveys conducted at Oak Valley in 2012 documented the species breeding in suitable habitat onsite (Figure 9). The proposed restoration activities would avoid the LBV breeding season. The proposed riparian habitat created and restored at the site would provide nesting and foraging habitat for a variety of riparian species, including LBV.

According to CDFG, the presence of feral pigs has been documented in the vicinity of the mitigation site and potential signs of feral pig presence on the site (diggings and tracks) were documented during surveys. Feral pigs are attracted to water sources present in riparian habitat and prefer grassland and fallow agricultural lands for rooting and foraging. This invasive species is known to destroy riparian ecosystems by disturbing the soil, potentially to the point of erosion; uprooting the plants; disturbing other wildlife; and spreading disease. If left unchecked, the species could undermine restoration/creation and enhancement efforts at Oak Valley. DWR is collaborating with the U.S. Department of Agriculture (USDA) Wildlife Services to develop a strategy for managing the invasive pig population at Oak Valley. DWR would work closely with USDA, CDFG, USFWS, and RCA to develop an acceptable adaptive management strategy that would include the following: 1. A definition of the extent of the problem and potential impacts from feral pigs at Oak Valley, 2. Preparation of a Feral Pig Management Plan that describes control methods, 3. Implementation of the Feral Pig Management Plan, and 4. Monitoring and evaluating the efficacy and cost-effectiveness of the plan

and adapting if necessary. Feral pig control would likely occur through trapping efforts rather than hunting, and the adaptive management plan would include a public outreach component.

DWR is currently designing the proposed restoration project and determining the quantities of creation, restoration, and enhancement of functional values and services that can be achieved on the site. Following completion of hydrological and geomorphological studies, a full Habitat Mitigation and Monitoring Plan (HMMP) describing the Oak Valley mitigation site and restoration process would be submitted for agency review and approval as part of the environmental permitting process. Temporary impacts to riparian resources and LBV may result from installation of the proposed mitigation described above, but they would be offset with the successful mitigation construction.

#### SKR and LAPM Habitat Mitigation

Mitigation for permanent impacts to SKR and/or LAPM-occupied habitat would be calculated at a 1:1 ratio and replaced through the purchase of SKR and/or LAPM-occupied habitat located along the Ramona Expressway. Mitigation property locations would be included as part of the MSHCP and SKR HCP process in coordination with CDFG and USFWS.

#### Fisheries Mitigation

To mitigate for impacts to fisheries and provide aquatic complexity for spawning, DWR, in coordination with CDFG, proposes to place native fill material on the riparian area below the dam and the haul road, and install pipe caves and submerge citrus trees within the lake in order to create fish spawning and rearing habitat.

#### Proposed Special Conditions

The following list is comprised of proposed Permit Special Conditions, which are required of similar types of projects:

1. The proposed mitigation for project impacts is described above. Prior to construction, the Permittee shall submit a final mitigation plan to the Corps Regulatory Division that stipulates how the objectives will be met. No work in waters of the United States is authorized (the final permit will not be issued) until the Permittee receives, in writing (by letter or e-mail), Corps Regulatory Division approval of the final mitigation plan.
2. Prior to initiating construction in waters of the United States, the Permittee shall submit to the Corps Regulatory Division a complete set of final detailed grading/construction plans showing all work and structures in waters of the United States. All plans shall be in compliance with the Final Map and Drawing Standards for the Los Angeles District Regulatory Division dated September 21, 2009 ([http://www.spl.usace.army.mil/regulatory/pn/SPL-RG\\_map-drawingstandard\\_final\\_w-fig.pdf](http://www.spl.usace.army.mil/regulatory/pn/SPL-RG_map-drawingstandard_final_w-fig.pdf)). All plan sheets shall be signed, dated, and submitted on paper no larger than 11 x 17 inches. No work in waters of the United States is authorized until the Permittee receives, in writing (by letter or e-mail), Corps Regulatory Division approval of the final detailed grading/construction plans. The Permittee shall ensure that the project is built in accordance with the Corps-approved plans.
3. No debris, soil, silt, sand, sawdust, rubbish, cement or concrete washings thereof, oil or petroleum products, from construction shall be allowed to enter into or be placed where it may be washed by rainfall or runoff into WoUS. Therefore, the Permittee shall employ all standard

Best Management Practices (as stipulated in the EIR) to ensure that toxic materials, silt, debris, or excessive erosion do not enter WoUS during project construction.

4. Vehicles shall not be driven or equipment operated in WoUS onsite, except as necessary to complete the proposed project. The Permittee shall ensure that all vehicle maintenance, staging, storage, and dispensing of fuel occur in designated upland areas, located in such a manner as to prevent any runoff from entering WoUS.
5. Within 45 calendar days of completion of authorized work in WoUS, the Permittee shall submit to the Corps Regulatory Division a post-project implementation memo indicating the date authorized impacts to WoUS ceased.
6. Pursuant to 36 CFR section 800.13, in the event of any discoveries during construction of either human remains, archeological deposits, or any other type of historic property, the Permittee shall notify the Corps' Archeology Staff within 24 hours (Steve Dibble at 213-452-3849 or John Killeen at 213-452-3861). The Permittee shall immediately suspend all work in any area(s) where potential cultural resources are discovered. The Permittee shall not resume construction in the area surrounding the potential cultural resources until the Corps Regulatory Division reauthorizes project construction, per 36 CFR section 800.13.

For additional information please call James Mace of my staff at 951-276-6624 x263 or via e-mail at James.E.Mace@usace.army.mil. This public notice is issued by the Chief, Regulatory Division.



*Regulatory Program Goals:*

- To provide strong protection of the nation's aquatic environment, including wetlands.
- To ensure the Corps provides the regulated public with fair and reasonable decisions.
- To enhance the efficiency of the Corps' administration of its regulatory program.

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**U.S. ARMY CORPS OF ENGINEERS – LOS ANGELES DISTRICT**

LOS ANGELES DISTRICT, CORPS OF ENGINEERS

RIVERSIDE REGULATORY FIELD OFFICE

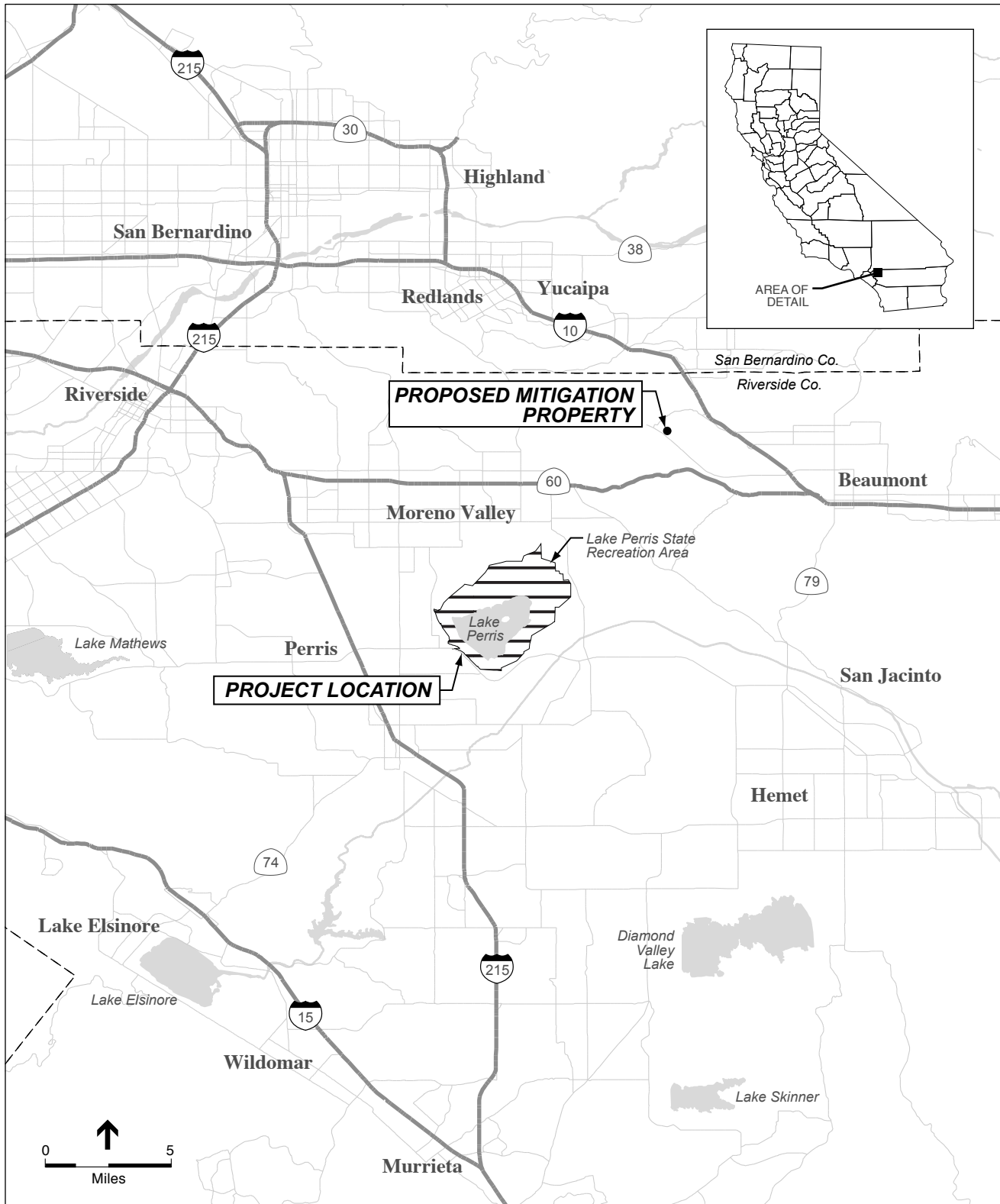
ATTN: JAMES MACE

1451 RESEARCH PARK DRIVE, SUITE 100

RIVERSIDE, CALIFORNIA 92507-2154

WWW.SPL.USACE.ARMY.MIL

U.S. Army Corps of Engineers Permit Application SPL-2012-00885-JEM  
Perris Dam Remediation Project - Seismic Retrofit



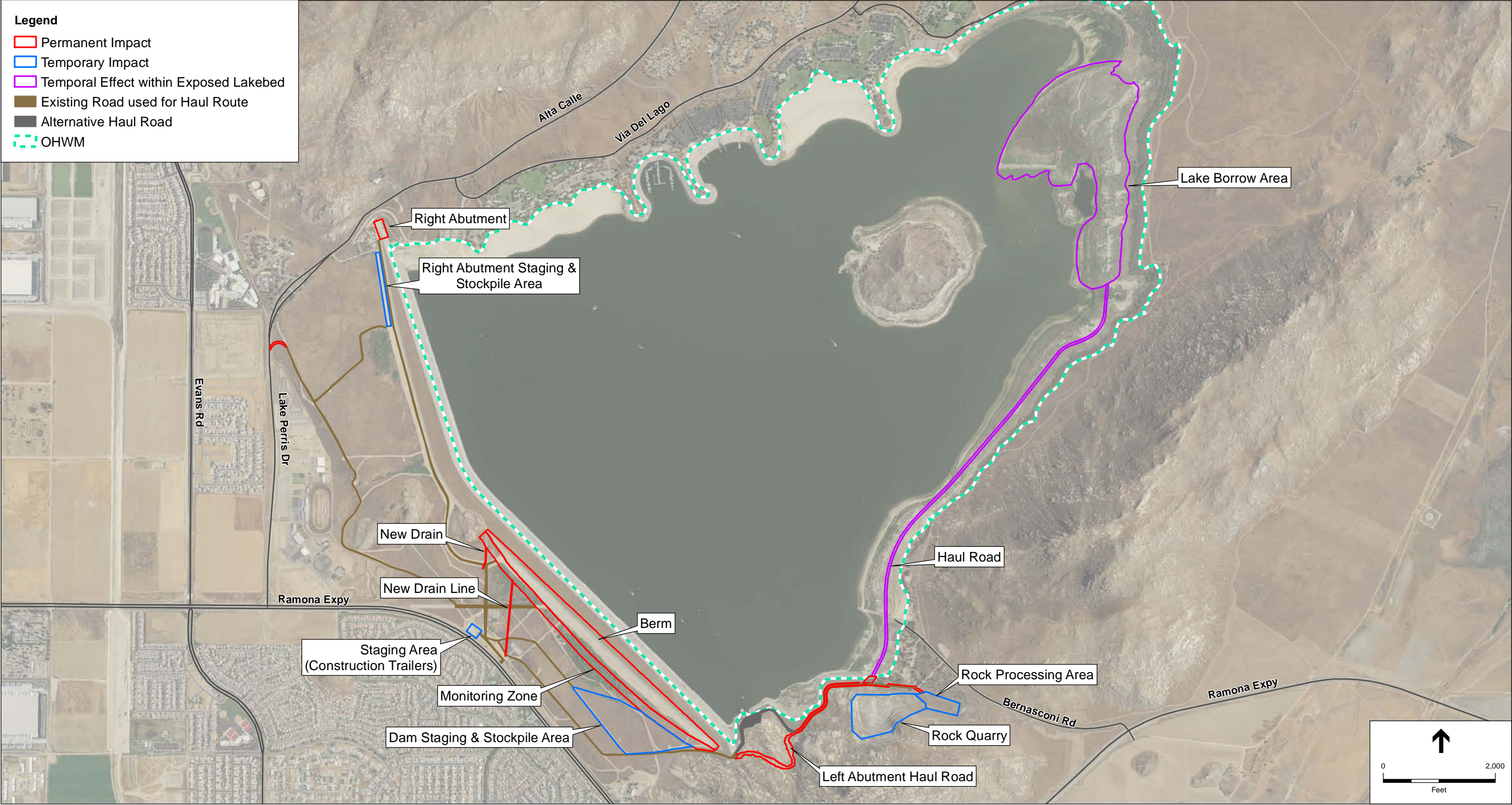
SOURCE: Riverside County, 2007.

DWR - Perris Dam Remediation Project . 206008.02

**Figure 1**  
Regional Location Map



U.S. Army Corps of Engineers Permit Application SPL-2012-00885-JEM  
Perris Dam Remediation Project - Seismic Retrofit



SOURCE: DWR; ESA, 2012.

DWR - Perris Dam Remediation Project . 206008.02  
**Figure 2**  
Project Components



U.S. Army Corps of Engineers Permit Application SPL-2012-00885-JEM  
Perris Dam Remediation Project - Seismic Retrofit



SOURCE: DWR; ESA, 2012.

DWR - Perris Dam Remediation Project . 206008.02

**Figure 3**  
Temporary and Permanent Impacts to Jurisdictional Resources