

# **COVER SHEET**

FEDERAL ENERGY REGULATORY COMMISSION

FINAL ENVIRONMENTAL IMPACT STATEMENT  
FOR HYDROPOWER LICENSE

Lake Elsinore Advanced Pumped Storage Project  
Docket No. P-11858-002

## *Appendix E*

Comments on the Draft Environmental Impact Statement and the  
October 3, 2006, Public Notice for the Lake Elsinore Advanced Pumped  
Storage Project, Project No. 11858-00

Pages E-1 to E-92

FEIS

**APPENDIX E**

**Comments on the Draft Environmental Impact Statement  
and the  
October 3, 2006, Public Notice  
for the  
Lake Elsinore Advanced Pumped Storage Project  
Project no. 11858-002**

**This page intentionally left blank.**

## APPENDIX E

### COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE LAKE ELSINORE ADVANCED PUMPED STORAGE PROJECT PROJECT NO. 11858-002

The Federal Energy Regulatory Commission (Commission or FERC) issued its draft environmental impact statement (EIS) for the licensing of the Lake Elsinore Advanced Pumped Storage Project (LEAPS Project) on February 17, 2006. The Commission requested comments be filed by April 25, 2006. In addition, the Commission conducted two public meetings on April 4 and 5 in the cities of San Juan Capistrano and Lake Elsinore. In this appendix, we summarize the written comments received; provide responses to those comments; and indicate, where appropriate, how we have modified the text in the final EIS. We grouped the comment summaries and responses by topic for convenience. The following entities filed comments on the draft EIS:

<b>Commenting Entity</b>	<b>Filing Date</b>
Elsinore Hang Gliding Association	March 6, 2006
Robert V. Wills	March 13, 2006
Michael Wayne Smith	March 23, 2006
Bill Soderquist, Elsinore Hang Gliding Association	March 25, 2006
Jeeni Criscenzo	April 4, 2006
Nick Bimbo et al. (letter filed by 13 individuals)	April 5, 2006
Elsinore Valley Municipal Water District	April 6, 2006
Palomar Observatory	April 7, 2006
Elsinore Hang Gliding Association	April 11, 2006
Endangered Habitat League	April 12, 2006
Jay Scott et al. (letter filed by 33 individuals)	April 17, 2006
John and Soma Stickler	April 17, 2006
LaCresta Property Owners Association	April 19, 2006
John Pecora	April 19, 2006
County of Riverside	April 20, 2006
Michael Hilberath et al. (letter filed by five individuals)	April 20, 2006
Peter Dawson	April 21, 2006
U.S. Department of the Interior	April 21, 2006
Deanna and Charles Whitney	April 22, 2006
David Anderson	April 24, 2006
Elsinore Testing of Experimental Aircraft Mechanisms, Inc. (Francis Hoffman)	April 24, 2006
Friends of the Forest (Trabuco District)	April 24, 2006
Douglas Pinnow	April 24, 2006

<b>Commenting Entity</b>	<b>Filing Date</b>
California Regional Water Quality Control Board, Santa Ana	April 25, 2006
California Department of Fish and Game	April 25, 2006
Center for Biological Diversity, Sierra Club	April 25, 2006
City of Lake Elsinore	April 25, 2006
Elsinore Valley Municipal Water District (two letters)	April 25, 2006
Fernandez Parties <sup>a</sup>	April 25, 2006
Chris Hyland	April 25, 2006
Robert and Susan Konoske	April 25, 2006
Jerry Mosier	April 25, 2006
Lake Elsinore United School District	April 25, 2006
Natural Resources Defense Council	April 25, 2006
Pacific Clay Industries	April 25, 2006
Rancho Capistrano Property Owners Association	April 25, 2006
Linda Lou and Martin Ridenour	April 25, 2006
State Water Resources Control Board	April 25, 2006
California Native Plant Society (Orange County Chapter)	April 26, 2006
Jon Johnson	April 26, 2006
Andrew and Sandra Mauthe	April 26, 2006
San Diego Gas & Electric Company	April 26, 2006
Edith Stafford	April 26, 2006
Edwin Thorell	April 26, 2006
David Voss	April 26, 2006
Scott Werner	April 26, 2006
Ruth Atkins	April 27, 2006
Bruce Campbell	April 27, 2006
Lake Elsinore Sailing Club	April 27, 2006
Lakeland Village/Wildomar Redevelopment Project Area Committee	April 27, 2006
Anna Lee	April 27, 2006
Pechanga Band of Luiseno Indians	April 27, 2006
U.S. Environmental Protection Agency	April 27, 2006
U.S. Marine Corps (Camp Pendleton)	April 27, 2006
County of Orange	May 1, 2006
Luis Stahl	May 1, 2006
Honorable Darrell Issa , Honorable Ken Calvert, Honorable Mary Bono, Honorable Duncan Hunter	May 2, 2006
Charles Jancic	May 3, 2006

Commenting Entity	Filing Date
US Army Corps of Engineers, Los Angeles District	May 8, 2006
Elsinore Valley Municipal Water District	May 31, 2006

<sup>a</sup> Miller, Staff, & Regalia filed on behalf of Friesian Focus, LLC, the Fernandez Trust, and Joseph and Joan Fernandez (collectively “Fernandez Parties”).

In addition to the above-listed filings, 95 individuals from the project area filed letters in opposition to the proposed project citing general concerns. These individuals are listed at the end of Appendix E. Also, organizations and individuals filed several letters echoing the same themes. We summarize these letters as follows:

(1) On April 25, 2006, the Commission received 1,905 letters from individuals across the country outside of the project area requesting that the Commission adopt the No-action Alternative. These individuals oppose the potential destruction of wilderness-quality and oak trees in Morrell Canyon, the potential effects on world class hang gliding opportunities, and the potential effects on nesting shorebirds in one of Riverside County’s most important wildlife reserves.

(2) The San Diego Chapter of the Sierra Club filed 151 postcards from residents of San Diego County on April 25, 2006, and the Los Angeles Chapter of the Sierra Club filed 430 comment cards (signed by 430 individuals) on April 27, 2006, saying that we need to preserve both Decker and Morrell canyons in the Santa Ana mountains and stop the proposed pumped storage project from destroying a prized recreational area and drowning the rare southern oak forest.

(3) By letters filed on April 26 and 28, 2006, 200 individuals from the project area oppose the proposed project citing concerns about risks to the environment, property, and people. Specifically they state that the project would violate the Cleveland National Forest Land Management Plan and would harm the San Mateo Wilderness Area, create a risk of flooding, complicate fire fighting, encourage off-road vehicle trespass, and put hang gliders at risk. They also question the need for the project, the competence of the co-applicants, and the adequacy of the environmental studies completed in support of the project. They urge adoption of the No-action Alternative for a project anywhere in the Cleveland National Forest. These individuals are listed at the end of Appendix E.

These general letters provide comments similar to those comments provided in the letters listed above. We address all the issues, as appropriate, in the final EIS. Comments regarding purely editorial issues are addressed in the final EIS and are not summarized below.

## GENERAL

**Comment 1:** Ninety-five regional residents filed letters with general comments about consideration of alternative energy sources and the potential effects of the proposed project on the environmental and recreational resources of Decker and Morrell canyons, including the disturbance of natural springs, removal of California live oak trees, interruption of use of hiking trails and hang glider launch sites, and interference with fire fighting activities; changes in the water quality and recreational boating use on Lake Elsinore; on the property values, and aesthetics qualities. These regional residents encourage the Commission to take no action.

**Response:** We appreciate the general comments put forth by regional residents and have addressed them, as appropriate, throughout the final EIS.

**Comment 2:** David Voss, Charles and Deanna Whitney, and other individuals question how the Commission could issue a license to an entity that has had no prior experience in the construction and operation of a pumped storage facility and transmission line.

**Response:** Under the Federal Power Act (FPA), any citizen, municipality, corporation, or Indian tribe can apply for a hydropower license. The Commission will consider whether the Nevada Hydro Company (Nevada Hydro) and the Elsinore Valley Municipal Water District (Elsinore Valley MWD), as co-applicants, can comply with the terms of a license and safely manage and operate the project to provide efficient and reliable service in any order issued for this project.

## **PURPOSE AND NEED**

**Comment 3:** Jenni Criscenzo states that the conclusions of the draft EIS are in direct conflict with the goals of the San Diego Association of Governments as published in May 2003 in *Energy in 2030: The San Diego Regional Energy Strategy*. She also states that as an energy consumer, the LEAPS Project is in conflict with the State law (SB 1037) that requires all utilities to meet their unmet resource needs first with energy efficiency and demand reduction resources that are cost-effective, reliable, and feasible. She points out that Southern California Edison (SCE) and San Diego Gas & Electric Company (SDG&E) might not actually be permitted to purchase power generated by LEAPS after meeting all of their legal and regulatory requirements.

**Response:** If the Commission decides to grant a license to the project, it is the responsibility of the co-applicants to then secure a power purchase agreement.

**Comment 4:** The Friends of the Forest question how the Commission can accept a license application that includes a transmission line that the Commission does not have the authority to grant.

**Response:** The Commission has authority to license a transmission line from a waterpower project to the “point of junction” with the interconnected primary transmission system, in this case the SDG&E and the SCE systems. Appendix B-7 provides further explanation of this project’s point of junction. We have deleted paragraph 1.2.3.3 on page B-8 from the final EIS as the Talega-Escondido/Valley Serrano 500 kilovolt (kV) Interconnect Project (TE/VIS Interconnect) transmission line is not being proposed as a separately permitted transmission line.

**Comment 5:** Pacific Clay and the Center for Biological Diversity state that the statement of Purpose and Need in the draft EIS is inadequate because it does not provide a meaningful discussion of why the project is the best comprehensive plan for improving and developing Lake Elsinore; whether the project forwards the purposes of energy conservation, the protection of fish and wildlife, and promotion of recreation; and whether there are feasible alternative energy sources or other feasible project locations. They state that there is no discussion of the likelihood of a transmission line only portion of the project going forward without the hydropower portion.

**Response:** Section 1.2.1 of the draft EIS describes the current and future demand for electricity in the California-Mexico Power area of the Western Electricity Coordinating Council (WECC) and the specific role that a pumped storage project could play in helping to meet the future energy demand. The draft EIS is intended to disclose the potential effects of the proposed project on the environmental resources of the projects. The draft EIS provides an analysis of the effects of each project component, including the transmission line, as summarized in table 53. Decisions about whether or not to license the proposed LEAPS Project or the TE/VIS Interconnect will be addressed in any license order issued by the Commission and in any Record of Decision issued by the USFS.

**Comment 6:** The Friends of the Forest state that there is no market for large-scale pumped storage projects, citing four examples of projects licensed by the Commission between 1991 and 1997 for which the Commission terminated the licenses because construction had not begun. They request that the final

EIS include information about pumped storage projects licensed by the Commission during the past 20 years.

**Response:** Whether pumped storage projects licensed by the Commission during the past 20 years have been built or terminated is not relevant to current proceeding. An applicant may apply for a license for a pumped storage project and the Commission must consider any application on a case-by-case basis that meets the regulatory requirements.

**Comment 7:** The Friends of the Forest and Charles and Deanna Whitney point out that SDG&E has eliminated the LEAPS Project transmission alignment as a preferred route in the Southwest Transmission Expansion Plan (STEP) process, finding it not suitable from a construction and maintenance point of view; that the Los Angeles Department of Water and Power and Imperial District have announced the Green Path Project; and that a new 775-megawatt (MW) combined power plant is under construction less than a mile from the Valley substation. They conclude that Nevada Hydro has overstated its case relative to the need for power.

**Response:** The proposed transmission line is currently a primary line associated with the proposed advanced pumped storage facility. The draft EIS states that the WECC anticipates that 6,783 MW of new capacity would come on line in the next 10 years, including the combined power plant under construction near the Valley substation. About 390 MW of hydroelectric pumped storage, not including the LEAPS Project, is included in this forecast. Of interest is not the amount of new capacity, but the type of capacity that would be provided by pumped storage. Pumped storage generates and stores power during off-peak periods that can be provided rapidly during on-peak periods when supplies of energy are tight.

**Comment 8:** The State Water Resources Control Board (State Water Board) states that the final EIS should compare the estimated consumer energy costs of the project with the estimated consumer energy costs resulting from the development of a 500-MW gas-powered combined cycle facility with peaking abilities in the South Coast Region. It states that this comparison should include a discussion of the relative project footprints and the cost and feasibility of mitigation for each.

**Response:** Our developmental analysis considers the No-action Alternative to include a 500-MW gas-powered simple cycle turbine. We refer to “Comparative cost of California central station electricity generation technologies” (CEC, 2003) as the basis for making this selection. The document describes simple-cycle turbines as operating in a peaking mode, which staff concludes is a reasonable basis for comparison to pumped storage projects. The document estimates that 50 acres would be required for a 100-MW simple-cycle combustion turbine plant. A 500-MW plant would likely require less than 250 acres due to economies of scale. Such a plant would require emissions controls and various environmental permits.

**Comment 9:** The State Water Board states that staff should take note of the recent agreement of seven utilities to underwrite the economic and environmental studies for a transmission line that would bring electricity to California from out-of-state generation sources, known as the “Frontier Line.” The cost and need for the TE/VIS Interconnect Project should be considered in light of the “Frontier Line” Project and its place in the STEP.

**Response:** We note that the transmission system expansion alternatives proposed under the “Frontier Line” Project would partially address energy transmission needs in the Western states. However, the project’s feasibility study and conceptual plan were only recently announced (April 2006) and will take approximately 12 months to complete. Therefore it is premature to consider it in the final EIS.

**Comment 10:** Bill Soderquist, on behalf of the Elsinore Hang Gliding Association, presented a list of new power projects that have gone online or are due to go online since the project was proposed. He states these projects are adequate to supply the new demand.

**Response:** We appreciate the research by Mr. Soderquist into new power projects serving the California area. Our basis for the Need for Power section of the draft EIS is the *10-Year Coordinated Plan Summary: Planning and Operation for Electric System Reliability* (WECC, 2005). We note that table 30 on page 49 of this document provides information similar to the information provided by Mr. Soderquist and that project generation additions and retirements are included in the WECC analysis. We continue to rely on the WECC assessment that says by 2014, California will have to add 6,783 MW of new capacity of which pumped storage could be a part.

**Comment 11:** The Army Corps of Engineers (Corps) recommends adding to the final EIS an explicit explanation of why a 500-MW capacity facility is needed, as opposed to a lesser amount of capacity.

**Response:** We previously requested clarification on the selection of the proposed installed capacity from the co-applicants. The co-applicants responded in Clarification (4) (c) to their November 12, 2004, deficiency letter response that the 500-MW facility optimizes the site and available equipment configurations, doing so in an economical manner. We note that for pumped storage the amount of capacity installed is highly sensitive to the power purchasers' load shape, and the co-applicants have not indicated who would purchase the energy generated by the project.

**Comment 12:** Edwin Thorell states that power production can be better produced by using "peakers" powered from methane produced by Elsinore Valley MWD's plant. He also states that solar power and wind power are better investments than the proposed project.

**Response:** As noted in the draft EIS, forecasts of new capacity do not treat wind power as firm capacity because of the intermittent nature of wind. Although other sources of energy may evolve, the co-applicants propose a pumped storage facility and our need for power addresses the role of pumped storage in the energy resource mix for the region.

**Comment 13:** The Natural Resources Defense Council states that the project's use of nuclear power and its associated environmental effects must be examined under the National Environmental Policy Act (NEPA).

**Response:** The co-applicants have not indicated that they have generation contracts with nuclear power providers at this time and, in any event, the environmental effects associated with nuclear power would have been disclosed in the NEPA analysis associated with the Nuclear Regulatory Commission's proceeding.

## **PROCEDURAL**

**Comment 14:** Nevada Hydro requests that the *Cover Sheet* and *Abstract* be revised to state that the project transmission lines are located in Orange and San Diego counties. It also requests that figure 1 show the locations of the pumped storage facility as well as the proposed transmission alignment.

**Response:** We have revised the *Cover Sheet* and *Abstract* to include all the counties within which the proposed project is located. We have revised figure 1 to expand the project location box to include the transmission component of the proposed project.

**Comment 15:** Nevada Hydro requests that the *Purpose of Action* discussion on page 1-1 of the draft EIS be revised to say that the Commission and the USFS have agreed to participate as cooperating agencies in the preparation of an EIS for the LEAPS Project and for the TE/VS Interconnect Project so that the EIS can be used by the Commission, the USFS, and other agencies as the environmental basis for any and all actions that may be required from those federal agencies from whom discretionary actions are required.

**Response:** The Commission invited the USFS to participate as cooperating agency for the preparation of an EIS for licensing of the LEAPS Project. The LEAPS Project, as proposed by the co-applicants, includes an upper and lower reservoir, water conduits, a powerhouse, tailrace channel, an intake/outlet structure, and 30 miles of transmission lines. The co-applicants also filed a separate special use permit application with the USFS for permission to occupy Cleveland National Forest lands to construct and operate the stand alone TE/VS Interconnect Project. The jointly prepared EIS will provide the environmental disclosures necessary for the Commission to make a decision on whether to issue a hydropower license and, if it so chooses, for the USFS to make a decision on whether to issue a special use permit to allow the LEAPS Project to occupy Cleveland National Forest lands. The Commission is not cooperating with the USFS on any decision related to the transmission alone project.

**Comment 16:** The Friends of the Forest point out that it filed a motion to intervene on June 2, 2004, but was not listed as an intervener on page 7 of the draft EIS.

**Response:** We have corrected this oversight and have listed Friends of the Forest in the list of interveners in the final EIS.

**Comment 17:** The Friends of the Forest question why the Commission chose not to use the Docket ER06-278 service list to notify parties in the P-11858 proceeding that ER06-278 had been opened for comments and interventions. They request that the record of ER06-278 be made part of the record in the P-11858 proceeding.

**Response:** These are two separate Commission proceedings with separate dockets and service lists.

**Comment 18:** Many individuals state that they did not receive any written notice that their property was in the path of the transmission alignment and question whether proper notification procedures have been followed.

**Response:** The co-applicants followed the Commission's notification requirements under 18 CFR § 4.32(a)(3)(i)(A). The Commission issued a public notice on October 3, 2006, to all owners of record to ensure that every owner who could be directly affected by the proposed and alternative transmission alignments (presented in the final EIS) received notification and had an opportunity to comment on the proposed and alternative actions prior to issuance of the final EIS.

**Comment 19:** Riverside County recommends that an additional public hearing be held in the local area because many people were forced to stand outside and were unable to hear the proceedings at the only Commission-conducted public hearing previously held.

**Response:** As noted by others in attendance, the alternative sites for the public meeting were no larger than the neutral site selected for the meeting. We note that everyone who wished to speak at the public meetings held on April 4 and 5, 2006, was able to do so and everyone who wished to file written comments could do so. Transcripts from the scoping meetings and the public meetings on the draft EIS are available on eLibrary through the Commission's web site.

**Comment 20:** Riverside County requests that it be notified of any and all additional hearings and be provided future reports prepared for this project so that it has the opportunity to review and coordinate regarding project-related effects on Riverside County activities.

**Response:** Riverside County filed a motion to intervene and as such will receive all Commission issuance and other filings in this proceeding.

**Comment 21:** The Fernandez Parties state that the Commission does not have authority over the Interconnect Project, and therefore that portion of the project needs to be redirected to the California Public Utilities Commission.

**Response:** The co-applicants propose a pumped storage project with a primary transmission line to convey the energy produced to the grid. Until an interconnection with the grid is achieved, the primary line is clearly within the Commission's authority to license.

## **PROPOSED ACTION AND ALTERNATIVES**

**Comment 22:** SDG&E states that the final EIS should evaluate the statement in section 2.2 of the draft EIS: "Pumped storage does not depend on fossil fuels and is not subject to supply disruptions" to determine the fuel source for unit at margin during off-peak pumping periods since the project is a net consumer of energy. The Center for Biological Diversity also expresses this concern.

**Response:** The co-applicants have stated their intent to pursue off-peak generating sources, such as geothermal, wind, and other non-fossil based energy sources. We recognize that until they negotiate a power sales agreement, the final off-peak fuel mix would not be fully defined. We have therefore modified the statement referenced accordingly. We note that as long as there is water in the upper reservoir, it can be dispatched for power; however, once empty, the project is dependent on electricity for refill.

**Comment 23:** Nevada Hydro suggested several modifications to the proposed project including: (1) using a single high pressure conduit rather than two parallel high pressure conduits from the upper reservoir to the powerhouse; (2) changing the proposed generator voltage from 13.8 kV to 16 kV and changing oil-filled cables to gas-insulated cables; and (3) accelerating the construction schedule from 4.5 to 3 years. Nevada Hydro also revised its proposed transmission alignment: (1) to relocate the southern substation from the Tenaja area to an area south of the existing Case Springs Fire Station within the existing SDG&E right-of-way; (2) to include underground segments near the hang gliding launch areas and between the upper reservoir and the powerhouse; (3) and to provide preliminary tower sites along the revised proposed alignment.

**Response:** In subsequent clarification communication with Commission staff (personal communication, D. Kates, Nevada Hydro, Vista California, and James Fargo, Commission, Washington, DC, on May 26, 2006), Nevada Hydro indicated that the co-applicants were not formally modifying their proposed action to include changes to the high pressure conduit design or to accelerate the construction schedule. Therefore, we present only the co-applicants' revised transmission alignment and analyze the effects of this proposed alignment along with the preliminary tower placements in the final EIS.

**Comment 24:** Nevada Hydro requests that several measures proposed by the co-applicants in the license application and subsequent filings be deleted, modified, or clarified as follows:

(1) Nevada Hydro no longer proposes to develop and implement a revised lake operating plan for Lake Elsinore, addressing increased minimum lake levels, flood control implications, and water

supply issues; instead, Nevada Hydro proposes to work cooperatively with the agencies in authority (pages 2-13 and 5-11 of the draft EIS).

(2) Nevada Hydro requests the deletion from the EIS the measure to reduce the maximum operational drawdown during summer months following a winter with below-normal precipitation to control algal blooms that could result in fish kills (pages 2-14 and 5-12 of the draft EIS) because the co-applicants no longer propose this measure.

(3) Nevada Hydro requests that the proposed measure to acquire and demolish the multi-family residences nearest the proposed powerhouse site to address potential adverse effects on residents during construction (pages 2-15 and 5-13) be clarified to state that it pertains to the Santa Rosa site and be modified to allow the co-applicants to use these properties to provide relocation assistance or for construction purposes, and to return these properties to the regional housing inventory or other productive uses, following completion of construction.

(4) Nevada Hydro states that it is currently the co-applicants' objective to achieve a balance of excavation and fill materials (pages 2-15 and 5-13 of the draft EIS) but requests that this objective be a target rather than an absolute requirement because it may be difficult to achieve for the construction of the transmission line.

(5) Nevada Hydro states that it agrees to provide a fair-share contribution toward the installation of a traffic signal at the Grand Avenue/Ortega intersection but requests that the appropriate state or local agency establish the need for the signal, develop plans and cost estimates, identify the proportion of costs associated with the proportion of project-related traffic use and that the co-applicants contribute funding rather than be responsible for implementation of the improvement.

(6) Finally, Nevada Hydro asks that the proposed measure to conduct all construction activities in accordance with the noise element of the county of Riverside Comprehensive General Plan and city of Lake Elsinore construction noise standards be revised to allow the co-applicants to conduct 24-hour construction operations subject to further noise studies demonstrating that, as proposed or modified, no sensitive receptors would be exposed to noise that exceeds the locally established standards.

**Response:** We removed the proposed measure to prepare a revised lake operating plan for Lake Elsinore from the co-applicants' proposed measures in section 2.3.6 and have added this measure to the staff alternative in section 2.4.3.2. We have deleted the proposed measure to reduce the maximum operational drawdown during summer months following a winter with below-normal precipitation. We concluded in the draft EIS that this measure is not necessary because the lake level would be maintained at or above 1,240 feet mean sea level (msl). We have revised the text in section 2.3.6 and 5.1.1 to indicate that housing acquired within the construction right of way could be returned to the regional housing market upon completion of construction. The staff-recommended measure only pertains to achieving a balance of excavation and fill materials at the upper reservoir. We would expect that the specifics for participating in the installation of any traffic signal would be addressed in the co-applicants' proposed road and traffic management plan. In their comments on the draft EIS filed on April 25, 2006, the co-applicants suggested and then withdrew their suggestion during a clarifying phone call with Commission staff on May 26, 2006, to accelerate the construction schedule, eliminating any need for studies to demonstrate that 24-hour construction would not violate local ordinances.

**Comment 25:** Linda and Martin Ridenour comment that the figures 2 and 3 in the draft EIS do not show the many homes, apartments, and schools that would be affected by the proposed project, the individual lakeside properties that would be affected, or the exact location of the inlet/outlet structure. They also comment that figures 5 and 6 do not include enough detail and suggest that the final EIS include a satellite map showing the location of houses near the transmission lines so that people can comment on the effect on their properties.

**Response:** Figures 2 and 5 show the approximate location of the inlet/outlet structure in Lake Elsinore. Appendix F of the final EIS includes aerial photographs that show the co-applicants' proposed and staff alternative transmission alignments. These aerial photographs also were sent to property owners of record within 0.25 mile of the co-applicants' proposed and staff alternative transmission alignments.

**Comment 26:** Nevada Hydro points out that some language in the draft EIS (e.g., page 3-136) is inconsistent with the co-applicants' proposal and with USFS preliminary 4(e) condition no. 28 that would provide a day-use area at either the upper reservoir construction staging and laydown area or elsewhere.

**Response:** USFS revised preliminary 4(e) condition no. 27 adopts the co-applicants' alternative 4(e) language and now allows for an alternative location for the day-use area. We have revised the final EIS to eliminate the inconsistent language in the terrestrial resources analysis.

**Comment 27:** Linda and Martin Ridenour provide comments on the USFS 4(e) conditions citing the need for detailed plans in order to evaluate effects. They comment that a special use permit should not be granted without more detailed information about vegetative fuel management, road and traffic management, recreational facilities (how will the USFS specified facility relate to the county trail system?), protection of historic properties, and protection of wildlife (information on the Pacific flyway).

**Response:** Site-specific analysis would be required before issuance of a special use authorization. A vegetation fuel treatment plan (condition no. 9), a vegetation and invasive weed management plan (condition no. 33), road and traffic management plan (condition no. 26), recreation facilities and administration plan (condition no. 27), historic properties management plan (condition no. 28), and a wildlife management plan (condition no. 34) would be required prior to construction and within 1 year of any license issued. The only system trail that may be affected is the Morgan Trail, which has been analyzed within the draft EIS (section 3.3.6.2).

**Comment 28:** Nevada Hydro states that, as described in section 2.3.4 of the draft EIS, the staff alternative transmission alignment would be a circuitous rather than a linear configuration that would require additional tower fortifications and additional temporary or permanent access roads. Nevada Hydro also suggests that figures 5 and 6 show a corridor rather than a specific transmission alignment.

**Response:** Commission and USFS staff modified the staff alternative transmission alignment to provide a more linear configuration and to minimize effects on the wilderness area and back-country non-motorized areas within the Cleveland National Forest. The figures included in volume 1 of the license application identified the primary transmission line as a transmission alignment and we describe the proposed route as an alignment in the EIS to be consistent. We consider the alignment to represent a 500-foot-wide corridor with a 200-foot-wide permanent right-of-way.

**Comment 29:** Nevada Hydro assumes that the staff-recommended measure for a plan to determine the toxicity of sediments in the lakebed relates only to the lake area that would be directly impacted by construction activity and only to the identification of toxins above actionable levels and does not encompass the entire lake or extend beyond areas of direct disturbance. Nevada Hydro requests that the measure be clarified to reflect these assumptions.

**Response:** Your assumptions are correct, and we have revised section 2.4.3.2 in the final EIS to clarify the scope of the recommended plan.

**Comment 30:** Nevada Hydro provides updated information on the housing development at Ortega Oaks and states that subdivision approvals in April 2004 and unknown to the co-applicants would increase both

the cost and the complexity of constructing the powerhouse at the Ortega Oaks site substantially. Nevada Hydro states that if the license is restricted to the Ortega Oaks site, there would remain an unresolved question concerning whether the co-applicants could feasibly and reasonably secure the Ortega Oaks site. Nevada Hydro also points out that its study reports show that of the three powerhouse sites, the Ortega Oaks site possesses the least desirable subsurface conditions, (i.e., the site offers greater geotechnical challenges and design-level obstacles). Nevada Hydro requests that both the Commission license and the USFS permit authorize use of either the Santa Rosa or Evergreen powerhouse sites in the event that the Ortega Oaks property cannot be feasibly or reasonably acquired.

**Response:** We have reviewed your filing including the information about the permitted housing development at the Ortega Oaks powerhouse location. Based on this new information and on other considerations, the staff alternative now includes the Santa Rosa powerhouse location.

**Comment 31:** Nevada Hydro states that the Decker Canyon upper reservoir site offers the most direct (and least expensive) connection to the Ortega Oaks powerhouse site. If that site is not feasibly acquired, the Decker Canyon upper reservoir site would not offer the most direct (and least expensive) connection to either the Santa Rosa or Evergreen powerhouse sites. It states that as the distance between the upper reservoir and powerhouse increases, so does the penstock tunnel length between these two facilities. Because tunneling costs represent one of the greatest construction line-item costs, it is important to maintain relative proximity between the powerhouse and upper reservoir. Nevada Hydro provides a wetland delineation report in the April 15, 2006, filing (attachment F) that states “While some minor differences in the overall species composition and structure of the drainage features exist, their functions are considered similar.” Nevada Hydro states that given the findings of the wetland delineations, the avoidance of jurisdictional waters, in and of itself, does not provide a supportable basis for the selection of one upper reservoir site over the other. Further, because Decker Canyon contains 0.3 acre of waters of the United States, it does not meet the definition of a practicable alternative pursuant to 40 CFR 230.10.

**Response:** We have reviewed the new information on wetlands provided in attachment F to your comments on the draft EIS. The potential effect on wetlands is only one of several issues we considered in determining the effects of the construction and operation of the upper reservoir at the Decker Canyon and Morrell Canyon locations. We continue to conclude that construction of the upper reservoir at Morrell Canyon would have greater effects on Lion Spring, oak woodlands, and recreational use of trails and hang gliding launch sites.

**Comment 32:** Nevada Hydro states that if the Ortega Oaks powerhouse site cannot be acquired, the staff alternative transmission alignment would need to be modified to facilitate connection to either the Santa Rosa or Evergreen powerhouse sites. With the exception of the northernmost segment, Nevada Hydro does not have any objection to the staff alternative transmission alignment. However, it continues to believe that, with the exception of that segment located near the area now used as a principal launching site by hang gliders, the co-applicants originally proposed and now revised transmission alignment would result in lesser impacts on existing homes located near the base of the Elsinore Mountains. With regard to the northernmost segment of the staff alternative transmission alignment, Nevada Hydro points out land use conflicts with Pacific Clay Products and housing developments at Horsethief Canyon and Alberhill Ranch and requests that Commission staff revise the staff alternative transmission alignment to adopt the northernmost segment of the co-applicants’ proposed/revised alignment that avoids these land use conflicts.

**Response:** We have considered all the comments made in response to the draft EIS and have revised the staff alternative transmission alignment. We agree that your alignment to the north of the Cleveland National Forest and to the south along the existing SDG&E route would avoid conflicts with Clay Products and housing developments. The staff alternative transmission alignment as shown in figure 5

and figures F-1 through F-4 in appendix F of the final EIS would follow the same alignment as the co-applicants' proposed alignment at both the northern (north of the Cleveland National Forest) and southern ends. Within the Cleveland National Forest, the staff alternative transmission alignment would still be to the east of your alignment, but generally to the west of the private in-holdings within the forest. We also would place the line underground near the hang gliding launch sites, but for a shorter distance just past the egress to Rancho Capistrano.

**Comment 33:** Nevada Hydro points out that figures 5, 8, 12, and 15 in the draft EIS show the transmission alignments east of the Cleveland National Forest instead of within the jurisdictional boundary of the forest.

**Response:** Our intention was for the alignment to be within the Cleveland National Forest. All of the figures in the final EIS have been revised to show the co-applicants' and staff's revised alternative transmission alignments. In addition, aerial photographs showing the proposed and staff alternative transmission lines have been added as appendix F to the final EIS.

**Comment 34:** The Environmental Protection Agency (EPA) indicates the alternatives analysis for the LEAPS Project needs to be expanded to include alternative sites, alternative technologies, and sustainable approaches that would avoid or minimize effects on waters of the United States while providing peak energy. It recommends that the final EIS include: (1) a clear, concise purpose statement for the project that allows for the analysis of alternatives that avoid waters to the extent practicable; (2) an expansion of the alternatives analysis to consider other alternative sites, technologies, and sustainable approaches within a reasonable market area; and (3) a discussion of appropriate mitigation measures for those effects that are unavoidable.

**Response:** Our alternatives analysis is adequate. The purpose of the project is to provide an advanced pumped storage facility for the generation of energy during off-peak energy use periods for delivery and use during peak energy use periods. This is clearly stated in the draft EIS. Under the no-action alternative, other forms of generation would be needed to meet future needs during peak energy use periods. We include in the draft EIS alternative locations for the upper reservoir, powerhouse, and transmission lines. We considered two transmission alignments in the draft EIS and, based on public and agency comments, both the co-applicants and staff have revised the proposed and staff alternative transmission alignments to address issues raised in the comments on the draft EIS including conflicts with businesses, housing developments, wetlands, oak woodlands, fire fighting protocols, recreational use of hang gliding launch sites and trails, and the aesthetic effects on wilderness and back country areas. The development of transmission alignments under consideration in the final EIS took into account the need to efficiently convey power while avoiding as many effects on environmental resources as possible.

**Comment 35:** The Corps recommends the final EIS include project alternatives with reduced effects on waters of the United States and a detailed discussion of practicability in terms of engineering, cost, and logistics as part of the section 404 analysis. If these requirements are not met in the final EIS, the Corps states it would conduct its own analysis before reaching a final permit decision.

**Response:** The co-applicants provided additional technical studies in their filing of April 25, 2006, including delineations of jurisdictional waters and wetlands at the Decker Canyon and Morrell Canyon upper reservoir sites. We include this information along with a new figure 14 that shows the location of waters of the United States and the state of California at the upper reservoir sites. In section 3.3.4.2, we conclude that construction at the Decker Canyon reservoir site would have a smaller effect on waters of the United States than construction at the proposed Morrell Canyon site. Due in large part to this finding, we include the Decker Canyon reservoir site in the staff alternative. We conducted a detailed review of the engineering assumptions, costs and logistics of the construction of both the proposed and staff

alternative facilities and presented the information about the practicability of this alternative in section 4.1 of the draft EIS.

**Comment 36:** The California Department of Fish and Game (CDFG), the Fernandez Parties, the Center for Biological Diversity, and Pacific Clay believe that the Commission did not explore all project alternatives and that the co-applicants have not fully explored the cost and feasibility of implementing other renewable options that would be less detrimental to the environment. CDFG further states that it does not concur with the draft EIS finding that the generation of renewable power by the placement of a hydroelectric facility within a location as environmentally sensitive and valuable as Morrell Canyon and the Cleveland National Forest is more beneficial than producing the required additional electricity via gas-fired means in non-sensitive areas.

**Response:** We did not conclude that a Morrell Canyon upper reservoir was a preferred location nor did we conclude that the project was more beneficial than producing electricity via other means, but rather concluded on page 5-1 of the draft EIS that both the staff alternative and co-applicants' proposal would likely be more expensive than a combustion turbine alternative.

**Comment 37:** The State Water Board agrees the Morrell Canyon upper reservoir option is the more environmentally sensitive and the Decker Canyon option is the least environmentally sensitive; however, the effects of the project on Decker Canyon must be fully analyzed by further footprint assessments.

**Response:** The co-applicants filed the results of their wetland delineations at the upper reservoir locations in appendix F to their comments on the draft EIS. We have included this new information in the final EIS and have added a new figure 14 that shows jurisdictional wetlands in relation to the alternative footprints for the upper reservoir in Decker Canyon. The USFS filed revised preliminary 4(e) conditions on June 23, 2006, that include plans for pre-construction surveys and post-construction monitoring of ground and surface waters at the upper reservoir location. We discuss these preliminary conditions in the final EIS. These pre-construction surveys may result in modifications to the footprint of the upper reservoir at Decker Canyon.

**Comment 38:** Francis Hoffman, on behalf of the Elsinore Testing of Experimental Aircraft Mechanism, and Robert and Susan Konoske question why an alternative placing transmission lines completely underground was not included in the draft EIS. Mr. Hoffman further states that placing the transmission lines underground would make them less terrorist-vulnerable. The Fernandez Parties also question why the draft EIS did not include alternatives that would: (1) route the lines outside the Cleveland National Forest, such as along Interstate 15; (2) place the transmission lines completely underground; or (3) avoid placement of substations and transmission towers and lines near private property.

**Response:** As stated in section 2.5.3 of the draft EIS, we considered several variations for the transmission alignment that included placing segments underground to avoid conflicts with hang gliding activities. We cited cost as the primary reason for eliminating these alternatives. Based on comments on the draft EIS and subsequent filings by the co-applicants, both the co-applicants' proposed and staff alternative transmission alignment would place the transmission line underground near the hang gliding launching and landing areas and along the east-west connection to the powerhouse location. However, we find that placing the entire length underground would still be cost-prohibitive, adding \$320 million to the project costs. Interstate 15 was not considered as a viable alternative for an overhead route because of Caltrans written policy that issuing a Utilities Permit for a Freeway Aerial (UF) transmission line requesting a longitudinal encroachment is normally not permitted. In reviewing the co-applicants consideration of alternative transmission alignments we concluded that there were no alignments that would entirely avoid proximity to existing or planned residential communities, even when going deeper (west) into the Cleveland National Forest.

**Comment 39:** CDFG states that because the project is contingent on the installation of the transmission line once the final alignment has been determined, a detailed analysis of the effects associated with the transmission line should be included in the EIS.

**Response:** Both the draft and final EIS include our assessment of the effects of the proposed and staff alternative transmission alignments on environmental resources.

**Comment 40:** Robert and Susan Konoske cite information presented on page 3-133 of the draft EIS that 11.1 acres of vegetation would be disturbed by the construction of temporary roads to install the transmission line. They question whether one can build 30 miles of transmission line with only 6.1 miles of temporary roads (they assume the roads will be 15 feet wide, whereas the authors of the draft EIS assume the temporary roads would be 12 feet wide).

**Response:** In the draft EIS we estimated that along the 5.1 miles of the proposed transmission alignment having slopes less than 15 percent the conventional installation of transmission lines would require 7.6 miles (not 6.1 miles) of temporary access roads. Straight road width estimates vary from 12 feet wide (see the Antelope-Pardee 500-kV Line Draft EIR/EIS [CPUC/USFS, 2006]) to 14-foot wide (see SDG&E's Sunrise Powerlink 500-kV Project Application [SDG&E, 2006]). Roadway widths also range from 14 to 20 feet-wide at curves to allow safe movement of construction equipment and vehicles (SDG&E, 2006, Chapter 2). At structure sites located in rugged terrain with grades that exceed 15 percent, small vehicles and manual labor delivered via helicopters will be used during construction. Approximately 78 percent of the co-applicants' proposed alignment and 80 percent of the staff alternative transmission alignment presented in final EIS is expected to have structures located on grades exceeding 15 percent. Based on this, we estimate that 10.8 and 9.3 miles of temporary road would be needed for the two alignments. This is an increase over the estimated 7.6 and 10.3 miles of temporary roads presented in the draft EIS and reflects the longer lengths of both the revised co-applicants and staff alternative transmission alignments.

**Comment 41:** The Honorable Darrell Issa, Ken Calvert, Mary Bono, and Duncan Hunter in comments in support of the LEAPS Project request that FERC adopt the co-applicants' proposed transmission line because it minimizes the visual impact on several existing and proposed housing developments. They comment that keeping the proposed line farther in the Cleveland National Forest is a better option than siting the line close to those developments.

**Response:** The mid-slope transmission alignment presented in the draft EIS crossed major planned subdivisions in Horsethief Canyon and at Ortega Oaks, mining operations of the Pacific Clay Company, as well as dozens of private in-holdings west of Grand Avenue and in the vicinity of the residential area at LaCresta. This initial alignment was designed to minimize interference with fire suppression activities, avoid designated wilderness and back country non-motorized areas in the Cleveland National Forest, and reduce effects on hang-gliding activities. Commission and USFS staff developed a revised staff alternative transmission alignment in response to hundreds of complaints about the proximity of our mid-slope transmission alignment to private residential and commercial development. Our revised staff alternative transmission alignment avoids as many private in-holdings with the Cleveland National Forest as possible while continuing to avoid the San Mateo Wilderness Area and to minimize encroachment on lands designated as back-country, non-motorized and back-country, motored-use restricted in the Land Management Plan. The staff alternative transmission alignment lies within 0.25 mile of 452 privately-owned parcels while the co-applicants proposed alignment lies within 406 privately-owned parcels, with the major difference being along the southern segment of the alignments where the staff alternative avoids crossing back country areas. The figures presented in appendix F compare the co-applicants' proposed and staff alternative transmission alignments.

**Comment 42:** Jon R. Johnson recommends an alternate transmission line alignment that extends to the lower portion of the mid-slope alignment approximately 0.5 mile to the north and then ascends the slope to the north of Edwards launch site. He states that this would allow the lines to cross the Main Divide Road in an area where the terrain is flat on both sides of the road, allowing greater fire fighting ability and residents to pass during a fire.

**Response:** We appreciate your suggestions on how best to route the proposed transmission line near Edwards launch site. The staff alternative transmission alignment was modified in the final EIS to address concerns about fire fighting and hang gliding safety.

**Comment 43:** Rancho Capistrano Property Owners Association and Bruce Campbell recommend analysis of alternate transmission line routes along the freeway corridor or in the wilderness area away from homes and roads.

**Response:** Both the co-applicants' and staff alternative transmission alignments now include underground segments near the egress to the community of Rancho Capistrano, and the staff alternative transmission alignment, which is under consideration in the final EIS, now avoids private in-holdings in the Cleveland National Forest. However, there is no provision in the Wilderness Act that would allow for the inclusion of a power transmission line within the designated San Mateo Wilderness. Transmission line alignments along freeway corridors were not considered in the draft EIS. I-15 was not considered as a viable alternative for an overhead route because of Caltrans written policy that issuing a Utilities Permit for a Freeway Aerial (UF) transmission line requesting a longitudinal encroachment is normally not permitted. This information can be found at:

[http://www.dot.ca.gov/hq/traffops/developserv/permits/encroachment\\_permits\\_manual/index.html](http://www.dot.ca.gov/hq/traffops/developserv/permits/encroachment_permits_manual/index.html)

**Comment 44:** SDG&E requests a more specific location map of the site of the southern substation be included in the final EIS with an aerial photograph base at a scale more useful for a detailed site review. SDG&E needs a better map to determine that the location, site characteristics, and environmental conditions are feasible from engineering and cost perspectives and that environmental and permitting issues can be addressed in a timely and cost-effective manner.

**Response:** Appendix F of the final EIS includes a more specific location map shown on an aerial base or U.S. Geological Survey (USGS) map at a scale that is more useful for a detailed site review.

**Comment 45:** SDG&E requests the final EIS include a discussion on why the south substation site and SDG&E substation site alternatives were eliminated from consideration.

**Response:** The SDG&E substation alternative shown on figure 8 was erroneously shown as an existing substation. It was eliminated because its purpose and location were replaced by the alternative substation shown in the revised figure 8. The alternative substation was included in the staff alternative mid-slope alignment and its various environmental issues were discussed in the draft EIS. The co-applicants have filed a revised transmission alignment that includes their preferred southern substation site. The co-applicants' preferred location is generally underneath or adjacent to the existing SDG&E 230-kV transmission line partially within, or directly adjacent to, the boundaries of Camp Pendleton, east of the existing Case Springs Fire Station (No. 28).

**Comment 46:** SDG&E requests a clarification on the type of habitat depicted in table 15 (pages 3-114 and 3-115) that would be affected by the construction of the southern substation—disturbed or chaparral.

**Response:** We have added headers to table 15 in the final EIS to clarify that the proposed southern substation is currently disturbed, and that the alternative southern substation location is characterized by chaparral.

**Comment 47:** SDG&E expressed its concern that a 25-acre 500/230-kV substation site may not be large enough for planned project and future equipment.

**Response:** We reviewed the Single Line Diagram, General Arrangement and conceptual Grading Plan for the Central East Substation (as shown in the Sunrise Powerlink Application [SDG&E, 2006]) and performed a conceptual layout based on the 500-kV and 230-kV equipment components in the southern substation to arrive at a revised site requirement of 50 acres. This value was found to be consistent when compared to the Antelope Substation (as shown in SCE's Antelope-Pardee 500 kV Transmission Line Project Application [CPUC/USFS, 2006]).

**Comment 48:** SDG&E requests that additional detail be provided for the south substation and that SDG&E be allowed to provide input on its requirements to ensure that the impact analysis is as accurate and complete as possible.

**Response:** In their filing of April 25, 2006, the co-applicants requested based on continuing discussions with SDG&E, Camp Pendleton, and additional engineering studies, the relocation of the proposed southern substation from the Tenaja area to an area south of the existing Case Springs Fire Station, within the existing SDG&E right-of-way and beneath SDG&E's existing 230-kV lines, within or adjacent to Camp Pendleton. This alignment was originally alternative 5 as shown on figure 8 of the EIS and is now included as part of both the co-applicants proposed and staff alternative transmission alignment. In the co-applicants' System Study of equipment quantities and capacities, the southern substation would contain two 500-kV breaker-and-a-half bays, two 1,000 MVA 500/500-kV phase-shift transformers, two 1,000 MVA 500/230-kV transformers, and two 230-kV breaker-and-a half bays. If licensed, Nevada Hydro would consult with SDG&E directly about the design of the southern substation.

**Comment 49:** SDG&E requests the final EIS disclose the status of the March 16, 2005, application for water quality certification under section 401.

**Response:** The status of the application for water quality certification as of the date of issuance of the final EIS is discussed in section 2.4.2.3 of the final EIS.

**Comment 50:** Edith Stafford asks if the proposed project is consistent with the California Water Code 71663.5 (b) and (d), which she interprets to mean that: (1) a water district can generate power for its own purposes and may sell surplus power to a public or private entity that is engaged in the distribution or sale of power and (2) a water district may not acquire property employed in the generation of power for public or private utility purposes, except by mutual agreement between the district and the owner of that property. Linda and Martin Ridenour also point out that Elsinore Valley MWD does not have eminent domain authority and must acquire property through mutual agreement. They request that the final EIS include documentation that allows Elsinore Valley MWD to provide electric power generation.

**Response:** The co-applicants are required to comply with federal, state, and local laws and regulations. We note that Nevada Hydro also is an applicant and is not a water district. Any license issued by the Commission would include the use of eminent domain if necessary to allow the co-applicants to build the project and to sell the power generated by the project, subject to all the necessary state and federal permits.

## PROJECT SAFETY

**Comment 51:** Riverside County states that project licensing should not occur until there is sufficient project design to determine the boundaries of the dam inundation area and it is assured that potential effects can be mitigated. Precise inundation maps and flows resulting from a potential dam/dike break should be provided to the Riverside County Fire Department, Office of Emergency Services so that these plans can be reviewed for compliance with local and state regulations. Lake Elsinore Unified School District is also concerned with the lack of discussion in the draft EIS regarding flooding danger from a potential dam break.

**Response:** Figure 10 in the draft EIS shows the potential extent of inundations that could result from a dam or dike break. This figure was developed from a more detailed study included in the license application. If the project is issued a license, the licensees would need to prepare more detailed dam break studies and coordinate with local agencies to develop an emergency action plan.

**Comment 52:** Mr. Campbell asks whether the USFS would use more toxic fire retardants in the future as a result of any limitations on fire fighting that might result from the construction and maintenance of the transmission lines.

**Response:** The proposed location of the towers and lines may result in less efficient firefighting in the area and could result in less or more retardant used overall. USFS indicates that a variety of fire suppression techniques will be used to control, contain, and suppress wildland fires.

## ENVIRONMENTAL CONSEQUENCES/GENERAL

**Comment 53:** The Natural Resources Defense Council and Pacific Clay state that the project's effects are not discussed in the draft EIS at a sufficient level of detail. The Center for Biological Diversity and the Orange County Chapter of the California Native Plant Society also question how an informed decision can be made about the proposed action until more knowledge is provided by detailed habitat studies, mitigation, and monitoring plans. EPA states that the draft EIS does not provide sufficient information to demonstrate that any of the build alternatives represent the least environmentally damaging practicable alternative. The State Water Board, the Fernandez Parties, Pacific Clay, and SDG&E also indicate that several studies and mitigation measures identified in the draft EIS should be conducted prior to issuance of the final EIS instead of deferred until after license issuance. The Fernandez Parties state the draft EIS was prepared prematurely because the co-applicants' proposal is in the conceptual planning stage and does not include information needed to adequately assess potential effects.

**Response:** The draft and final EIS include a sufficient level of detail to assess the potential effects of the proposed project on environmental resources in the project area. We acknowledge that facility designs are still conceptual. We are confident that the level of information provided in the proceeding is sufficient to allow Commission and USFS staff to make an informed judgment of the relative effects of the alternative project configurations. Any license issued by the Commission and any permit issued by the USFS would include requirements to complete studies and resolve the details of any outstanding environmental issues prior to the commencement of construction.

**Comment 54:** Riverside County, Pacific Clay, the Center for Biological Diversity, and Lake Elsinore Unified School District state that the draft EIS does not supply specific locations and acreages to be affected by construction laydown areas during development of the powerhouse, the upper reservoir, the intake/outlet tunnels, and acreages affected during construction of the transmission lines or upstream detention basin. The absence of a detailed plan limits the ability of reviewers to completely assess the potential effects resulting from the project and the adequacy of mitigation measures. Pacific Clay states

that the draft EIS should be withdrawn, revised, and recirculated for no less than 120 days for public review and comment.

**Response:** The draft and final EIS include specific information on the staging and laydown area acreage that would be affected by the alternative project configurations. The type and amount of vegetative cover that would be affected are shown in table 15 of the draft EIS and have been revised to account for the revised proposed and staff alternative transmission alignments in the final EIS.

**Comment 55:** The State Water Board questions if the co-applicants would be willing to have an open license until environmental effects are known because much of the environmental documentation and plans have been deferred to post licensing.

**Response:** We are not sure what you mean by an open license. Any license order issued by the Commission would specify the location of project facilities and require the completion of any outstanding environmental studies specified in mandatory conditions, final design drawings, and plans to protect environmental resources prior to the commencement of construction. In addition, any license issued for the project would include a requirement for a detailed plan, developed in consultation with the resource agencies, for environmental construction monitoring in aquatic and terrestrial environments.

**Comment 56:** Pacific Clay states that the project outlined in the draft EIS varies from the projects outlined in Scoping Documents 1 and 2, specifically the deletion of a “preferred project” designation, deletions, amendments, and alterations to the project alternatives, and the inclusion of the “staff alternative” at the last minute. It states that because the text of the draft EIS does not match the information from the April 5, 2006, Commission public meeting and because the draft EIS does not contain detailed maps or figures, it was unable to determine where the staff’s alignment occurs and therefore is unable to assess potential effects.

**Response:** In their license application, the co-applicants identified a preferred project, which is treated as the proposed action in the draft EIS. Commission and USFS staff developed a staff alternative based on the analysis of the proposed action and action alternatives presented in the license application. The staff alternative evolved from scoping meeting comments and technical review of the potential effects of the proposed action and alternatives. Following the public meeting and review of comments filed on the draft EIS, Commission and USFS staff developed a revised staff alternative transmission alignment that now avoids conflicts with Clay Products. The Commission issued a notice on October 3, 2006, to property owners affected by the revised alignments and included a detailed aerial-based map with the notice. Property owners were afforded 30 days to comment and the comments are summarized in this appendix and addressed in the final EIS.

**Comment 57:** Nevada Hydro and a number of agencies expressed concerns about coordination with CEQA. CDFG recommends that the final EIS address the state’s concerns pursuant to CEQA and EPA recommends the Commission coordinate with state and local agencies to prepare one document that combines NEPA with state and local environmental impact statement requirements like CEQA. Riverside County also recommends that the draft EIS be rewritten as an EIS/EIR to satisfy CEQA and recirculated for review and comment. The State Water Board states that final designs and sediment control plans and measures should be developed and included in the final EIS or they can not consider it mitigation under CEQA. EPA states that in order to be CEQA compliant, the final EIS should identify and describe all appropriate mitigation measures and contingency measures (if such measures are deemed necessary by monitoring results), referencing any that are adopted into the record of decision and stating whether all practicable means to avoid or minimize environmental harm have been selected. Nevada Hydro requests that the final EIS and the USFS’ Record of Decision contain an explicit acknowledgement that federal law authorizes the use of the FERC/USFS document either in whole or in part, in fulfillment of any state-

imposed environmental disclosure requirements such as those associated with California Environmental Quality Act (CEQA) and section 1500.4(n) and (o), 1500.5(h), 1506.2, and 1506.4 of CEQ regulations implementing NEPA.

**Response:** Elsinore Valley MWD is the lead agency for CEQA review. In the EIS, we have addressed all of the CEQA requirements to the extent possible given the information provided in the license applications. The Commission is considering the overall proposal in the EIS. If licensed, the licensees would need to provide the details associated with many of the mitigation measures in the plans recommended by staff and specified by USFS that would be developed in consultation with the federal and state resource agencies and local agencies.

**Comment 58:** The city of Lake Elsinore states that the EIS should include a condition that the construction of power generating facilities occurs before the construction of the transmission lines.

**Response:** The sequence of construction would be considered in any license issued by the Commission for this proposed project.

**Comment 59:** The city of Lake Elsinore recommends an adaptive management plan be developed and implemented which includes a rigorous 3-year post-construction monitoring program, mitigation measures in the event that the project causes unanticipated and ecologically significant environmental effects, establishment of a third-party administered fund for the protection of habitat, and the establishment of an independent scientific oversight panel.

**Response:** USFS revised preliminary 4(e) condition no. 32 (Environmental Monitoring) includes the type of construction monitoring and adaptive management program that you recommend. The detailed monitoring plan would be developed in consultation with resource agencies.

## **GEOLOGICAL AND SOIL RESOURCES**

**Comment 60:** Pacific Clay states that the geology, soils, and erosion analysis in the draft EIS is inadequate because project facility sitings have not been finalized, geophysical survey data has not been confirmed, stream crossings have not been mapped, no studies or data are provided to support conclusions regarding the effects of lake level fluctuations on Lake Elsinore shorelines, and proper mitigation is not proposed. Pacific Clay also is critical of the analysis in the draft EIS regarding applicable requirements of state and local agencies, effects on local storm drainage facilities, formulation of mitigation to control erosion and surface runoff, and secondary effects of migration measures because it defers the analysis to post-licensing.

**Response:** The draft and final EIS include a sufficient level of detail to assess the potential effects of the proposed project on environmental resources in the project area. We acknowledge that facility designs are still conceptual and additional geotechnical studies are proposed. We do identify stream crossings in section 3.3.2.2 of the draft EIS and evaluate the potential effects on stream crossings in the water resources section. The co-applicants filed additional information including studies of the potential effects of lake level fluctuations (Anderson, 2006) that have been added to the final EIS. The level of information provided in the proceeding is sufficient to allow Commission and USFS staff to make an informed judgment of the relative effects of the alternative project configurations. Any license issued by the Commission and any permit issued by the USFS would include requirements to complete studies and resolve the details of any outstanding environmental issues prior to the commencement of construction.

**Comment 61:** The State Water Board states that the upper reservoir clearing plan should be developed for the final EIS so that the public and agencies can determine if the plan would mitigate or address those

affects identified in the draft EIS. It states that the final EIS should discuss spoil storage areas, storm runoff management, and spoil stabilization measures.

**Response:** The upper reservoir clearing plan would be developed in consultation with the state and federal resource agencies and filed with the Commission prior to the commencement of any construction. This plan would include the specifics relative to the location and management of spoil storage areas.

**Comment 62:** SDG&E states that over the term of the license, sediment transport at velocities of 40 feet/second (on page 3-52 of the draft EIS) would cause significant corrosion on most pipe materials and requests this design be reassessed.

**Response:** We agree that the design of the upper reservoir would need to provide for an emergency spillway or overflow pipeline of sufficient size and durability to control waters during a maximum probable flood. Design details of this nature are generally addressed during the final design phase and are subject to an external engineering board of review. The example cited by staff in the draft EIS was provided simply to illustrate the large diameter and high velocities that would be involved in controlling such a hydrologic event. In the final EIS we've modified our example to reflect a pipe size that results in water velocities that would not be detrimental to an overflow pipe, should that be the design solution.

**Comment 63:** The State Water Board states that the final EIS should disclose the type and materials to be used for the cofferdam in the construction of the tailrace/intake structure and whether or not the cofferdam would require the driving of sheet-piling into the lakebed sediments.

**Response:** The draft EIS indicates that the co-applicants would use a cofferdam; however, the material specifications for the cofferdam would be submitted in the final design plans, which would be reviewed by the independent board of engineers, the Commission, and applicable agencies, including the State Water Board.

**Comment 64:** The city of Lake Elsinore notes that the draft EIS does not address the potential effects that higher average water elevations would have on Lake Elsinore's levee system.

**Response:** Alteration to the lake's water surface elevations were evaluated under the Environmental Impact Report for the Lake Elsinore Stabilization and Enhancement Project. A key objective of that project is the stabilization of the water level of Lake Elsinore, by maintaining the lake elevation within a desirable operating range (minimum of 1,240 feet msl to a maximum of 1,247 feet msl). The proposed LEAPS Project does not intend to operate outside of the lake levels evaluated in the Lake Elsinore Stabilization and Enhancement Project and therefore should not affect the levee system. Also, we have recommended that any license issued for the project include a requirement for a revised lake operating plan to include the pumped storage project operations.

**Comment 65:** The State Water Board points out an inconsistency in the project description regarding vegetation management along the transmission alignment. It notes that in several places the EIS says that vegetation clearing or management is not proposed; however, on page 3-20, the EIS states that periodic vegetation clearing may be needed due to high fire risk. The State Water Board requests clarification so it can assess the potential for erosion and sedimentation of streams. The Center for Biological Diversity also comments on the analysis of the effects of vegetation clearing and raises concerns about the lack of analysis of the potential effects of fire abatement activities on soils and soil productivity. It further comments that the final EIS include specific details about the BMPs to be taken to protect the integrity of stream ecosystems during construction and operation of the project.

**Response:** The co-applicants do not propose to clear vegetation under the transmission line, but fuel management in the future may require manipulation to reduce the risk of fire. Methods selected for fuel management would depend on site-specific factors (e.g., vegetation type, slope, aspect, access), and could include grazing, prescribed fire, or mechanical means to create and maintain firebreaks. Existing firebreaks that intersect the proposed alignment would also be maintained, as needed. We have revised the final EIS to reflect these factors.

**Comment 66:** The Center for Biological Diversity notes that during 2004-2005 winter storms, numerous transmission line towers located on steep slopes experienced substantial damage. It recommends that the final EIS discuss the risks to property, life, and the environment as well as the costs associated with maintaining and repairing the extensive lengths of transmission lines. It also asks that the EIS disclose whether there have been similar lengths of transmission line installation and maintenance via helicopter at other locations.

**Response:** If licensed, the co-applicants would be required to develop and file with the Commission an emergency action plan to avoid risks to property, life, and environment in case of emergencies. About 12 miles of the Valley-Serrano 500-kV Transmission Line cross the Trabuco Ranger District of the Cleveland National Forest in an east-west alignment. Much of the line was constructed by and is presently maintained using helicopters.

**Comment 67:** Riverside County indicates that no geotechnical studies are provided to determine whether soils excavated during construction of the powerhouse would qualify for use in the construction of the upper reservoir main dam or perimeter embankment. Determining whether a balance can be achieved between excavation and fill materials onsite can not be determined without further testing of subsurface soils.

**Response:** We agree that additional geotechnical studies would be necessary to determine whether soils excavated from the powerhouse sites would be suitable to use as fill for the upper reservoir dam. However, we conclude in the draft EIS that transporting excavated materials from the powerhouse to the upper reservoir site would tax the local traffic and roads and recommend that excavated materials from the powerhouse construction be disposed of off-site. We recommend a balance of excavated and fill be achieved at the Decker Canyon upper reservoir site.

**Comment 68:** Riverside County states that the draft EIS fails to identify and quantify the subsurface effects on project components that may result from the active faults in the project location.

**Response:** We discussed seismic considerations for project construction and operation in the *Geology and Soils* section of the draft EIS (on page 3-26), as well as in the Developmental Analysis section (at pages 4-2 and 4-3). Specific potential effects of the faults that we mentioned in our analysis include damage to project infrastructure or construction-related equipment, or injury or loss of life of construction crews.

**Comment 69:** The State Water Board and Pacific Clay state that it appears to be necessary to answer the questions and disclose the answers regarding seismic issues in the construction of the proposed Santa Rosa powerhouse and tailrace/intake structures due to the cost of the proposed project. The Lake Elsinore United School District is critical of the discussion in the draft EIS regarding the potential affect of a seismic event on the project and mitigation, including its ability to withstand an earthquake and the risk of a high-pressure water line rupture. The EPA recommends the final EIS indicate geologic/seismic hazard mapping would be completed before the Commission licenses this project in order to ensure that site and mitigation selection is based upon this information.

**Response:** We discussed seismic considerations for project construction in the Developmental Analysis section (on pages 4-2 and 4-3), and made cost adjustments to reflect those considerations. In its March 2006 report appended to the April 25, 2006, filing by Nevada Hydro, Genterra Consultants indicate that faults may lie beneath all three powerhouse sites and that detailed investigations of faulting would be undertaken once the powerhouse location is selected. These additional studies were proposed by the co-applicants and recommended by the staff in the draft EIS as part of the final design process. The final designs process would include detailed geologic and seismic studies and analyses, which would be reviewed by the Commission and appropriate agencies prior to the commencement of any construction.

**Comment 70:** The State Water Board states that deferring analysis and mitigation regarding dam breach and dike failure is inconsistent with CEQA, whereas Pacific Clay states it is inadequate under NEPA.

**Response:** The draft EIS includes a summary of the dam break and inundation analysis developed by the co-applicants and included in the license application. Figure 10 on page 3-31 of the draft EIS shows the potential inundation that could result from a dam or dike failure. The information provided in the draft EIS is sufficient to address the potential effects of the unlikely occurrence of a dam breach or dike failure. If the project is issued a license, the licensees would need to prepare more detailed dam break studies and coordinate with local agencies to develop and file with the Commission's Division of Dam Safety and Inspections, an emergency action plan.

## **WATER RESOURCES**

### **Water Quantity**

**Comment 71:** The U.S. Department of the Interior (Interior) comments that relative to table 3 in the draft EIS, the monthly streamflow statistics for the USGS gage no. 11070500 for the entire period of record (1916-2004) are available on the USGS web site. It also notes that the gage number in the table is incorrect.

**Response:** We have corrected the gage no. in table 3 to read "11070500" to be consistent with the text. Although a long period of record for this gage is available, considerable development has occurred in the basin and it appears that the 30 years from 1975 through 2004 would be more representative of current hydrologic conditions. Additionally, a 30-year representative period of record is fairly common in hydrology and in this case, more appropriate for our analysis of the effects of the proposed project operations on lake level.

**Comment 72:** Interior points out that the highest peak flow recorded at USGS gage no. 11072100, Temescal Creek near Corona, since the construction of the flood control improvements in the 1990's is now 4,030 cfs recorded on January 9, 2005.

**Response:** We have made this suggested edit to the final EIS.

**Comment 73:** Interior comments that figure 11 does not accurately depict the frequency curve for Lake Elsinore lake level elevations under current conditions and mis-labels elevation of 1,263.3 feet msl.

**Response:** We have corrected the mislabeled elevation on figure 11. The curve shown is an elevation-duration curve based on daily values. Interior argues that the 100 year flood value of 1,263.3 feet msl should correspond to the 1-percent value; however, flood analyses are based on the record high for each year and are based on instantaneous maximum elevations for the year (a different type of analysis). The correct definition of a 1-percent exceedance elevation in the context of this curve would be the elevation equaled or exceeded at least 365 days out of a 100-year period of record.

**Comment 74:** Nevada Hydro provides a technical analysis of the potential water quality impacts of the LEAPS Project on Lake Elsinore (Anderson, 2006) that concludes that the LEAPS Project could either enhance or impede dissolved oxygen (DO) conditions, suspended sediments, and the development of an aquatic macrophyte community; however, the overall effects are still unclear at this time. The report recommended that additional heat calculations be performed and an ecological model conducted. As such, Nevada Hydro requests that any additional water quality studies that might be required as a condition of any license be limited to the LEAPS Project and not required of a transmission stand alone project.

**Response:** Because both aspects of the proposed project— as a complete unit of development, the hydropower and the transmission line—would require a license, they are both subject to license conditions that could include monitoring.

**Comment 75:** The Santa Ana Regional Water Quality Control Board (Santa Ana Water Board) indicates that, other than the payment of money each year to buy water to stabilize lake levels, the other claims of water quality improvement provided by the Lake Elsinore Stabilization and Enhancement Project, as stated in the draft EIS, would occur even if the project does not move forward. Therefore, the Santa Ana Water Board requests the final EIS indicate how much water can be purchased through the lake management fee and how it would affect lake levels.

**Response:** The effect on lake levels was summarized in figure 11 of the draft EIS. The lake management fee provides a vehicle for paying for supplemental water which we estimate to be from 4,000 acre-feet to 15,000 acre-feet depending on the water year. Replacement water would come from wells and would be primarily from recycled water by year 2020. We assume that the management fee would pay for the water needed to maintain water level targets included in the plan.

**Comment 76:** The State Water Board states that the draft EIS does not describe the area of relicited lakebed (fluctuation zone) that would result from the drop in water elevation on Lake Elsinore from project operations. It states that the final EIS should include an assessment based on bathymetry data that discloses the areal extent of the expanding shoreline due to project operations at various lake levels, including drought years.

**Response:** We have revised section 3.3.1.2 of the final EIS to include new information (Anderson, 2006) on the areal extent of the shoreline migration resulting from the daily and weekly fluctuation of the water surface elevation under proposed project operations.

**Comment 77:** The Santa Ana Water Board would like a discussion in the final EIS on the project's policy of operation during low lake levels, such as occurred during the drying cycle from 1941 to 1973 when Lake Elsinore regularly dried up.

**Response:** The co-applicants have specified that the minimum operating level for the LEAPS Project would be 1,240 feet msl. The project would not operate below this level. A comparison of operations under baseline and 2020 conditions is provided in section 3.3.2.2, *Environmental Consequences Water Quantity*.

**Comment 78:** Nevada Hydro comments that the description in section 3.3.2 on page 3.51 of the draft EIS that the co-applicants propose to operate the lower reservoir (Lake Elsinore) between 1,240 and 1,249 feet msl is incorrect. Nevada Hydro requests that the text be clarified to state that the operational range of the proposed project is 1,240 to 1,247 feet msl and that any operation of Lake Elsinore would be independent of the proposed projects and would be undertaken by the Elsinore Valley MWD, operating in conjunction with other agencies and acting separately from the hydropower project. Further, Nevada

Hydro states that as proposed, the facility operators would pay to Elsinore Valley MWD a lake management fee. Under the provisions of an operating agreement to the operator, the Elsinore Valley MWD would maintain Lake Elsinore at a minimum depth of 1,240 feet msl. Therefore Nevada Hydro states that the two energy projects would have no direct obligations or responsibilities with regard to the active management of Lake Elsinore.

**Response:** We have revised the text in the final EIS to read that the co-applicants propose to operate the project within the fluctuation range of 1,240 and 1,247 feet msl. We respectfully disagree that the co-applicants would have no responsibilities relative to the operation of Lake Elsinore. Under any license issued for the LEAPS Project, Lake Elsinore would be part of the complete unit of development in that it is required for the operation of the project and a revised operating plan for the pumped storage operation would be necessary.

**Comment 79:** The Center for Biological Diversity states that an increase in the maximum water levels to 1,249 feet msl could potentially have impacts on flooding within the city of Lake Elsinore and requests that the final EIS address this public safety issue.

**Response:** The co-applicants propose to operate the pumped storage consistent with the target minimum and maximum lake levels of 1,240 and 1,247 msl recommended in the Lake Elsinore Stabilization and Enhancement Project. As proposed, the pumped storage project operations would not increase the maximum target lake level. We have revised section 3.3.2.2 of the final EIS to reflect the co-applicants' intent. We recommend that the co-applicants develop a revised lake operating plan for Lake Elsinore. This plan would address how the Elsinore Valley MWD would operate Lake Elsinore to meet the objectives of the pumped storage operations within the target elevations established by the Lake Elsinore Stabilization and Enhancement Project and to make sure that the operation of the project would not have unintended consequences such as flooding. We further describe this plan in section 5 of the final EIS.

**Comment 80:** Riverside County states that the proposed reservoir/dam could potentially impound flood waters during the rainy season and design of the reservoir/dam should accommodate the flooding and normal operating volume.

**Response:** A FERC-licensed project must have a spillway designed in accordance with the Commission's Engineering Guidelines and the spillway must accommodate appropriate flood conditions. More detailed hydrologic design would be conducted for the effects of flood waters at the licensed upper reservoir site. Normal operations are accommodated by the co-applicants' proposed reservoir preliminary designs.

**Comment 81:** SDG&E indicates the proposed water level fluctuations at Lake Elsinore, as described on p. 3-54, are in conflict with the Fisheries Management Plan and recommends a water level management plan be developed to mitigate for effects on target sport fisheries.

**Response:** Actions proposed in the Fisheries Management Plan anticipate the stabilization of lake level fluctuations between 1,240 feet msl and 1,247 feet msl. The proposed project will operate within those lake levels. However daily flow fluctuations of 1 foot during the week and to 1.7 feet during the weekends would likely prevent many submergent plant species from establishing within the fluctuation zone and rooted shallow-water vegetation that provides spawning, rearing, foraging, and cover from predators would continue to be limited, particularly in the shallow, southern area of the lake.

**Comment 82:** EPA and the Center for Biological Diversity recommend that the final EIS include more detailed information regarding the potential effects of the Morrell Canyon reservoir on groundwater resources and discuss measures to mitigate any adverse effects to groundwater and to potential

construction problems. EPA also recommends that the final EIS analyze how the Morrell Canyon reservoir site alternative would affect upstream and downstream flows, flows from Lion Spring, and designated beneficial uses.

**Response:** We recognize that additional information on groundwater characterization may be developed, once a preferred site for the upper reservoir is selected. We recommend the Decker Canyon site over the Morrell Canyon site. On page 5-24 of the draft EIS we described a groundwater monitoring program that would address potential impacts on ground water at either upper reservoir site. We summarized information on hydrology from the license application and responses to additional information requests in the affected environment section of the draft EIS. In response to the draft EIS, the USFS filed revised preliminary 4(e) conditions including a new condition that specifies the development of a groundwater management plan. The USFS plan would include studies to determine baseline groundwater conditions prior to the commencement of construction.

**Comment 83:** The State Water Board states that additional groundwater studies should be conducted at the Decker Canyon site because only geologic assessments for groundwater have been conducted. Pacific Clay is critical of the analysis in the draft EIS regarding the effects of operation on groundwater and the effects of the failure of the proposed liner system on groundwater in the San Juan Basin, groundwater recharge, and potential make-up water. EPA recommends the final EIS include the leak detection monitoring and mitigation plan, including action levels and response measures that would be required for the types of leaks that could occur and demonstrate the long-term effectiveness of the reservoir liner and leak detection system.

**Response:** We respectfully disagree. Our cost estimate in the draft EIS does address site-specific geological and groundwater conditions. Implementation of the staff recommended upper reservoir and water conduit program to monitor groundwater and implementation of USFS revised preliminary condition no. 36 specifying a groundwater management plan would address the concerns about the long-term operation of the reservoir liner.

## **Water Quality**

**Comment 84:** The Corps indicates that the draft EIS does not include a quantification of waters of the United States that could be affected by the project and no mitigation to offset losses of waters of the United States. It recommends this information be included in the final EIS.

**Response:** We have added new information to section 3.3.4.2 about waters of the United States at the Morrell Canyon and Decker Canyon reservoir sites and their functions and values, based on reports filed by the co-applicants as attachments to their comments on the draft EIS. New figure 14 shows the jurisdictional waters relative to the proposed and alternative upper reservoir locations.

**Comment 85:** Riverside County states that the proposed intake/outtake structure at Lake Elsinore should be designed to ensure disturbance of sediments in the bottom of the lake are avoided to the satisfaction of the city of Lake Elsinore and the Santa Ana Regional Water Quality Control Board (Santa Ana Water Board).

**Response:** The co-applicants propose maximum velocities at the intake/outflow structure not exceed 1.5 feet per second. We recommend the co-applicants consult with the Santa Ana Water Board and local authorities prior to final design approval by the board of three qualified engineers. Additionally, agency and governmental approval could be included as part of the permitting of all dredging and work to be performed in waters of the U.S. (including the intake/outflow structures) which would be the responsibility of the Corps and also would include consultation with other agencies.

**Comment 86:** The Santa Ana Water Board requests that the final EIS include a discussion of the BMPs that would be used to adequately reduce effects to water quality from the construction of the intake/outflow structures.

**Response:** In the event of a license being issued, the co-applicants would need to develop an erosion control plan in consultation with the agencies for Commission approval; the erosion control plan would detail the specific BMPs to be implemented to reduce the potential effects of the construction of the intake/outflow structures on water quality.

**Comment 87:** The State Water Board states that the co-applicants should have conducted soil toxicity assessments on lakebed sediments and the results disclosed in the draft EIS. It also states that, contrary to what is stated on page 3-66 of the draft EIS, there is the potential for effects on water quality and beneficial uses from the release of nutrients and potentially other chemicals during the construction of the tailrace/intake structure. The State Water Board also states that the draft EIS is not clear on what effects the discharges from the outlet pipes will have on the lake's water quality standards.

**Response:** We considered the degree to which lakebed sediments might be disturbed during the installation of the cofferdam and the construction of the tailrace/intake structure and our analysis indicates that typically very little disturbance would result because excavation would occur in an area physically separated from Lake Elsinore by the cofferdam. We would not expect the release of toxins during this construction. However, fish samples have shown toxins below actionable levels and that is an indication that there could be toxins in the lakebed sediments. Therefore, we recommend, that the lakebed sediments be tested for toxicity prior to the disposals or reuse of the lakebed sediments. We have provided a more detailed description of the proposed construction activity and the potential effects from the construction of the intake/outflow structure in the final EIS. As far as operational effects from flows in the intake/outflow structure with respect to water quality standards we discussed the effects of operations on pages 3-68 and 3-69 of the draft EIS.

**Comment 88:** The Santa Ana Water Board indicates that the draft EIS states that the co-applicants require target minimum water surface elevation of 1,240 feet msl to operate the pump storage project. The Santa Ana Water Board comments that it was stated that operating the project at lower lake levels would degrade water quality unacceptably. The Santa Ana Water Board requests that a firm commitment of what lake levels the project would operate at to adequately protect the lake water quality.

**Response:** The co-applicants propose to operate the pumped storage project consistent with the Lake Elsinore Stabilization and Enhancement Project between elevations 1,240 and 1,247 feet msl. Further, the co-applicants propose and we recommend payment of an annual management fee to the Elsinore Valley MWD to maintain the minimum target elevation at 1,240 feet msl. If the project is licensed with either the proposed action or the staff alternative, the licensees would be required to maintain lake levels at or above 1,240 feet msl.

**Comment 89:** The Friends of the Forest and the Center for Biological Diversity criticize the level of analysis and the conclusions drawn in the draft EIS concerning the potential effects of project operations on the re-suspension of sediments in Lake Elsinore. They also question whether the project proponents can demonstrate whether the project can operate without exceeding existing Total Maximum Daily Load (TMDL) limitations.

**Response:** The Lake Level Stabilization and Enhancement Project was developed in response to the listing of Lake Elsinore as impaired which triggered development of a TMDL. It is our understanding that the LEAPS Project is related to the Lake Elsinore Stabilization and Enhancement Project, which has

received local governmental and agency support, including the city of Lake Elsinore and the Riverside County. Other environmental documents show that current programs developed to improve water quality (lake level stabilization, axial-flow pumps, and line diffusers) would be beneficial to water quality. Considering the role the proposed project could play in the overall lake water quality, we concluded in the final EIS that the proposed project operations would provide incremental benefits to the same water quality parameters the other programs target through improved mixing of the water column. Furthermore, the thousands of bottom feeding carp in Lake Elsinore are responsible for stirring up sediments throughout the entire lake bottom, not just localized areas as proposed under both the Lake Level Stabilization and Enhancement Project and the LEAPS Project. To clarify the relationships between the proposed action, approved programs, and the existing biotic community, we have augmented the discussion on the potential effects of project operations on the re-suspension of sediments in section 3.3.2.2 of the final EIS (beginning on page 3-67 of the draft EIS).

**Comment 90:** Mr. Pinnow comments that Elsinore Valley MWD supports the costly program of carp removal because these bottom-feeding fish stir up sediments and yet the potential effects of project operations on the disturbance of sediments could be far more serious than the effects of carp. He points out that computer modeling could be used to study this potential and ensure that the worse-case scenario involving massive fish kills does not occur. He further suggests that the co-applicants be required to post a bond or procure insurance that would compensate home and business owners in an around Lake Elsinore for loss of property values as a result of any decline in the water quality of Lake Elsinore caused by the LEAPS Project.

**Response:** Carp are considered a nuisance species to the lake with almost 500,000 pounds removed as recently as 2003. We conclude that the proposed project would supply oxygenated water to the sediment-water interface improving nutrient conditions at the bottom of the lake. Further, the intake-outlet structure would be located in a fixed location near the western shoreline and flows into Lake Elsinore would occur within the same linear area on a daily basis whereas carp graze and stir up sediments across the entire lakebed. Additionally, the axial flow program implemented under the Lake Elsinore Stabilization and Enhancement Project is designed to destabilize the water column by applying downward currents toward the lakebed, which would also disturb sediments. Environmental review of this program considered the objectives to be beneficial to water quality. The kinetic energy of the water flowing into and out of the intake structure would further assist in mixing the water column. We discuss the effects of operations on page 3-67 of the draft EIS.

Regarding the co-applicants' requirement to secure insurance for property surrounding Lake Elsinore, it is our understanding that the LEAPS Project is contingent upon the lake levels that are planned to be met under the Lake Elsinore Stabilization and Enhancement Project, which has received local governmental and agency support, including the support of the city of Lake Elsinore and the Riverside County. As discussed in our response to Comment 89, we concluded in the final EIS that the proposed project operations would provide incremental benefits to the same water quality parameters as the other programs.

**Comment 91:** The Santa Ana Water Board states that recent studies on Lake Elsinore show that under the proposed project operation the southern portions of the lake would experience greater daily shoreline migration than the rest of the lake with an estimated 40 foot average daily shoreline migration when the project operates. The shallow embayments in the southern part of the lake would experience the greatest daily oscillation in exposed sediments, up to hundreds of feet. Because the draft EIS did not address the effects of wave action on the exposed shoreline in the southern part of the lake, CRWQCB recommends further discussion of the effects of increased turbidity from the raising and lowering of the shoreline be included in the final EIS.

**Response:** Based on Anderson (2006), it is our understanding that the shoreline migration would range from 8 feet to over 100 feet depending on location and shoreline configuration; however, because the amount of shoreline subject to the large shoreline exposures (of up to 100 feet) represents a small percentage of the shoreline length (less than 10 percent) that is predominately located along the southern shore within an embayment with west facing exposure, any increases in turbidity or suspension of fine grained sediments would largely be confined to these protected areas and only marginally effect the turbidity within the main water body of Lake Elsinore. At the same time stable lake levels may be beneficial to these areas by promoting macrophytes or riparian vegetation growth which may promote an evolution of the shoreline substrate in these areas from barren, sandy soils susceptible to wave actions suspending sediments to an aquatic vegetation induced stable substrate that traps suspended materials and prevents future sediment suspension improving water quality. We have modified the text in the final EIS to include this discussion.

**Comment 92:** The Santa Ana Water Board states that the draft EIS has not taken into account the effect that cycling the water would have on its temperature in the discussion on page 3-68 of the draft EIS regarding the project benefiting the annual mean water quality of Lake Elsinore. The friction exerted on the cycled water as it is pumped to the upper reservoir, cycled down and through turbines may increase the water temperature. The Santa Ana Water Board and EPA recommend a 3-D hydrodynamic model for the lake be developed to predict turbulent energy inputs, mixing, and circulation and their effects on the lake. The Santa Ana Water Board requests that in the final EIS an appropriate model is used to recalculate the effects on the temperature and DO levels of the cycled water.

**Response:** The cycling of water through 1.5 miles of conduit is likely to have a negligible effect on raising the temperature of the water as the conduits would be underground where annual temperatures are consistently cooler (about 60 degrees F) than the summer lake temperatures (time when the demand for the project would be greatest) thereby negating any increase resulting from friction. Concerning the overall effect of cycling water between reservoirs and the potential effects on Lake Elsinore's thermal regime, we have augmented our discussion on the effects of cycling on temperatures in the lake in section 3.3.2.2 of the final EIS. Further, we find that given the uncertainties associated with the success of other water quality related programs such as the Lake Elsinore Stabilization and Enhancement Project and the axial flow pumps designed to disturb the thermal gradient that develops throughout the lake in the summer, the implementation of a 3-D hydrodynamic model prior to making a licensing decision would not make sense.

**Comment 93:** The city of Lake Elsinore states that Lake Elsinore and San Jacinto Watersheds Authority (Joint Watershed Authority) has invested considerable funds to develop, build, install, and operate a reliable aeration system for the lake to improve water quality and that any alteration to the design or operation of the existing system to accommodate the project should require mitigation through the development of an equally reliable, dedicated, and applicant-funded aeration system.

**Response:** We do not expect any negative effects from the LEAPS Project operation on the aeration system implemented as part of the Joint Watershed Authority's Lake Elsinore Stabilization and Enhancement Project. We also note that Dr. Alex Horne (Elsinore Valley MWD and Nevada Hydro, 2005) has suggested that design features could be incorporated into the final LEAPS Project that could be beneficial to the efforts of the Joint Watershed Authority programs. Our recommended revised lake management plan is the proper place to recognize the relationships between the proposed project and other lake management programs.

**Comment 94:** Riverside County states that the addition of imported water to Lake Elsinore should not introduce Total Phosphorus or Total Nitrogen in excess of the respective TMDL Load Allocations assigned to Supplemental Water discharges to Lake Elsinore. Total Phosphorus offsets for supplemental

water discharges should not be allowed unless the required 35 percent in-lake Total Phosphorous load reductions have been achieved by in-lake nutrient treatment and removal projects.

**Response:** Make-up water to maintain Lake Elsinore at elevation of 1,240 feet msl would be acquired by Elsinore Valley MWD, using funds from the co-applicants designated for this specific purpose. Because the water would be delivered by Elsinore Valley MWD, the quality of the water would be subject to its allocated or supplemental load allocations under the TMDL. As such, we expect make-up water as part of the proposed project would meet the TMDL requirements.

**Comment 95:** The Santa Ana Water Board comments that is unclear from the discussion on page 3-67 of the draft EIS what effect the intake/outlet discharges would have on Lake Elsinore water quality, and therefore recommends that appropriate modeling be used to assess the effects of the project on internal nutrient loading in the lake and results be presented in the final EIS. The State Water Board also states that it is unclear what affect the discharges from the intake/ outlet structure into Lake Elsinore would have on the lake's water quality standards because the reversal of flows during project operation could re-suspend bottom sediments.

**Response:** We have modified the text in section 3.3.2.2 of the final EIS to clarify the expected effects of discharges from the intake/outlet structure during project operations on suspended sediments and nutrients within Lake Elsinore. As noted in our response to comment 92, given the uncertainties associated with the success of other water quality related programs such as the Lake Elsinore Stabilization and Enhancement Project and the axial flow pumps designed to disturb the thermal gradient that develops throughout the lake in the summer, the implementation of a 3-D hydrodynamic model prior to making a licensing decision would not make sense.

**Comment 96:** Mr. Pinnow comments that water quality analysis in the draft EIS contains some obvious mistakes such as the statement on page 3-67 that "a greater surface area to volume in the upper reservoir" used in support of the co-applicants' view that the operation of the pumped storage project could improve DO in Lake Elsinore. He points out that the average depth of the upper reservoir would be much greater than the average depth of Lake Elsinore (180 versus 15 feet) so that the surface area to volume ratio in the upper reservoir would be less than the surface area to volume ratio in Lake Elsinore.

**Response:** We have corrected the text in the final EIS based on Mr. Pinnow's comment. At 1,240 feet msl, Lake Elsinore has a surface area of 3,074 acres and a volume of 38,519 acre-feet (surface area to volume ratio of 0.08). Decker Canyon reservoir would have a surface area of about 76 acres which corresponds to a volume of 5,500 acre-feet, resulting in a ratio of 0.01, smaller than Lake Elsinore. However, we still conclude that over time, project operations should provide a measurable benefit to the annual mean water quality by using temperature and oxygen concentration differences between the two water bodies to promote mixing of the water column and control internal nutrient loading within Lake Elsinore. Our view that project operations could increase oxygen concentrations within Lake Elsinore is also supported by Dr. Alex Horne in his memo to David Kates filed in response to AIR-WQ-6 (Elsinore Valley MWD and Nevada Hydro, 2005) and by Dr. Micheal Anderson (Anderson, 2006) in his technical analysis of the potential water quality effects of the LEAPS Project on Lake Elsinore submitted to the Santa Ana Water Board, January 31, 2006, and filed by Nevada Hydro as appendix D of its comments on the draft EIS.

**Comment 97:** The Center for Biological Diversity questions the conclusion in the draft EIS that lake level stabilization would result in benefits to water quality greater than the effects associated with sediment disturbances from the project. It points out the Santa Ana Water Board studies referenced in draft EIS conclude that both control of nutrients and lake level stabilization are necessary to improve

water quality in Lake Elsinore and do not specify that water levels are more important than sediment disturbance.

**Response:** Based on comments on the draft EIS we have modified the text in the final EIS to clarify the point raised by the Center for Biological Diversity; however, we would also like to note that Lake Elsinore is a terminal lake that has at times completely dried up. The fluctuation in shoreline widths during the historic drying and filling phases of the lake has resulted in sediment disturbances at all reservoir elevations. The cycling of water into and out of Lake Elsinore, and the resulting changes in exposed shoreline would not be substantially different than historical conditions save for the timing between the rising and falling surface elevations. Once water sources and levels are secured, secondary programs and projects have been proposed and implemented to improve the quality of water in the lake. The LEAPS Project is one such project dependent on water levels which could contain design features that could assist the already approved Lake Stabilization and Enhancement Project. The TMDL is the appropriate tool to control nutrient loading into Lake Elsinore and the lake level stabilization has been determined by local agencies as a promising method to improve water quality. We discuss the effects of project operations on water quality in section 3.3.3.2.

**Comment 98:** The Santa Ana Water Board states that the comments in the draft EIS regarding the positive effects of the project on phytoplankton are speculative and request that the final EIS include more comprehensive documentation of the effects, including specific references supporting the claims. The Santa Ana Water Board also indicates that the draft EIS does not include a discussion of the project's effects on zooplankton in Lake Elsinore, which are important in the reduction of phytoplankton. Dr. Michael Anderson, referenced by the Santa Ana Water Board, states the operation of the project could result in significant zooplankton mortality. As such, the Santa Ana Water Board recommends that the final EIS evaluate the project's effect on zooplankton.

**Response:** Based on comments on the draft EIS we have modified the final EIS and discuss the anticipated effects of the proposed project on phytoplankton and zooplankton. We conclude that the natural mixing processes resulting from the project operations combined with the increased efficiency of the axial flow pumps, installation of the diffused aeration system and the proposed project should all help to achieve oxic conditions in the subsurface that would help to control algae blooms. Project operations could negatively affect zooplankton populations through entrainment. However, this extent of potential effect would depend on the depth of the intake.

**Comment 99:** The Santa Ana Water Board and EPA indicate that the effects of operating a pump storage system on a terminal lake are unknown. The Santa Ana Water Board requests a thorough discussion on the possible effects of a pump storage system on a terminal lake, such as Lake Elsinore, be included in the final EIS that takes into consideration the unique nature of this lake.

**Response:** We conclude that the effects of operating a pumped storage project on a terminal lake like Lake Elsinore would not be substantially different from operating a pumped storage project on a non-terminal lake. The effects of pumping water into and out of Lake Elsinore on a daily basis within the Joint Water Authority's specified target range would be less dramatic over the long term than maintaining lake levels between 1,240 feet msl and 1,247 feet msl on a terminal lake that has dried up completely in the past.

**Comment 100:** The Santa Ana Water Board requests the following studies be done to better quantify project effects on water quality standards of Lake Elsinore and reduce uncertainty concerning predicted effects: (1) evaluation of the water temperature gain and/or loss that would occur as the project transfers water between the lake and the upper reservoir and back and the effects of the temperature change on water quality; (2) develop and apply a 3-D hydrodynamic model for the lake; and (3) develop an

ecological model that can be used to better understand the trophic cascades that may result from the project. EPA requested the previous two models listed be applied, as well.

**Response:** We conclude that the information in the record of this proceeding is currently sufficient to assess the potential effects and to recommend proposed measures to address the potential effects. Further, as explained in our response to comment 92, we find that given the uncertainties associated with the success of other water quality related programs such as the Lake Elsinore Stabilization and Enhancement Project and the axial flow pumps designed to disturb the thermal gradient that develops throughout the lake in the summer, the implementation of a 3-D hydrodynamic model prior to making a licensing decision would not make sense.

**Comment 101:** EPA and the Corps recommend the final EIS include a functional assessment of direct, indirect, and cumulative effects to waters at both upper reservoir sites from watershed changes.

**Response:** In the final EIS, we have provided such an assessment on the Decker Canyon site as we did for the Morrell Canyon site in the draft EIS.

**Comment 102:** The County of Orange questions where water collected by the proposed seepage collection systems would be discharged and how water from dam seepage would affect the water quality and habitat of the upper San Juan Creek watershed. It also asks under what circumstances water would be released to the San Juan Watershed in the event of dam failure, how much water would be released to the San Juan Watershed, and how would the release affect water quality. The Center for Biological Diversity also raises this concern. Further, the State Water Board questions where emergency releases from the upper reservoir would be discharged to and what would be the effect of releasing Lake Elsinore water into Morrell or Decker Canyons.

**Response:** The purpose of the seepage collection system is to collect natural seepage from the San Juan Creek within the footprint of the proposed upper reservoir and convey that water beyond the dam to keep it in the watershed. The co-applicants propose a liner system to prevent Lake Elsinore water from leaking into the San Juan Creek watershed. We discussed potential dam failures at the upper reservoir sites on page 3-32 of the draft EIS. We noted that dam failure analyses submitted in the license application were preliminary and that if licensed, a more detailed inflow design flood and dam break analysis would be developed in the final supporting design report prior to construction. The dam break analysis is described in detail on page E.6-43 through E.6-50 of the license application. Failure of any dams or dikes associated with the upper reservoirs would temporarily affect water quality and introduce considerable sediment into the San Juan Creek. However, the probability of dam failure is remote. Emergency overflows associated with the spillway would also discharge into the San Juan Creek watershed and temporarily introduce Lake Elsinore water into the watershed.

**Comment 103:** The Center for Biological Diversity states that the final EIS must include a more specific comprehensive monitoring plan, particularly with regard to water quality impacts to the San Juan Creek.

**Response:** The liner system proposed for the upper reservoir would prevent any water from seeping out of the upper reservoir to mix with waters in San Juan Creek under normal operating conditions; however, the EIS does recognize there is some risk of inter-basin transfer regardless of the preventive measures. Failure of any dams or dikes associated with the upper reservoirs would be considered outside normal operations and would temporarily affect water quality and introduce considerable sediment into the San Juan Creek. The co-applicants propose and we recommend the development and implementation of an upper reservoir water conduit monitoring program to assess the effects of the upper reservoir liner and seepage collection systems, shafts, and tunnel on groundwater levels and water quality.

**Comment 104:** Interior points out that the analysis in section 3.3.2.2 of the potential effects of operations of the proposed project on algae blooms in Lake Elsinore does not take into account the potential effect of algal decomposition on DO levels if the intake structure were designed to draw in water near the surface.

**Response:** We have augmented the discussion on the potential effects of the proposed operations on algae and the resulting increases on oxygen demand after algae die-off. We conclude that it would be unlikely that the water level and suction of the intake would be sufficient to draw significant amounts of algae into the intakes where pressure gradient could eliminate their ability to float causing them to die and sink to the bottom of the lake as suggested by the co-applicants.

**Comment 105:** The Santa Ana Water Board states that the draft EIS contains very little discussion of the effects on water quality and beneficial uses from the construction and operation of the high voltage power line that is part of the project. It requests that in the final EIS BMPs, non-point source pollution management measures, and other techniques to be employed to reduce effects on water quality standards from power line construction and operation be discussed.

**Response:** The effects of the construction of the transmission lines are detailed in section 3.3.1.2, *Environmental Consequences*, in *Geology and Soils* and succinctly stated with respect to water quality in section 3.3.2.2, *Environmental Consequences*, in *Water quality*. The co-applicants proposed and our recommended soil erosion control plan would use BMPs to control the effects of construction on water quality in the project vicinity. We recommend implementation of the soil erosion control plan and hazardous substances spill prevention and control plan over the term of any license issued for project.

**Comment 106:** EPA and the Corps recommend the final EIS include a description of the functions and values of the streams that could be affected by the construction of crossings for the transmission line access road, a discussion of the significance of the aquatic resources at risk from construction and operation of the transmission line, and an evaluation of less damaging alternatives to culverted crossings.

**Response:** We identify the drainages that would be crossed by the proposed and staff alternative transmission alignments. The co-applicants indicate that they would place transmission towers to avoid sensitive areas and riparian areas. Further, our recommended measures to conduct site-specific pre-construction surveys for special plants and wildlife in sensitive areas and implement a vegetation control plan along with the co-applicants proposed soil erosion control plan would avoid effects on aquatic resources during the construction and operation of the transmission line. As tower placement and temporary access roads would have the potential to affect streams, culverted crossings, and sensitive areas, we recommend in the final EIS that the co-applicants prepare and implement a transmission tower placement plan in consultation with the USFS, CDFG and FWS.

**Comment 107:** Pacific Clay states that the cumulative effects analysis in the draft EIS for water resources is inadequate and only references the Santa Ana Integrated Watershed Plan and lists Congressional appropriations without going beyond general statements or perfunctory analysis.

**Response:** The cumulative effects analysis not only covers the Santa Ana Integrated Watershed Plan but also mentions the pending TMDL developed for Lake Elsinore and Canyon reservoir as well as the Joint Watershed Authority's Lake Level Stabilization and Enhancement Project. The cumulative effects analysis raises the most pertinent programs that could have additional effect on the water quality of Lake Elsinore and discloses the cumulative effect relative to the proposed project.

## AQUATIC RESOURCES

**Comment 108:** Pacific Clay is critical of the analysis in the draft EIS regarding the effects of construction on fish habitats and populations. It states that transmission tower locations could affect fish populations through stream crossings and ground disturbing activities washing sediment into streams; however, these locations are not yet sited, measures are not specified in the draft EIS to prevent these effects, and effects to major drainages are not discussed. It also notes that the draft EIS does not suggest alternate approaches from rotenone poisoning in Lake Elsinore or discuss the consequences of this poisoning. Further, Pacific Clay questions the speculative conclusions about the effects of the intake/outlet in Lake Elsinore absent specific information on the location, depth, and distance from the shore.

**Response:** Measures to avoid potential effects to fish populations from ground disturbing activities from transmission tower placement are addressed on page 3-81 of the draft EIS. The co-applicants indicate that they would avoid placing towers in sensitive areas and riparian areas. Although exact tower locations have not yet been sited, implementation of established BMPs are commonly applied during construction activities and are typically effective at protecting stream resources if implemented properly. As noted in our response to Comment 106, tower placement and temporary access roads would have the potential to affect streams and sensitive areas and therefore we recommend in the final EIS that the co-applicants prepare and implement a transmission tower placement plan in consultation with the USFS, CDFG and FWS.

As discussed on page 3-84 of the draft EIS, rotenone poisoning would remove desirable game fish as well as undesirable carp from Lake Elsinore, and this measure is not supported by the Joint Watershed Authority Fisheries Management Plan. Current presence of carp in Lake Elsinore is not the result of the co-applicants' proposal, and therefore we do not recommend the co-applicants be responsible for the extirpation of carp from the lake by rotenone poisoning or any other means.

While we agree with Pacific Clay that the location, depth and distance from shore of the intakes are only conceptual, we respectfully disagree that the analysis for entrainment potential is inadequate for the EIS. In the draft EIS, we examined the likelihood for entrainment if the intakes were located near the shore or far out into the lake, and concluded that the likelihood of fish entrainment in the intakes was low. We also reviewed performance of several physical and behavioral barriers used at other projects or that are under development, and we conclude that implementation of such facilities is very expensive relative to the potential benefit to the fishery. Therefore, our staff recommendation is that the co-applicants monitor the intakes for entrainment losses during the first year and once every 5 years thereafter over the term of any new license. Based on the monitoring results, we recommend the co-applicants develop and implement, with Commission approval, measures to mitigate for any losses. Mitigation activities may include implementing measures such as those identified in the Fisheries Management Plan, including annually stocking desirable game fish that would lead to the establishment of a productive sport fish fishery in Lake Elsinore.

**Comment 109:** Linda and Martin Ridenour take issue with the statement in section 3.3.3.2 of the draft EIS that the Santa Rosa powerhouse would not be near a stream. They state that a USFS map shows a blue line (stream) in the vicinity of the proposed powerhouse.

**Response:** We have modified the final EIS to state that small streams are located on the Santa Rosa powerhouse site. The co-applicants proposed and our recommended soil erosion control plan would include measures to avoid impacts to the water quality in these streams.

**Comment 110:** CDFG states that the final EIS should address project effects on the arroyo chub (*Gila orcutti*), a species of special concern and the tidewater goby (*Eucyclogobius newberryi*), a federally threatened species and state species of concern from the reservoir's effects on water quality and the introduction of non-native species to the watershed. The State Water Board also is concerned about the potential introduction of exotic species (bass and sunfish) in Lake Elsinore being a threat to the upper reservoir's watershed if a spill or overflow releases adults or larvae of these species.

**Response:** A discussion of project effects on arroyo chub has been included in section 3.3.3.2 of the final EIS. Tidewater goby are not known to occur in the project area or watershed, the only reference to the presence of tidewater goby in the San Juan drainage is from an observation noted in 1939. Habitat for tidewater goby consists of brackish shallow tidal lagoons and lower stream reaches where the water is fairly still but not stagnant. Currently San Juan Creek does not provide habitat suitable for the tidewater goby (FR 65:69693), and San Juan Creek does not contain designated critical habitat for this species. Therefore we did not include a discussion of tidewater goby in the EIS.

See also response to Comment 102. The likelihood for a spill or overflow event is remote, and would be the result of a catastrophic event. Therefore the likelihood for adult fish to be introduced into the upper reaches is remote, and larvae of warmwater fish would not likely survive such an event. As stated on pg. 3-80 of the draft EIS, non-native species including bass and sunfish are already present in lower reaches of San Juan Creek. Surface water quality monitoring below the upper reservoir was proposed by the co-applicants and recommended by the USFS and staff and clarified requirements for a monitoring and remediation plan should fish from Lake Elsinore be introduced into San Juan Creek.

**Comment 111:** The city of Lake Elsinore recommends that an Aquatic Vegetative Management Plan for Lake Elsinore be developed and implemented to mitigate for the possible negative effects of lake-stabilization and sediment resuspension.

**Response:** The Final Fisheries Management Plan for Lake Elsinore developed for the Joint Watershed Authority contains measures to address establishment of stands of aquatic vegetation. However, such activities will not be successful until the number of carp, which feed on aquatic plants, in the lake is reduced. Also see our response to comment 112.

**Comment 112:** The city of Lake Elsinore states that the project may have a substantial negative environmental effect on achieving the goals of the Fisheries Management Plan and the state beneficial use designation. As such it recommends the following mitigation measures be implemented: (1) fund an intensive 2-year carp removal program by the city in the amount of \$500,000 in lieu of the proposed "rotenone poisoning"; (2) fund improvements to sport fish spawning habitat in the large cove off the T-peninsula of the levee system based on the plans and specifications prepared by Wildlands Inc. for the Joint Watershed Authority in the amount of \$500,000; (3) develop and fund improvements to approximately 60 acres of adjacent fry and fingerling nursery habitat in the southeast bay area in the amount of \$1,500,000; (4) develop and conduct fish population surveys every 3 years on Lake Elsinore to assess the fishery and attainment of the goals of the Fisheries Management Plan, with sport fish stocking based on the results of the surveys and consultation with CDFG at a cost no less than \$50,000 annually; and (5) immediately clean up any fish kills that occur during project construction, count the loss of sport fish, and replace the lost sport fish before the project is operational.

**Response:** We respectfully disagree that the operation of the proposed project would have substantial negative effects on achieving the goals of the Fish Management Plan and the state beneficial use designation. Management of fisheries resources in Lake Elsinore is the responsibility of the Joint Watershed Authority that developed the Fisheries Management Plan for Lake Elsinore to address agency priorities for manipulating the current composition of fish species as well as implementation of habitat

enhancement measures to restructure and improve the sport fishery in the lake. There are many elements of the Fisheries Management Plan, which is designed to be adaptive in order to respond to changes in the fishery over time that may occur as a direct result of actions described in the plan, or as an indirect result of other activities that affect fish resources in the lake.

The current state of the Lake Elsinore fishery, lack of aquatic vegetation, and presence of undesirable populations of carp in Lake Elsinore is unrelated to the proposed project construction and operations. Carp removal is a key element of the Fisheries Management Plan to restructure the fishery in the lake, and the measure is already being implemented through annual netting operations. Rotenone poisoning is not recommended as it would also remove desirable game fish from the lake. The habitat enhancement measures recommended by the city of Lake Elsinore do not appear to address potential project affects on the fishery, but are enhancement activities that are already planned. Our recommendation is that the co-applicants monitor for entrainment in year 1 and every 5 years thereafter over the term of any license issued for the project. Any contributions to the implementation of the Fisheries Management Plan, would depend on the results of the entrainment monitoring and would be tied to project-related fish mortality and impingement. The monitoring plan would be developed in consultation with the CDFG, FWS, the State Water Board and the Joint Watershed Authority.

**Comment 113:** Linda and Martin Ridenour request information about the fish stocking program including the frequency of fish stocking, the types of fish to be stocked, and the cost to Elsinore Valley MWD to do the stocking.

**Response:** The co-applicants propose and we recommend consultation with CDFG and FWS to support a sports fish stocking program in Lake Elsinore consistent with the Fisheries Management Plan for recreational angling. The details of this support would be determined in the event that the Commission issues a license for the project.

**Comment 114:** The Santa Ana Water Board indicates that the project may potentially affect the lake's fish population, especially larval fish or ichthyoplankton through entrainment and impingement. It states that although the draft EIS briefly discusses methods to reduce mortality to fish from project operations, the final EIS should provide more discussion on methods to be used to reduce fish and ichthyoplankton effects.

**Response:** Section 3.3.3.2 (pages 3-88 and 3-89) of the draft EIS discusses the known technologies currently available to prevent fish entrainment as well as anticipated effects of project operations on fish of various life-stages. In a report filed by the co-applicants, Anderson (2006) estimated potential entrainment losses of ichthyoplankton, zooplankton, and phytoplankton from operation of the project to be 40 to 100 percent, 7 to 24.8 percent, and 1.1 to 4 percent, respectively, based on specific operating scenarios and generalized modeling assumptions. Anderson (2006) also speculated on the effectiveness of a filter-fabric-curtain to prevent entrainment mortality. The co-applicants suggested but did not propose an aquatic filter barrier system might be employed to prevent entrainment of fish, fish eggs and larvae, however such systems were designed for much smaller flow rates and have not been tested for flows as high as 1967 cfs for each intake, as is proposed for Lake Elsinore and we do not recommend such a system in Lake Elsinore.

**Comment 115:** The State Water Board states that the proposed 1-year entrainment monitoring program may not be long enough to evaluate the potential effects on the Lake Elsinore fishery.

**Response:** We agree with the State Water Board and have revised our staff recommendation to include monitoring for entrainment losses once every 5 years over the term of any license issued because of the

structure and composition of the fisheries is expected to change as a result of implementation of the Fisheries Management Plan.

**Comment 116:** The Friends of the Forest comments that the draft EIS does not provide much information about the littoral zone of Lake Elsinore. It points out that this is the area of the lake that would be most affected by the proposed project operation and state that biological studies must be completed. The State Water Board and the Center for Biological Diversity also states that the final EIS needs to address the consequences of lake fluctuation and the exposure of near-shore littoral habitats on game fish spawning habitat and other wildlife habitat.

**Response:** We have added text to section 3.3.4.2 to provide further information regarding the effects of lake fluctuations on wildlife habitat in the fluctuation zone. Current seasonal and annual lake level fluctuations in Lake Elsinore contribute to the lack of vegetation on the shore and the lack of submerged aquatic vegetation. The Joint Watershed Authority concluded that the lack of floating or submerged aquatic plants results from several factors in addition to the lake level fluctuations, including limited availability of shoreline sediments for rooting, shading by dense algal populations; turbidity caused by several mechanisms, and constant foraging by carp (Joint Watershed Authority, 2005). Limiting lake level fluctuations to 1 foot on a daily basis, and 1.7 feet on a weekly basis as proposed by the co-applicants would provide a more stable regime of constant inundation and may contribute to the establishment of rooted shallow-water vegetation that provides spawning, rearing, foraging, and cover from predators. Anderson (2006) estimated the fluctuations in shoreline exposure would not result in increased turbidity, since natural wave action would likely prevent fine material from accumulating near the active shoreline.

**Comment 117:** Pacific Clay states that the cumulative effects analysis in the draft EIS for fisheries is inadequate and only provides a project-specific discussion of the effects of project operations on the city of Lake Elsinore's fishery programs. It states that this is a violation of NEPA because it fails to provide a listing of related actions and never addresses project effects in combination with those of other past, present, and reasonably foreseeable future actions within the San Juan River Basin.

**Response:** We have expanded the cumulative effects section in regards to fisheries to include reconfiguration of the Back Basin Wetlands as part of the Lake Elsinore Stabilization and Enhancement Project and the proposed Special Area Management Plan for the San Juan Creek and Western San Mateo watersheds.

## TERRESTRIAL RESOURCES

**Comment 118:** The Orange County Chapter of the California Native Plant Society states that the EIS should include a large-scale map or overlay that clarifies what percentage of the total southern coast live oak forest and other vegetation types would be removed at the sites. Furthermore, CDFG states that it is not possible to determine the existence of significant adverse effects because the draft EIS did not contain a detailed description or map of existing biological resources and habitat value within the project area, specifically the Lion's Springs and Morrell canyon sites. EPA recommends the final EIS include detailed maps of both the Decker and Morrell canyon reservoir sites showing plant communities, water and wetland boundaries, riparian areas, and acreages for each. Linda and Martin Ridenour also comment that information about vegetation that would be disturbed is insufficient.

**Response:** As an attachment to their April, 24, 2006, filing, the co-applicants submitted a report discussing a delineation of wetlands and waters at the Morrell and Decker Canyon sites that was conducted by Michael Brandman Associated (MBA) in January, 2006. We have overlaid the reservoir footprint for each alternative on an aerial photo that was included in the delineation report, to provide

additional detail about waters of the U.S. and waters of the state that occur on each site, as shown in figure 14 of the final EIS. Survey results are summarized in section 3.3.4.2. We conclude that the level of detail provided in the final EIS is sufficient to serve as the basis for comparing the biological effects of the staff alternative with those that would occur under the co-applicants' proposal. Based on this comparison, we conclude that the staff alternative would be the least environmentally damaging action alternative. Additional information, including all the technical studies filed by the co-applicants, with attached aerial photos, site drawings, topographic maps, cover type maps, jurisdictional wetland delineations, functions and values assessments, field notes, and other exhibits, are available to the public on the Commission's eLibrary or by request from the co-applicants.

**Comment 119:** SDG&E requests a clarification concerning the type of vegetation cover (disturbed or chaparral) at the southern substation site given that the information in table 15 conflicts with the table note.

**Response:** We have added headers to table 15 to clarify that the proposed southern substation is currently disturbed, and that the alternative southern substation is characterized by chaparral.

**Comment 120:** CDFG notes that an accurate statement of the potential for impacts on sensitive species cannot be made because the final alignments of the transmission line and access roads have not been established. CDFG comments that the Department would require biological surveys for all sensitive and endangered species in the development footprint, according to the policies of the Multi-Species Habitat Conservation Plan (Multi-Species HCP). CDFG also notes that the California black walnut is considered locally and regionally sensitive, is covered by the Multi-Species HCP, and would be affected by the project.

**Response:** As discussed in sections 2.4.3.2, 5.2.6 and 5.2.7, we recommend pre-construction surveys for special status species in any areas that have not yet been covered. We have added the California black walnut to table 13, and modified tables 13 and 14 to indicate species for which focused surveys would be needed, according to the Multi-Species HCP.

**Comment 121:** Nevada Hydro states that no factual basis exists to impose a compensation requirement for those plant communities not recognized by the California Natural Diversity Database as high priority habitats. Nevada Hydro states that coastal sage scrub has not been identified as communities known or believed to be of high priority. However, although not required, the co-applicants would replace coastal sage scrub at a 1:1 ratio and requests that the proposed measure as described on page 2-14 of the draft EIS be corrected to reflect the 1:1 replacement ratio for coastal sage scrub. Nevada Hydro states that the appropriate replacement ratio for southern coast live oak riparian forest, southern sycamore-alder riparian forest, and southern willow scrub, should these habitats types be present with the area of physical disturbance, is 2:1.

**Response:** We have corrected the text on page 2-14 to reflect the co-applicants' proposal to replace coastal sage scrub at a 1:1 ratio and we have included this lower ratio in the staff alternative in the final EIS. The staff alternative also includes compensation for the loss of chaparral and non-native grasslands, at a 1:1 mitigation ratio because many special status species use non-native grasslands, including white-tailed kite, burrowing owl, loggerhead shrike, southern California rufous-crowned sparrow, northwestern San Diego pocket mouse and Stephens' kangaroo rat. Chaparral habitat for these species would be reduced as a result of project construction, unless the co-applicants provide compensation.

**Comment 122:** The Center for Biological Diversity comments that coastal sage scrub is also a rare plant community according to California Natural Diversity Data Base (CNDDDB) and should be addressed in the final EIS (on page 3-92). It also comments that the draft EIS did not adequately describe the biological

resources of the project area and state that sticky Dudley, Parry's tetraococcus, and Robinson's pepper-grass are additional List 1B species that occur in the San Juan Creek area and should be included in the final EIS.

**Response:** The Center for Biological Diversity references CNDDDB (2005) as the basis for stating that coastal sage scrub is a rare plant community. However, we could not find this reference in the *Literature Cited* section of the Center for Biological Diversity letter. In preparing the draft EIS, we used the *List of Terrestrial Vegetation Natural Communities Recognized by the California Natural Diversity Database, September 2003 Edition*, as posted on the CNDDDB web site. The 2003 edition is still posted on the web site, as of August 17, 2006, and we assume this is the most current version. This version does not indicate that CNDDDB considers coastal sage scrub to be a rare plant community. Regardless of the "official" status of the community, however, the draft EIS does address its special importance, and we recommend that the co-applicants mitigate for project effects (please see response to Comment 124). We did not conduct an in-depth analysis of any resources in San Juan Creek because we consider the risk of a dam break to be extremely low.

**Comment 123:** Riverside County states that several species' habitat assessments or focused surveys were not included in the draft EIS, specifically some of the narrow endemic and Criteria Area plant species required by the Western Riverside County Multi-Species HCP. A thorough analysis of effects on riverine and riparian habitats would be needed.

**Response:** We have modified tables 13 and 14 to identify which species are narrow endemics, and have added Criteria Area species. We anticipate that additional plant surveys, burrowing owl surveys (if needed) and delineations of wetlands and waters that would be conducted prior to project construction would provide the information the County would need to evaluate project consistency with the Multi-Species HCP. We have specified in section 5.2.6 that the co-applicants should consider these species, as well as others previously identified in the document, during planning for additional, focused surveys in areas that have not yet been covered (e.g., the final placement of transmission towers and temporary access roads) and that may be affected by project construction or operation. We have described the amount of temporary and permanent disturbance to habitats that support these species.

**Comment 124:** CDFG states that the project occurs within the Western Riverside County Multi-Species HCP and CDFG will review the project for compliance with the plan. It states that a future habitat management plan for the project should include an in-depth analysis of the project's effects on the Multi-Species HCP and demonstrate how the project is consistent with the Multi-Species HCP.

**Response:** We agree that the habitat mitigation plan should address project effects on species covered under the Multi-Species HCP and support CDFG's intention to review the LEAPS Project for compliance with the plan.

**Comment 125:** The Center for Biological Diversity also cites the lack of analysis of the potential effects of the co-applicants' proposal to not clear vegetation under transmission lines as inadequate. It is concerned that failure to clear out vegetation under the transmission lines would increase the fire hazard in the project area.

**Response:** The co-applicants do not propose to clear vegetation under the transmission line, but fuel management in the future may require manipulation to reduce the risk of fire. Methods selected for fuel management would be developed in consultation with the USFS and would depend on site-specific factors (e.g., vegetation type, slope, aspect, access), and could include grazing, prescribed fire, or mechanical means to create and maintain firebreaks. Existing firebreaks that intersect the proposed alignment would also be maintained, as needed and as specified by the USFS. The increased risk of fire

that would be associated with uncontrolled public access and weed invasion highlights the importance of effective road and weed management. The objective is to eliminate all man caused fires within the project area and to take prompt, aggressive action on all fires in the vicinity. Our recommended hazardous vegetative fuel treatment plan as specified by the USFS would set forth protocols for the treatment of vegetation in the vicinity of the transmission lines.

**Comment 126:** Pacific Clay and Linda and Martin Ridenour state that the analysis of the construction effects on special status plants is inadequate because several areas were not included in survey efforts, mesa horkelia was not included in surveys, the effects of the transmission line are unknown because it has not been sited, no rare plant surveys have been conducted for the staff alternative, and maps do not provide a sufficient level of detail. They state that because of these reasons the mitigation proposed is not effective. The Ridenours would like to see all the plans that relate to the protection of rare plant species.

**Response:** As mentioned in section 3.3.4.2, we recognize that site-specific pre-construction surveys would be needed for special status plants in any areas that have not yet been covered or that have not been thoroughly covered during previous surveys. We have added text to section 5.2.6 to clarify that data obtained through additional surveys should be used to avoid, minimize or mitigate adverse effects, first by locating transmission towers, roads and other project features away from any rare plant populations that may be present. We have added text to this section to specify that the co-applicants should consult with the resource management agencies and other stakeholders to develop a survey plan and then to develop mitigation plan, before submitting finalized reports and plans to the Commission.

**Comment 127:** The Center for Biological Diversity points to a recent declaration by USFS that invasive species of weeds is one of the four greatest threats to National Forest System lands and comments that the EIS needs to include a description of weed communities in the project area as well as identification of higher protective standards for areas without invasive weed problems. It criticizes the co-applicants' proposal to develop a weed control plan pursuant to the new Cleveland National Forest Land Management Plan because that plan only provides general guidance for the development of site specific plans.

**Response:** The Center for Biological Diversity letter notes that non-native species are widespread in the South Coast Bioregion of California. Although only 12 weeds were documented during the co-applicants' plant surveys, it is very likely that most, if not all, of the 42 non-native invasive species known to occur in the project vicinity are present in areas that would be affected by the project. On one hand, it would be advantageous to design the project to avoid areas that do not currently support weed species, in order to reduce the threat of introduction. On the other hand, it would be beneficial to design the project to avoid sites that support weed species, in order to reduce the threat of spreading them to uninfested areas. Neither scenario is likely possible, given that project features must also be located to avoid or minimize impacts on steep slopes; streams and riparian habitats; special status plants, plant communities, and animals; listed species; high quality recreation sites, sensitive viewsheds, and other important resources. This situation points out the importance of weed management, without any need for additional detail about existing conditions.

We recognize that the Land Management Plan was developed at a general level to address almost 567,000 acres of lands within the Cleveland National Forest, and was not intended to serve as a blueprint for the development of site-specific weed management plans. Many weed management handbooks are readily available that could serve as a blueprint for developing a plan to manage weeds in lands affected by the LEAPS Project. With their site-specific knowledge, we conclude that selection of any particular document as a model for developing a plan is best left to the co-applicants, in consultation with the resource management agencies and other stakeholders. In any case, because some project features would be located on National Forest System lands, we recommend that the co-applicants consult with the USFS

to develop a plan that is consistent with the Land Management Plan goals, objectives, and design criteria. We have added text in section 5.2.6 to clarify the elements that should be included in a weed management plan for the project area, including National Forest System and non-National Forest System lands.

**Comment 128:** Bruce Campbell comments on the lack of information about the potential effects of the use of toxic and hazardous materials during the construction and operation of the project and requests that a supplemental or new draft EIS be issued that addresses these concerns. He comments that non-native plant species would spread in the area because of the construction of the transmission lines, increased use of OHVs, and transmission line maintenance activities. He requests more information in the draft EIS about the maintenance activities including what herbicides would be used, if toxicological profiles would be presented in a supplement or new draft EIS, and whether hazardous Material Safety Data Sheets will be completed and made available to the public. He asks if this information about herbicides would be made available to the public in both English and Spanish.

**Response:** For the most part, the transmission line would traverse chaparral and grassland vegetation that does not reach a height that would interfere with project operation, and there would be no need to manage any vegetation except weeds. If taller vegetation is present and would interfere with system reliability or safety, it could be removed by periodic cutting or trimming. We anticipate that herbicides could be used for spot treatment of certain weed species. However, there are many alternatives to herbicides, and non-chemical treatments are almost always preferable (in terms of safety and environmental stewardship), unless other attempts at control have failed, and the risk of damage caused by weeds is greater than the risk of damage caused by an herbicide (Tu et al., 2001).

As discussed in our response to comment 127, we have added text to section 5.2.6 to clarify our recommendations for development of a weed management plan. The plan should include an evaluation of all available methods of weed control for target species, a comparison of their costs and benefits, and finally, selection of the most appropriate treatment. If an herbicide is to be applied, the co-applicants would be required to comply with federal, state and local regulations for proper use and application.

**Comment 129:** The Center for Biological Diversity indicates that the draft EIS fails to consider native willows, tule, and cattails at Lake Elsinore as potentially important riparian habitat and requests that information about stands of these species and wildlife use of these habitats be included in the final EIS. Linda and Martin Ridenour also state that information about wetlands associated with Lake Elsinore is insufficient.

**Response:** We have added text in section 3.3.4.2 to recognize that even small and scattered patches of native riparian vegetation can provide important habitat for wildlife. We have added some anecdotal information about birds that use Lake Elsinore, reflecting comments supplied by the city of Lake Elsinore. We also note that implementation of the Lake Elsinore Stabilization and Enhancement Project combined with proposed operations, would be expected to result in a stable upper shoreline at 1,241.7 feet msl, with a variable fluctuation zone that covers about 79 acres 5 days a week and an additional 55 acres during the weekend. We would expect that additional shoreline vegetation and possible new wetlands that could support nesting shorebirds would develop above elevation 1,241.7 feet msl. Given this likelihood, we include a monitoring plan for shorebirds in our staff alternative.

**Comment 130:** Nevada Hydro states that the co-applicants disagree with the statement on page 3-129 of the draft EIS that wetland delineations would be needed to evaluate and quantify effects. Nevada Hydro comments that the proposed LEAPS Project would not alter the operational parameters established under the Lake Elsinore Stabilization and Enhancement Project but would provide a revenue source that would facilitate the implementation of the plan. It indicates that seasonal variations are substantially greater than the limits outlined in the adopted plan, which has gone through environmental review, and it requests that

measures in the staff alternative for wetland delineations and habitat mitigation and monitoring for Lake Elsinore be eliminated from the final EIS.

**Response:** We agree that stabilizing year-to-year and seasonal lake elevations, while allowing daily and weekly fluctuations, may have little effect on existing wetlands around Lake Elsinore, if any are present. Native species that persist around the shoreline, such as willows, tule and cattails, are tolerant of seasonal water level fluctuations that occur in natural systems throughout the semi-arid west and these species would likely tolerate daily fluctuations of 1 foot. Fluctuations limited to 1 foot and occurring within a 24-hour time-frame, as proposed, should allow for soils to remain moist and these species would likely persist. Operational effects on wetlands that may be associated with Lake Elsinore would likely be minor. We do not recommend in the EIS any additional wetland delineations other than those proposed by the co-applicants as needed after the final placement of project facilities.

**Comment 131:** CDFG recommends that all areas supporting hydrophytic cover be mapped in order to assess the potential effects on wetlands from the proposed project. It also recommends a CDFG-approved wetland restoration/protection plan, including a means of replacing or protecting the hydrologic conditions, which contribute to the existing wetlands. CDFG states that its policy has no net loss of wetlands and that buffers between existing or proposed development and existing wetlands or wetland compensation sites should be included in any mitigation plan. The Corps, the State Water Board, and Pacific Clay also state that wetland delineations need to occur to determine potential project effects.

**Response:** As an attachment to their April 24, 2006, comments on the draft EIS, the co-applicants filed a delineation of jurisdictional waters and wetlands at the Morrell and Decker Canyon sites and an assessment of functions and values, using the California Rapid Assessment Method (CRAM). We have included exhibit 4 of the delineation report as figure 14 in the final EIS. We have revised and added text in section 3.3.4.2 to reflect information contained in this report. As noted in section 3.3.4.2, delineation of wetlands associated with Lake Elsinore would be needed, as well, to meet federal and state permitting requirements.

**Comment 132:** The Orange County Chapter of the California Native Plant Society indicates that although the draft EIS properly states that the Lion Spring wetland fulfills important habitat functions that would be lost if the project is built, it is not clear if there is an intention to replace the habitat function with a new wetland formed by the upstream and spring water that are proposed to be diverted under the reservoir's geofabric liner.

**Response:** A settling pond may be needed to ensure that clean water is returned to the creek downstream of the reservoir if Morrell Canyon is selected as the site of the upper reservoir. Returning flows to the creek would maintain natural processes downstream of the dam. However, we anticipate that replacement of habitat functions associated with Lion Spring itself would not be feasible, because of the complex geology and hydrology that characterize this site. The staff alternative includes an upper reservoir at the Decker Canyon location, which would eliminate the effect on Lion Spring.

**Comment 133:** The EPA and the Corps state that information regarding the need for section 404 compliance for wetland effects should have been disclosed for consideration in the draft EIS. Additionally, EPA states that it considers this project and the TE/VS 500-kilovolt Interconnect Project to be separate projects in regard to section 404 compliance. SDG&E also questions whether the south substation would require a wetland permit for access or pad construction.

**Response:** In general, Commission staff is not in a position to speculate about the permit requirements other agencies may impose.

**Comment 134:** Nevada Hydro provides a report containing the findings of jurisdictional wetland delineations at the Morrell Canyon and Decker Canyon upper reservation sites and requests that the descriptions of wetlands that might be affected by the construction of an upper reservoir be revised to reflect the findings of the wetland delineation report.

**Response:** We appreciate the additional information and have included it in the document.

**Comment 135:** EPA states that the draft EIS should have included a conceptual description of what is being considered as compensatory mitigation to offset unavoidable effects to waters of the US, including wetlands at both the Decker and Morrell canyon reservoir sites. It states that compensatory mitigation should include restoration or enhancement of waters along with the acquisition/preservation of other waters. It recommends that the final EIS analyze an alternative that combines the Decker Canyon site with a minimal functional transmission line that avoids waters of the United States to the maximum extent possible. EPA recommends the final EIS indicate how riparian habitat losses would be mitigated for under the staff alternative.

**Response:** We do not include a conceptual description of compensatory mitigation, because we do not have information about opportunities/resource needs that may exist within the upper San Juan Creek basin. However, we have added text discussing mitigation priorities to sections 3.3.4.2 and 5.2.6.

**Comment 136:** CDFG states that the draft EIS did not address its comments from the October 21, 2004, letter pertaining to the loss of approximately 100 acres of mature oak woodlands associated with Lion's springs and a rare perennial spring.

**Response:** The referenced letter was sent to the co-applicants only and was not filed with the Commission until April 2006; therefore, CDFG comments were not considered in the draft EIS; however, we now acknowledge CDFG's October 21, 2004, letter and note that the draft EIS did consider the potential effects of the project on the mature oak woodlands associated with Lion Spring at the proposed upper reservoir location in Morrell Canyon.

**Comment 137:** Nevada Hydro points out that the exact acreages for replacement ratios remain subject to further refinement based on site selection and final grading plans. Further, Nevada Hydro states that either the 3:1 or the 5:1 replacement ratio for oak woodlands would appear to be beyond the ability of the co-applicants to achieve. Nevada Hydro requests that the final EIS reference California Senate Bill 1334 which established section 21083.4 of the Public Resource Code and specifies oak woodland mitigation under CEQA and maintains the proposed ratio of 3:1 for replacement of oak woodlands.

**Response:** As noted in section 3.3.4.3, we considered California Senate Bill 1334 establishing section 21083.4 of the Public Resource Code in making our recommendations regarding an appropriate mitigation ratio. In section 3.3.4.2, we identified the advantages and disadvantages of various approaches to mitigation, including on-site planting, on-site transplanting, contribution to a mitigation banks, and purchase of off-site lands or conservation easements. We concluded that the first two options would not likely be successful, and that the third option might not allow the co-applicants, resource management agencies and other stakeholders to choose site(s) for mitigation that would provide the highest local benefits. For this reason, we recommended purchase and protection of existing oak woodlands at the 1:1 ratio recommended by Interior and specified by USFS.

**Comment 138:** The Orange County Chapter of the California Native Plant Society states that the proposed 2:1 oak mitigation is inadequate and that oaks should be mitigated at 5:1. SDG&E requests further discussion of why the co-applicants propose a 2:1 ratio rather than the 5:1 ratio recommended by the USFS as well as discussion of CDFG's permitting requirements under section 1600 of the Fish and

Game Code for riparian and oak woodland impacts. CDFG states that the proposed 5:1 ratio mitigation for the loss of oak woodland is not adequate, and instead should be 10:1, which is the CDFG standard for removal of mature coastal live oak trees. Additionally, CDFG states that the spacing of the replacement trees should be 20 feet minimum and should be monitored, nurtured, and protected within the drip line so they survive a minimum of 5 years. Off-site mitigation alternatives should be included in detail in the EIS and should be agreed upon by CDFG. The Center for Biological Diversity also recommends a higher mitigation ratio as well as information about where and how the mitigation would occur.

**Response:** The staff alternative now includes a 1:1 habitat mitigation replacement ratio for oak woodlands and an equivalency analysis to ensure that the replacement habitat is of equal value consistent with Interior's recommendations and a priority for replacement with the Cleveland National Forest, consistent with measures specified by the USFS, instead of the 5:1 habitat mitigation replacement ratio we recommended in the draft EIS. We consider CDFG's recommended ratio of 10:1 to be excessive, because off-site mitigation will involve mature oak woodlands that currently provide high-quality habitat for wildlife, and there would be no time gap between the impact (project construction) and functional mitigation, as would be the case if oaks were planted on-site. We have not identified off-site options for mitigation, but have added text to section 5.2.6 to outline a general order of priority, and clarify that we recommend the co-applicants consult with the resource management agencies and other stakeholders to identify appropriate sites.

**Comment 139:** The Orange County Chapter of the California Native Plant Society states that the draft EIS does not indicate the range of dbh above 8" or analyze dbh measurements to indicate age-classes, which would help determine the habitat functions of woodland oak communities that would need to be replaced by mitigation (page 3-130).

**Response:** Coast live oak woodlands in Morrell Canyon contain a variety of age classes; trees range in size from 2 to at least 24 inches diameter at breast height (dbh), with most individuals in the 8 to 12-inch range. For this reason, we are recommending the co-applicants purchase and protect mature coast live oak woodlands as mitigation for habitat losses at Morrell or Decker Canyon.

**Comment 140:** CDFG states that mitigation for the loss of biological resources should include both temporary and permanent effects. It believes that the draft EIS understates the habitat values of Morrell Canyon and Lion's Spring oak woodland and that the loss of these resources to wildlife in the Cleveland National Forest and surrounding wilderness area would be a significant effect. As such, CDFG recommends that the co-applicants submit additional environmental analysis of the reservoir location and its effect on wildlife habitat function and value and submit a detailed Mitigation and Monitoring Plan to CDFG for approval. Additionally, CDFG states that any management plans developed as a result of the project should include CDFG input and approval.

**Response:** The information filed with the Commission to date serves as an adequate basis for our conclusion that project effects on biological resources in Morrell Canyon (including Lion Spring) would be substantial. We have added text to section 5.2.6 to clarify that we are recommending the co-applicants consult with the resource management agencies (including CDFG) to develop a detailed habitat mitigation and monitoring plan.

**Comment 141:** The Center for Biological Diversity states that the occurrence in the planning area and potential spread of sudden oak death syndrome that affects oak woodlands in coastal California must be addressed in the final EIS.

**Response:** Our review of maps posted on the California Oak Mortality Task Force website in 2005 indicated that *Phytophthora ramorum* had not been reported south of Monterey. A review of the July, 2006, maps shows the same result (<http://kellylab.berkeley.edu/SODmonitoring/maps/PDF/SODCalifornia07-25-06page.pdf>). Based on the Task Force's evaluation, we conclude that there is a low risk of infection in western Riverside County and in Orange and San Diego counties ([http://kellylab.berkeley.edu/SODmonitoring/maps/PDF/state\\_risk\\_05a\\_avg.pdf](http://kellylab.berkeley.edu/SODmonitoring/maps/PDF/state_risk_05a_avg.pdf)).

**Comment 142:** The Center for Biological Diversity comments that the draft EIS lacks any meaningful information on how habitat loss at Morrell Canyon would affect special-status wildlife populations. It also comments that there is no meaningful or quantitative analysis of edge effects on wildlife from the loss of Morrell Canyon.

**Response:** Section 3.3.4.2 concludes that project construction and operation would reduce habitat quantity and quality for special status wildlife populations in the area. We agree the draft EIS does not contain a detailed analysis of effects at the population level, but clearly, the analysis is sufficient to compare the effects of the proposed action and the staff alternative, in terms of acres and types of habitat that would be affected. We conclude that special status wildlife species that use those habitats would be adversely affected by the loss of those habitats, in direct relation to the acreage of each habitat type that is lost to construction. Thus, acres and types of habitat that would be affected serve as an adequate indicator of impacts on wildlife. Given similar reservoir configurations under both alternatives, the extent of edge effects would depend primarily on acreage, so again, the analysis is adequate to compare the effects of the proposed action and the staff alternative. Based on these relationships, no additional information is necessary to conclude that loss of Lion Spring (a unique habitat feature) and 20 acres of mature oak woodlands at Morrell Canyon would have a greater impact on wildlife, including special status species, than loss of 5 acres of mature oak woodland at Decker Canyon, and that the no-action alternative would have the least impact.

**Comment 143:** Pacific Clay is critical of the special status wildlife analysis because survey data is out of date with none more recent than 1998 and mitigation measures are not consistent with the Western Riverside County Multi-Species HCP or the Cleveland National Forest Land Management Plan.

**Response:** We have added text to section 3.3.4.1 to clarify that the co-applicants conducted general biological surveys in the project area in 2001 and noted the presence of any special status species observed during other field efforts. Table 16 shows federally listed special status species for which focused surveys were conducted between 2001 and 2005. We anticipate that mitigation measures would be consistent with the Multi-Species HCP in calling for pre-construction surveys, where needed, and recommending compensation ratios that exceed the Multi-Species HCP minimum of 1:1.

**Comment 144:** CDFG states that the EIS should address project effects on the southwestern pond turtle (*Emy marmorata pallida*), a state species of special concern from the reservoir's effects on water quality and the introduction of non-native species to the watershed.

**Response:** Only a dam failure at the upper reservoir could adversely affect the southwestern pond turtle. We have not conducted an in-depth analysis of any aquatic resources in San Juan Creek including the southwestern pond turtle, because the risk of a dam failure is very small.

**Comment 145:** Scott Werner comments that the draft EIS does not provide specifics on the immediate and cumulative effects to many species, especially several CDFG-listed California Species of Concern including the Coast-horned lizard, and Southern California rufous-crowned sparrow, and Bell's sage sparrow.

**Response:** We used the lists provided in the license application and the co-applicants' responses to additional information requests as the basis for describing special status species that could occur in the project area. Some special status species, such as Bell's sage sparrow, may have been omitted from the lists. We have added the California Species of Special Concern that you text to section 3.3.4.2 and 3.3.4.3 to indicate that other special status species may also occur, and would also be adversely affected by the loss of habitat types they use and by the increased risk of disturbance, both directly and cumulatively.

**Comment 146:** The Center for Biological Diversity comments that the draft EIS cannot be used to satisfy the NEPA requirements for the USFS decision on the proposed project because it does not present any population data on Management Indicator Species, assuming that the Cleveland National Forest is currently operating under the 1982 regulations.

**Response:** We used information taken from the Land Management Plan to provide general population data for the Trabuco Ranger District, Cleveland National Forest or the Santa Ana Mountains, wherever possible (see section 3.3.4.1), supplemented with results of MBA's project-specific surveys for the California spotted owl and arroyo toad. Although no detailed data are available about management indicator species (MIS) populations, we find that the project would adversely affect MIS by removing habitat, and, for this reason, we recommend substantial mitigation if either of the action alternatives is implemented.

**Comment 147:** Riverside County states that the location description of the project is too vague to accurately determine the potential effects of the project on reserve assembly; however, it is likely to be within cell criteria areas and has the potential to affect reserves and/or corridors including Core Reserve Area 1, the proposed extension of Core Area 2, and proposed Constrained Linkages 1, 2, and 9.

**Response:** We agree with your assessment that the project has the potential to affect the reserves and corridors mentioned.

**Comment 148:** Nevada Hydro cites numerous conclusions in the draft EIS that suggest that the project would have little effect on nesting shorebirds and requests that Interior's 10(j) recommendation for a monitoring and remediation plan to eliminate or reduce impacts to nesting shorebirds be deleted from the staff alternative and no conditions or measures be imposed with regard to shorebirds.

**Response:** We respectfully disagree. The draft EIS concluded that while limited in size, small areas of suitable habitat that provides forage and cover for waterfowl, wading birds, and songbirds could be affected by project operations. We also concluded that the more stable water level would promote the development of emergent herbaceous plants within the 79-acre fluctuation zone and additional riparian vegetation may establish along the shoreline above the fluctuation zone providing additional suitable habitat for a variety of ducks, wading birds, and songbirds. Further, in comments on the draft EIS, the city of Lake Elsinore provided more information on water-associated bird species that currently use undisturbed shorelines of Lake Elsinore. Our recommended nesting shorebird plan would monitor project-related effects on these species.

**Comment 149:** The city of Lake Elsinore states that the draft EIS seriously underestimates the lake's avian resources and provides additional information of bird use of the lake. It states that to mitigate for the potential negative effects of the project on great blue heron and egrets, the co-applicants should be required to provide educational outreach to the general public by purchasing the nesting sites of these wading birds in both the Four Corners and Rome Hill areas of Lake Elsinore. The Center for Biological Diversity comments that the draft EIS presents no data about the shorebirds, waterfowl, and riparian birds

that use Lake Elsinore and relies on speculation to downplay potential impacts to avian species that use the lake. It also comments that the draft EIS does not provide an analysis of potential impacts to migratory birds sufficient to allow the reader to compare the various transmission route corridors relative to which alignment would best avoid such impacts. Linda and Martin Ridenour also comment that information provided by MBA is flawed and inadequate to serve as a basis for analysis of potential effects on birds at Lake Elsinore and within the Pacific flyway.

**Response:** We have added text to sections 3.3.4 and 3.3.5 reflecting information the city of Lake Elsinore provided about bird species observed at Lake Elsinore. However, we have not included the city's recommendation to include purchase of land in the Rome Hill and Four Corners areas to the staff alternative, because we conclude it is very unlikely that the project would affect nesting habitat for great blue herons or egrets. Great blue herons and egrets nest in trees that are large enough to support their sizable nests, in fairly close proximity to foraging areas. The co-applicants do not propose to remove any mature trees along the shoreline, and lake fluctuations should not affect existing trees. For these reasons, there should be no project effects on nesting habitat for these two species.

Although the level of detail provided in the EIS is adequate to identify major areas of concern, we agree that monitoring will be needed to identify high-risk crossings along the selected alignment. As discussed in section 5.2.6, we are recommending the co-applicants implement measures to minimize the risk of collision. Consistent with Avian Power Line Interaction Committee (APLIC) and FWS guidelines for avian protection plans, the co-applicants would monitor the effectiveness of any measures that are implemented, and use the results to design and implement further protective measures if any are needed.

**Comment 150:** The city of Lake Elsinore states that the fluctuating water levels caused by the project may have a substantial negative effect on shoreline birds and recommend the co-applicants mitigate for these effects by acquiring substantial shoreline property to restore, enhance, and protect the seasonal shoreline nesting sites.

**Response:** The city's comment letter indicates that several bird species that do not require emergent or woody riparian vegetation for nesting (including black-necked stilts, avocets, and killdeer) are known to breed along the Lake Elsinore shoreline, and that western snowy plover nested there at one time. This information highlights the importance of implementing a monitoring and remediation plan to determine if additional mitigation measures might be warranted. However, as pointed out in section 3.3.4.2, land use and land management practices (construction, soil disturbance, mowing, fertilizing, herbicide use, domestic pets) are likely to have as much or more influence on shorebird use of Lake Elsinore than project operations.

**Comment 151:** Pacific Clay states that the final EIS should include analysis of an entirely underground transmission option that would avoid potential bird collisions.

**Response:** The cost of an entirely underground transmission line option would be an additional \$320 million or about \$10 million per mile for about 32 miles. While such an option would prevent many of the terrestrial resource impacts discussed in the analysis, costs would be prohibitive.

**Comment 152:** The Fernandez Parties, the Center for Biological Diversity, and Pacific Clay indicate that the draft EIS was missing information regarding the wetlands, wildlife habitat, and rare animal and plant species located in the areas to be affected by the project, and as such the analysis is not adequate.

**Response:** The analysis is adequate for determining the relative extent of impacts likely to occur under the proposed action and the staff alternative, and to compare these with the no-action alternative. Further detailed, site-specific analysis would be needed in finalizing the location of project facilities, including

access roads, in order to avoid and minimize project effects and design appropriate mitigation where necessary.

**Comment 153:** Linda and Martin Ridenour comment that the effects of an increase in mosquito production at the 86 acre margin of Lake Elsinore were not addressed in the draft EIS. They question the co-applicants' statements about no effect from mosquito and ask if any Vector Control has commented on the co-applicants' statements.

**Response:** We have added text to section 3.3.4.2 of the final EIS to clarify why we conclude that project operation would not affect mosquito production in Lake Elsinore. We are not aware of any Vector Control comments.

**Comment 154:** Pacific Clay states that the cumulative effects analysis in the draft EIS for wetlands and riparian habitat is inadequate because it does not identify habitat locations, related actions, or quantify the project's incremental effect when taken in conjunction with the effects of related actions, it does not analyze effects to each habitat separately, and it does not quantify the cumulative risk if the project were to go forwards.

**Response:** We have added more specific information about project cumulative effects to wetland and riparian habitat the cumulative effects discussion in section 3.3.4.3.

## **THREATENED AND ENDANGERED SPECIES**

**Comment 155:** CDFG states that the draft EIS does not address its concerns regarding steelhead trout and the habitat function and value of the lower San Juan Creek, as found in its October 21, 2004 letter.

**Response:** As noted, the referenced letter was sent to the co-applicants only and was not filed with the Commission until April 2006, therefore it was not considered in the draft EIS. However, we analyzed the potential effects of the proposed project on steelhead in San Mateo Creek in section 3.3.5.2 of the draft EIS and concluded that construction at either upper reservoir location would not affect steelhead or steelhead habitat in San Mateo Creek. We also concluded that measures proposed by the co-applicants including their soil erosion control plan, water quality monitoring program at the upper reservoir, and the placement of transmission line poles outside of sensitive area would limit the potential for sediment discharge into San Mateo Creek. We concluded in section 3.3.4.2 of the draft EIS sediment transport several miles downstream to the perennial segments of San Juan Creek would be unlikely and that implementation of a drainage monitoring and remediation plan as recommended by staff and Interior would minimize the potential for negative effects on native fish in the lower San Juan Creek.

**Comment 156:** Linda and Martin Ridenour asks if the National Marine Fisheries Service (NMFS) responded to the conclusion in the draft EIS that the California summer steelhead would be not adversely affected and requests more specific data to support this conclusion.

**Response:** We conclude that the construction of the LEAPS Project may affect, but would not likely adversely affect the southern California summer steelhead or steelhead habitat. Only the lower 6 or 7 miles of San Mateo Creek are accessible to southern steelhead trout and spawning occurs in the downstream reach during periods of significant precipitation. Steelhead trout have not been identified in the tributaries to San Mateo Creek that would be crossed by transmission lines. A combination of BMPs during construction and water quality monitoring during the life of the project would reduce, but not eliminate, the potential risk of adverse impacts from the downstream transport of sediments. We sent a letter to NMFS on February 28, 2006, requesting concurrence with our finding that the project would not likely adversely affect California summer steelhead and NMFS has yet to respond.

**Comment 157:** CDFG does not concur with the finding that the placement of the reservoir in Morrell Canyon would not have an adverse effect to steelhead trout. It states that the project would introduce non-native fish species to the San Juan Creek watershed and affect the water quality of the lower reaches of San Juan Creek from the storage of low quality Lake Elsinore water, which could adversely affect the ability of steelhead to utilize spawning and rearing habitat in the watershed. The introduction of low-quality water from Lake Elsinore could also affect the sustainability of the San Juan Creek as critical habitat. CDFG recommends the co-applicants conduct surveys for steelhead in the San Juan Creek consistent with CDFG and NMFS protocol, and in coordination with CDFG and NMFS, to identify the project effects to steelhead and the portion of the Creek that has been designated as critical habitat.

**Response:** Introduction of water from the upper reservoir into San Juan Creek would only occur were there to be a spill event, failure of the proposed liner system, or failure of the dam structure, which are highly unlikely given the design of the reservoir. As stated in the draft, surveys of San Juan Creek from Interstate 5 east to just beyond Hot Springs Canyon did not find steelhead; however, non-native species were found, such as mosquitofish, green sunfish, smallmouth bass (*Micropetrus dolornieu*), yellow bullhead (*Ameiurus natalis*), and red shiner (*Cyprinella lutrensis*) (FWS, undated, as cited in the Elsinore Valley MWD and Nevada Hydro, 2004a, exhibit E). In its final listings for steelhead, NMFS stated that it believes that steelhead have been extirpated from San Juan Creek, because viable habitat is extremely limited or no longer exists as a result of habitat degradation and they do not anticipate they will occupy the watershed in the future absent major restoration efforts (71 FR 834). In NMFS' final critical habitat designations, San Juan Creek above the I-5 bridge, was excluded as critical habitat based on information provided by CDFG (70 FR 52488). We do not believe effects of project construction or operation will extend to the designated critical habitat portion of San Juan Creek below the Interstate 5 bridge; therefore, we do not recommend surveys for steelhead in that portion of the creek.

**Comment 158:** The Center for Biological Diversity points out the Cleveland National Forest S10 states that "the future development at Elsinore Peak will be designed to avoid adverse effects to Munz's onion." It states that the construction of eleven towers would disturb nearly 3 acres of potential habitat for this species as well as the spread of non-native species associated with the disturbance would violate the standards of the Cleveland National Forest Land Management Plan. Linda and Martin Ridenour disagree with the draft EIS and the MBA statement that occurrences of Munz's onion are outside the project boundary. They note that they observed this species during a site visit with FERC and USFS staff in 2004.

**Response:** Neither the proposed nor alternative alignments would affect known populations of Munz's onion on National Forest System lands at Elsinore Peak that USFS staff pointed out during the September, 2004, site visit. Based on the current proposed and alternative alignments, construction of towers should not affect the USFS's ability to meet its objectives under S10. However, the potential occurrence of this species highlights the importance of conducting site-specific surveys at each tower location, inside or outside the Cleveland National Forest, so that the footprint of each tower can be adjusted to avoid affecting this listed species, if it is present. The high risk of introducing and spreading non-native weed species highlights the importance of preparing and implementing plans to manage and monitor weeds and public access.

**Comment 159:** CDFG disagrees with the conclusion that the project would have no effects on the Quino checkerspot butterfly (*Euphydryas editha quino*). It states that because the actual alignment of the transmission line and its associated construction effects are unknown, the draft EIS can not determine if the species or its critical habitat would be affected. It recommends conducting protocol level surveys, in coordination with FWS, for suitable habitat along the transmission line corridor once an exact route is established. The Center for Biological Diversity cites the goals of the recovery plan for this species,

which calls for the protection and management of as much as possible of the remaining undeveloped suitable and restorable habitat that is part of the known and historic population distributions and states that the project would impede recovery. Linda and Martin Ridenour ask if the University of California at Riverside, as the leading experts on the Quino checkerspot butterfly, was asked to respond to the data filed by the co-applicants. The Ridenours states that more information is needed on the potential effects of the project on this species.

**Response:** CDFG misunderstood our conclusions regarding the Quino checkerspot butterfly. As discussed in sections 3.3.5.2, 5.2.7 and 5.6.4, we found that project construction would adversely affect this species as a result of direct and indirect effects on habitat. We did not request expert review of the co-applicants' survey results because we based our conclusions on the project's impact on habitat for this species, rather than its impact on individual butterflies. We anticipate that FWS would determine whether project construction would impede recovery, or whether conservation measures (such as establishing and maintaining preferred plant species in areas where soils are disturbed as a result of construction) would provide adequate mitigation for project impacts.

**Comment 160:** CDFG does not agree with the finding that "no critical habitat for this species [arroyo toad (*Bufo californicus*)] will be affected." The potential discharge of sediment associated with the construction of the reservoir, permanent reduction in water quality to the creek, as well as the introduction of non-native species that prey on arroyo toad would have an effect on the species and its critical habitat. CDFG states that the EIS needs to address these effects and recommends consultation with FWS. Linda and Martin Ridenour also comment on the inadequate study of the arroyo toad habitat and request that USFS conduct its own study.

**Response:** To our knowledge, the most current designation of critical habitat (70 FR 70, April 13, 2005) does not include any lands within the San Juan or San Mateo creek watersheds. We did not conduct in-depth analysis of any resources in San Juan Creek, because the risk of a dam failure is very low. However, as indicated in section 3.3.4.2, implementation of a sediment and erosion control plan during construction would be important in maintaining downstream water quality, which would protect essential habitat for the arroyo toad. We have added text to indicate that implementation of Interior's recommended drainage monitoring and remediation plan would also benefit habitat for the arroyo toad in San Juan Creek. To our knowledge, no arroyo toads have been observed at Decker Canyon.

**Comment 161:** The Center for Biological Diversity and Linda and Martin Ridenour comment that the draft EIS does not address the potentially significant impact to the declining populations of the coastal California gnatcatcher.

**Response:** Section 3.3.5.2 provides estimates of the amount of suitable habitat that would be removed under either of the project alternatives, and section 5.6.4 concludes the project is likely to adversely affect this species and adversely affect critical habitat. Section 3.3.5.3, though brief, points out that the project would contribute to cumulative adverse effects on this species. In light of the significance of this impact, we are recommending that the co-applicants consult with FWS regarding protection, mitigation and enhancement measures as project designs are being developed. Because the coastal California gnatcatcher is so closely linked to coastal sage scrub habitat at lower elevations, loss of chaparral and oak woodlands at the Decker Canyon site should not affect this species.

**Comment 162:** Linda and Martin Ridenour comment that MBA did an inadequate job by ignoring areas where the California red-legged frog is located. They ask for information on the dates of the surveys conducted by MBA for the Southwestern willow flycatcher, noting that table 16 in the draft EIS only tells the reader the number of visits but not the dates of the surveys. They also comment that they did not read

any information in the draft EIS about potential effects of helicopter use during construction on this species and recommend that helicopters not be allowed during the breeding and nesting seasons.

**Response:** Red-legged frog surveys were conducted only in areas that might provide habitat for this species; we are not aware that MBA overlooked any areas that should have been surveyed. The completed survey reports for each species for each year of survey are available to the public on eLibrary ([www.ferc.gov](http://www.ferc.gov)) using the “eLibrary” link. For assistance, contact FERC Online Support at [FERCOnlineSupport@ferc.gov](mailto:FERCOnlineSupport@ferc.gov) or toll-free at (866) 208-3676, or for TTY, (202) 502-8659. The description given in section 3.3.5.1 regarding the location of critical habitat is meant only to indicate that it is not immediately adjacent to the project, and that no project features would be constructed within it. We anticipate that the need for timing restrictions would be addressed through consultation with USFS, FWS and CDFG on final designs.

**Comment 163:** Linda and Martin Ridenour ask how many pairs of Least Bell's vireos were found during the surveys and ask that USFS conduct its own study of this species in the project:

**Response:** As indicated in section 3.3.5.2, MBA did not observe any least Bell's vireos during its surveys.

**Comment 164:** The Center for Biological Diversity states that the draft EIS does not address the 50 acres of Stephens' kangaroo rat habitat that would be eliminated but not mitigated outside of the Stephens' Kangaroo Rat HCP area. It again states that the draft EIS cannot analyze effects to any species without population or locational data.

**Response:** We have added text to section 3.3.5.2 to clarify anticipated project effects on the Stephens' kangaroo rat. Based on information in the Multi-Species HCP, there are no reliable data on Stephens' kangaroo rat populations in the vicinity. CDFG's recent report on special status species indicates the Stephens' kangaroo rat's status is unknown.

**Comment 165:** The Center for Biological Diversity states that the draft EIS is wholly deficient in its analysis of the proposed project's impact on listed species because it fails to provide population and abundance data either on the project site or region.

**Response:** We have added information, where available, about populations in the region; however, MBA's surveys did not reveal the presence of any federally listed wildlife species in the project area.

**Comment 166:** The Center for Biological Diversity comments that the draft EIS needs to disclose what actions would be taken if new populations of listed species are identified and what remedial actions would be taken to prevent or minimize loss of fish or wildlife. It also states that Interior's recommendation no. 2 is not properly described in section 5 of the draft EIS.

**Response:** We have added text in section 5.2.7 to clarify that the staff alternative includes provisions for implementation of protective measures, if monitoring indicates they are needed. This approach is consistent with the USFS revised preliminary 4(e) condition no. 38 (see appendix C for full text). We have included all the information Interior provided about its 10(a) recommendation no. 2 and Interior did not take issue with our characterization of its recommendations in its letter commenting on the draft EIS.

**Comment 167:** Pacific Clay states that the cumulative effects analysis in the draft EIS for federally listed species is inadequate because it does not define the range in southern California for each relevant species, fails to identify past, present, and reasonably foreseeable future actions that might affect each species in

its range, fails to identify the project's incremental effect to each species when evaluated in conjunction with the related actions, and fails to evaluate the risks of adverse cumulative affects to each species.

**Response:** We respectfully disagree and note that we did address cumulative affects to the listed species in the draft EIS. However, in the final EIS we now provide information on the cumulative effects to listed species on a species-by-species basis.

## RECREATIONAL RESOURCES

**Comment 168:** The city of Lake Elsinore and Peter Dawson state that any construction-related drawdown of Lake Elsinore below 1,240 feet msl would have substantial negative affects on recreational use because the Seaport Boat Launch facility and the inlet channel "event" concession are not functional below that elevation. They state that any drawdown below that elevation should be prohibited or a mitigation plan should be developed to mitigate for the effects. John Pecora is concerned the fluctuating water levels of Lake Elsinore would prohibit the launch of his boat from its present storage location. Empire Pre-Cast is concerned that the shoreline would be useless when water elevations are down. Peter Dawson comments that the PRINCESS, a 94 foot paddlewheeler currently being refurbished, would not be able to operate at an elevation below 1,240 feet msl. The Santa Ana Water Board, the State Water Board, and Pacific Clay state that the draft EIS did not address the effects on recreational boating from the project-caused shoreline fluctuations and requests that the final EIS discuss this issue.

**Response:** The construction and operation of the proposed project would not draw down Lake Elsinore below the minimum target elevation of 1,240 feet msl. The co-applicants propose to perform all in-lake construction, including the intake/outlet structure, behind a cofferdam and would not drawdown the lake below 1,240 feet msl. The project would operate between 1,240 and 1,247 feet msl consistent with the Lake Level Stabilization and Enhancement Project, and would not be able to operate if water levels fell below 1,240 feet msl. We conclude in section 3.3.6.2 of the EIS that because the project would not operate below 1, 240 feet msl, project-related fluctuation in water elevations would not adversely affect existing recreational boating facilities at Lake Elsinore.

**Comment 169:** The city of Lake Elsinore states that the estimated 6 acres or 0.5 percent loss of Lake Elsinore's surface acreage from the construction of the tailrace tunnels is a mischaracterization of the true negative effect on the boating traffic pattern. The City estimates that approximately 20 percent of the lake would be affected and a detailed assessment and mitigation plan for the loss of recreational use by the proposed navigational restrictions should be performed to determine the affect of boating capacity and traffic pattern.

**Response:** We respectfully disagree. We calculated 6 acres by multiplying two-thirds of the length of the tailrace tunnel (the length that would be in Lake Elsinore and thus would affect boating) by 200 feet and converting to acres.

**Comment 170:** To assist the city of Lake Elsinore in carrying out its mandatory police powers on Lake Elsinore, the city recommends the co-applicants develop and fund implementation of a Boating Traffic Plan prior to construction to ensure public safety. The city recommends that it review and approve the plan prior to implementation.

**Response:** To protect public safety during construction, the co-applicants propose detailed site plans that identify contingencies for restricting public access to certain areas, such as near construction activities in the lower reservoir including boating. Therefore, we do not see the need for a separate boating traffic plan.

**Comment 171:** The city of Lake Elsinore recommends the co-applicants be required to perform an aquatic safety study to consider the public safety element on Lake Elsinore from operations of the project.

**Response:** If licensed, the licensee would be required by the Commission's regulations to prepare a public safety plan that would detail the location of safety signage and buoys and any other safety measures designed to protect the public using Lake Elsinore or other project facilities.

**Comment 172:** The city of Lake Elsinore recommends that the co-applicants provide annual employee orientation on the projects to all city employees, local law enforcement, fire department staff, and commercial boating facilities on the lake.

**Response:** The co-applicants, as one of their environmental measures, propose to provide tours of the generating facilities. As needed, local public safety agency personnel could tour facilities and ask questions about public safety obligations.

**Comment 173:** Linda and Martin Ridenour disagree that the fish stocking program would improve angling and state that anglers would have to wade out 95 feet (during drawdowns) to be able cast. As mitigation, they recommend a walkway with a non-slip surface, preferably located at Perret Park, wide enough for 10 anglers and their gear.

**Response:** The fish stocking program would not only improve angling from the shore but also from the water as angling occurs from both the shore and on the water. Before the implementation of the Lake Level Stabilization and Enhancement Project, changes in lake level elevations resulted in fluctuations of more than 95 feet. The proposed project supports the Lake Level Stabilization and Enhancement Project, would reduce overall effects to fishermen who wade out into Lake Elsinore as lake levels would be higher than, and fluctuate within a narrower range than historical levels. Therefore we do not find that the provision of a walkway for fisherman is warranted.

**Comment 174:** Riverside County recommends the co-applicants develop and fund the operation and maintenance costs for a 30-acre sports park to meet local recreation needs.

**Response:** Based on comments received on the draft EIS, the co-applicants now propose to provide a developed turn-key park facility, which could include sports fields, at the proposed powerhouse construction lay down locations to either the city of Lake Elsinore or Riverside County. The co-applicants propose to retain ownership and responsibility for O&M activities subject to a determination whether such ownership and operation would be authorized under the Elsinore Valley MWD's existing special district authority for developments not in public ownership and not located on National Forest System lands.

**Comment 175:** Riverside County states that the co-applicants should be required to secure, renovate, and fund a lakeside park facility on 10 to 15 acres on Grand Avenue, on the Naval Academy site if available.

**Response:** We have analyzed the potential effects of the proposed project on recreational opportunities in the project vicinity and conclude that the co-applicants proposed recreational facilities at the Santa Rosa powerhouse construction lay-down area would provide a new recreational experience. There is no evidence that the existing public access to Lake Elsinore is inadequate and therefore we do not include an additional lake side park facility in the staff alternative.

**Comment 176:** Jay Scott and other individuals protest the finding in the draft EIS that development of a formal landing site at Ortega Oaks would benefit hang gliders as there would still be interference from

transmission lines, substations, fencing, and other structures that would cause air disturbance of normal wind conditions.

**Response:** The revised co-applicants' proposal and staff alternative transmission alignment to place the transmission lines underground in the vicinity of the launch sites and from the north/south transmission line to the Santa Rosa powerhouse and not the Ortega Oaks powerhouse site would be greatly reduce interference with hang gliding activities over the alignments included in the draft EIS. We have revised the text in section 3.3.6 *Recreational Resources* of the EIS relative to the co-applicants' proposal. While we agree that a formal landing site at Ortega Oak would benefit hang gliders, we no longer include this measure in the staff alternative because we now include the Santa Rosa powerhouse location.

**Comment 177:** Nevada Hydro comments that the co-applicants' initial assessment of impacts on the existing Morgan Trail was based on plotting the trail on USGS topographic maps. USFS subsequently provided the co-applicants with additional information identifying the as-built routing of the trail, which differed considerably from the initial presentation. Based on the updated information, the co-applicants agree that the proposed Morrell Canyon upper reservoir would necessitate both the temporary closure and permanent re-routing of a portion of the trail should the Morrell Canyon site be selected.

**Response:** We have clarified the text in the final EIS to disclose that the proposed Morrell Canyon reservoir would require the relocation of the Morgan Trail.

**Comment 178:** The Center for Biological Diversity comments that the draft EIS should not characterize the Morgan trail use as "low" in the absence of any user studies. It also points out that the map showing trail seems to follow an old ridge route rather than the current trail, which rapidly descends into the riparian oak woodland of upper Morrell Canyon. David Voss questions the use of USFS staff observations of the number of vehicles parked at the trailhead as a basis for determining usage of Morgan Trail. He comments that users typically carpool and that just counting vehicles underestimates the usage. Linda and Martin Ridenour also disagree with the use characterization of Morgan Trail in the draft EIS and question the lack of information on the effects of the proposed project on the other three trailheads within the Cleveland National Forest. They disagree with statement in the draft EIS that there are no developed recreational sites in Decker Canyon and ask the USFS to respond that there is a trail system located there.

**Response:** We agree that in the absence of user studies the exact level of use is unattainable; however, we have based our characterization of use on communications with USFS staff who are responsible for managing the resource. The presence of 2 to 3 vehicles on a peak use weekend, even if full of passengers, would comprise only 15 hikers and represent 20 percent of the parking lots capacity. Non-peak weekends and weekdays would receive even less use, supporting our characterization as "low," especially when the forest received more than 31,000 visits to the wilderness alone. We have modified the map to show the current location of Morgan Trail, which is consistent with the effects analysis. As for Decker Canyon, there are no system trails maintained by the Cleveland National Forest in Decker Canyon.

**Comment 179:** Pacific Clay and Linda and Martin Ridenour criticize the recreational resource analysis because it understates the effects of the project on trail destruction, public access to the Cleveland National Forest, disturbance of developed recreation sites, inconsistency with the USFS Land Management Plan's designations, and inadequate figures.

**Response:** We respectfully disagree. The draft EIS discloses the effects of the proposed project on existing trails, recreational use in the Cleveland National Forest, and affects on existing developed recreational facilities in section 3.3.6.2, and disclose inconsistencies with the Cleveland National Forest Land Management Plan in section 3.3.7.2. We have clarified the text in section 3.3.6.2 of the final EIS

that construction of the Morrell Canyon Reservoir alternative would require the relocation of portions the Morgan Trail. Also, placing the transmission line underground in the vicinity of the hang gliding launch sites would affect use of the Morgan Trailhead for about a year during the construction of the transmission line. Access to the Cleveland National Forest in the general vicinity of construction would not be precluded; however, the recreational experience along forest access routes near proposed project facilities (reservoir, transmission lines, support towers) would be adversely affected.

**Comment 180:** Linda and Martin Ridenour comment that if an upper reservoir were built then it should be open to the public as a water resource and should not be enclosed behind a chain link fence. In addition, they state that a day-use recreation facility should be located at the upper reservoir site as mitigation for losing use of Decker Canyon.

**Response:** We conclude that the co-applicants' proposal to fence the upper reservoir is reasonable given that the surface elevation of the upper reservoir would fluctuate over 50 vertical feet during the day. Instead, the co-applicants propose to develop a recreation facility either at the upper reservoir construction laydown area or at an alternative location as may be approved by the USFS.

**Comment 181:** The County of Orange requests the co-applicants work with the Cleveland National Forest staff to ensure that the Main Divide Road is kept open during project construction and restored to its original condition, or better, as part of project completion.

**Response:** Construction of the proposed upper reservoir and buried transmission line would require work to be performed in close proximity to South Main Divide Road and rely on the road network to deliver construction related equipment and materials. Because homeowners who live in the area also rely on the road, it would be open for the duration of project construction. The co-applicants propose to prepare a traffic management plan that would include controls to traffic flow in and around project construction. The co-applicants also propose to maintain or rehabilitate the road to pre-project construction conditions. Furthermore, USFS preliminary 4(e) condition no. 13 specifies that the co-applicants provide a "safety during project construction plan" to identify potential hazards near public roads, trails, and recreational facilities, and measures necessary to protect public safety. Implementation of this measure should address the County of Orange's concerns.

**Comment 182:** Nevada Hydro states that the draft EIS mischaracterizes the nature of Lion Spring by describing that feature as a "cluster of natural springs" (on page 3-33). Further, Nevada Hydro is unaware of the existence of "Lion Spring Trail." Finally, Nevada Hydro questions the statement "this type of setting is not abundant in the general area" on page 3-202 when there are 35,330 acres of oak woodlands with the Multi-Species HCP study area and three large clusters in the Cleveland National Forest from the Santa Ana Mountains near Glen Ivy south toward San Mateo Canyon (Riverside County, 2003, page IIC-94).

**Response:** In section 3.3.6.2 of the draft EIS we describe Lion Spring as a location where a complex of seeps rise through subsurface fractures on the east side of Morrell Canyon, consistent with the description in MBA 2006. We revised the description in the water quality section of the final EIS to be consistent. We agree that there is no Lion Spring Trail and have revised the text in section 3.3.6.2 to refer to Morgan Trail. The 35,330 acres of oak woodlands within the Plan Area account for less than 3 percent of the existing vegetative cover, a fact that supports our description of the oak woodlands as "not abundant." More importantly, coast live oak woodlands, such as those that occur at Morrell and Decker canyons, account for only 6,660 acres of the Plan Area, or 0.5 percent of the existing vegetative cover.

**Comment 183:** Elsinore Hang Gliding Association comments that there are no specific measures for dispersed recreation. The project as proposed by the co-applicants could affect dispersed recreational use

at the wilderness area, hang gliding launch sites, Morgan Trail, powerhouse site, and hang gliding flight paths and landing areas.

**Response:** We analyzed the potential effects of the proposed project on dispersed recreation in section 3.3.6.2 of the EIS and conclude that there would be a temporary disruption to use of the Morgan Trail and hang gliding for about one year during construction of the project. The staff alternative includes reasonable measures to ensure the safe public use of existing dispersed recreational opportunities in Cleveland National Forest during the construction of the upper reservoir and placement of the transmission towers.

**Comment 184:** Nevada Hydro comments that none of the studies conducted by the co-applicants have identified or suggested the potential likelihood of any micro-meteorological impacts on air currents or thermals associated with the construction of the upper reservoir and, therefore, disagree with the statement on page 3-202 of the draft EIS that the construction of a reservoir in Morrell Canyon would eliminate a series (over 3) of known house thermals along the ridge to the southwest of Morrell Canyon.

**Response:** We agree that the construction of a reservoir with a 100 acre surface area would not affect air currents in the project area. However, the footprint of the upper reservoir in Morrell Canyon covers the originating location of several house thermals and therefore would eliminate them as known locations of thermals.

**Comment 185:** Jay Scott and other individuals state the draft EIS is incorrect in reporting that hang gliders launch from nine various points along South Main Divide Road in the vicinity of the proposed Morrell Canyon upper reservoir site and indicate that they know of only two authorized launch sites (Edwards and E) in the Cleveland National Forest.

**Response:** We have modified the text in the final EIS accordingly.

**Comment 186:** Jay Scott and other individuals state that the staff transmission alignment would be hazardous to hang glider pilots because of the close proximity of the switch yard and buildings to the landing area. They state that placing the power lines underground or placing the overhead lines at least one mile from the two authorized launch sites and the landing area would put hang gliders at an acceptable risk that would most likely not result in loss of life. They also comment the current reference to parasailing should be changed to paragliding as parasailing occurs on waterbodies.

**Response:** We have reconsidered the transmission alignment and now include a staff alternative transmission alignment in the final EIS that places the transmission lines underground in the vicinity of the hang gliding launch. We also now include the Santa Rosa powerhouse location in the staff alternative which eliminates the construction of an above ground substation and transmission lines in the vicinity of the landing area at Ortega Oaks. Under both the co-applicants' proposed and staff alternative transmission alignments, there would no longer be any above ground transmission lines between the launch areas and the landing site at Ortega Oaks. We have deleted references to parasailing in the final EIS.

**Comment 187:** Francis Hoffman, on behalf of the Elsinore Testing of Experimental Aircraft Mechanism, states that the comment on page 3-184 of the draft EIS that successful launches occur about 75 percent of the time is inaccurate and further suggests that the USFS should be collecting statistics on hang gliding activities in the Cleveland National Forest.

**Response:** We discussed hang gliding use in general with Mr. Charles Mackin of Infrastructure Solutions, a local business that services the hang gliding industry. He indicated that about 75 percent of

the pilots taking off at the launch sites travel east and then west and find thermals that support them. Mr. Mackin indicated on a typical day with 50 pilots launching from the E site 10 may head cross country, 25 would find sufficient thermals and stay above the mountains for a number of hours and land at the landing zone while others, unsuccessful in finding adequate thermals would 'sled' to the landing site. He indicated that these were estimates based on his knowledge of practice in the area.

**Comment 188:** Bret Daniel, Rancho Capistrano Property Owners Association, and other individuals comment that the hang gliding safety mitigation measures proposed in the draft EIS are "vastly inadequate." In particular they are concerned that adding power lines either in front or behind the South Main Divide Road will create a major hazard for recreational flight in this area. They also comment that this area is a destination for pilots from all over the world and the project will compromise not only his safety but the safety of other local pilots. Francis Hoffman, on behalf of the Elsinore Testing of Experimental Aircraft Mechanism, and Pacific Clay state that the mid-slope alignment will cause an unacceptable risk of death to hang gliders. Jay Scott and other individuals request that the Commission prohibit new overhead power lines within one mile of the two authorized hang glider launches (Edwards and E) located in the Cleveland National Forest or within one mile of the landing zone located on parcel 386120029 in Riverside County. In support of this request, they cite the draft EIS for the Agua Fria National Monument/Bradshaw-Harquahala Planning Areas issued by National Park Service that includes an alternative to prohibit new overhead power lines, phone lines, or communication facilities within one mile of launching and landing zones in the general project area that hang gliding commonly takes place. The city of Lake Elsinore also states its concern for hang-glider safety with the staff alternative transmission alignment and request than an underground transmission line in certain locations be evaluated.

**Response:** We have reconsidered the transmission alignment and now include a staff alternative transmission alignment in the final EIS that places the transmission lines underground in the vicinity of the hang gliding launch sites. We also now include the Santa Rosa powerhouse location in the staff alternative which eliminates the construction of an above ground substation and transmission lines in the vicinity of the landing area at Ortega Oaks. Under both the co-applicants' proposed and staff alternative transmission alignments, there were no longer be any above ground transmission lines between the launch areas and the landing site at Ortega Oaks.

**Comment 189:** Riverside County states that the final EIS should describe the types of improvements that would occur at the top or bottom of the hill to meet the needs of hang gliders.

**Response:** Both the co-applicants proposed and staff alternative transmission alignments would bury the line in the vicinity of the USFS permitted hang gliding launch sites and significantly reduce conflicts with hang gliding activities. The staff alternative no longer includes a powerhouse and substation at the Ortega Oaks sites and eliminates conflicts with the existing informal landing site at Ortega Oaks. The staff alternative does not include any other measures to enhance hang gliding activities.

**Comment 190:** Lake Elsinore Soaring Club indicates the placement of transmission lines and towers anywhere along the crest or northeast facing sloop of the Ortega Mountains between Clinton-Keith Road and Santiago Peak would make gliding (different than hang gliding in that pilots are in an enclosed, lightweight, powerless aircraft) much more dangerous and even deadly. It recommends the relocation of the transmission lines to the southwest side of the Ortega Mountains.

**Response:** According to the Soaring Club, the sport of gliding uses the lift winds rushing into the east side of the mountains near Lake Elsinore as hang gliders rush up and over the mountains, analogous to pelicans flying along ocean waves, typically flying near the ridgeline. Based on comments received on the draft EIS, we reconsidered the transmission alignment and now include a staff alternative transmission

alignment in the final EIS that places the transmission lines further west away from the crest or northeast facing slope of the Ortega Mountains and also includes an underground portion in the vicinity of the hang gliding launch and landing sites.

## LAND USE AND AESTHETICS RESOURCES

**Comment 191:** Riverside County states that the lack of specificity in the draft EIS makes it impossible to determine what effects would result from the daily lowering of the surface level of Lake Elsinore. It states a more detailed study of the lake shore and properties that adjoin it is needed to ensure that property values, land uses, and access points are protected. The city of Lake Elsinore states that the co-applicants should be required to acquire undeveloped shoreline property that lies below 1,263.3 feet msl to reduce effects on private property owners and then should be used for development of public recreation and environmental habitat preservation.

**Response:** As described on pages 3-50 through 3-56 of the draft EIS, project operations would reduce seasonal lake level fluctuations compared to the natural pattern and would maintain the lake level between 1,240 and 1,249 feet msl (revised in the final EIS to 1,240 to 1,247 feet msl). However, project operations would introduce a daily fluctuation that does not currently occur. This would be similar to beach property where the tide goes in and out over the course of a day resulting in shoreline migration from 8 feet to over 100 feet. Because this daily and weekly shift in shoreline would be less than the shoreline migration experienced during dry years, we do not see the need to do a more detailed study of the potential effects on lake shore properties, nor do we see the need for the co-applicants to acquire this undeveloped shoreline property. The lake is already managed by other parties to the 1,263 elevation.

**Comment 192:** Riverside County comments that a major portion of the proposed project is located within the Riverside County Flood Control and Water Conservation District's (Flood Control District's) preliminary Lakeland Village Master Drainage Plan (MDP) boundary and the proposed alignment for the powerhouse and the inlet/outlet structure may be in potential conflict with one of its proposed facilities. Although the powerhouse is likely to be constructed underground and therefore, would most likely not affect the facility, the issue of right-of-way and easement for future operation and maintenance of the MDP facility needs to be addressed in the draft EIS. Additionally, it states that the intake/outlet structure may be in potential conflict with one of its proposed drainage facility outlets downstream of the intersection of Grand Avenue and Adelfa Street into Lake Elsinore. Riverside County states that the draft EIS should address potential effects on the proposed MDP facilities in the project area.

**Response:** We have revised the text of section 3.3.7.2, *Environmental Consequences, Effects of Construction and Operation on Infrastructure*, to include the information about the MDP provided by Riverside County and conclude that consultation with the Flood Control District would address both existing and proposed Flood Control District facilities.

**Comment 193:** Riverside County states that the project would have a cumulative adverse effect on the Fire Department's ability to provide an acceptable level of service. They recommend the following mitigation measures: (1) participate in the Fire Protection Impact Mitigation Program; (2) prepare a traffic management plan to be reviewed by the County Fire Department; (3) all buildings located in Riverside County would be required to have an approved access and be constructed in accordance with Riverside County Ordinance Nos. 460 and/or 787, subject to review and approval by the Riverside County Fire Department; (4) all water mains and fire hydrants providing fire flows should be constructed in accordance with the appropriate sections of the Riverside County ordinance and be subject to review and approval by the Riverside County Fire Department; (5) any buildings constructed within the "Hazardous Fire Area" of Riverside County should comply with the special construction provisions contained in Riverside County Ordinance 787 and subject to approval by the Riverside County Fire

Department; and, (6) prior to approval of any development plan for lands adjacent to open space areas, a fire protection/vegetation management (fuel modification) plan should be submitted to the Riverside County Fire Department for review and approval.

**Response:** As discussed on page 5-37 of the draft EIS, the staff recommends that the co-applicants prepare and file a road and traffic management plan for non USFS roads. This plan would be developed in consultation with Riverside County and the city of Lake Elsinore. The co-applicants have indicated that they will comply with all applicable local and county ordinance during the construction and operation of the project.

**Comment 194:** The Lake Elsinore Unified School District and Pacific Clay indicate that the draft EIS does not discuss the potential effects of project construction on the Butterfield Elementary School on Grand Avenue. According to the Lake Elsinore Unified School District, the school would be inoperable for several years under the co-applicants' proposal because of construction activities and the resulting noise levels directly adjacent to the school. Additionally, Lake Elsinore Unified School District states that the electromagnetic fields (EMFs) resulting from the powerhouse and transmission lines may be too large a risk to the students and teachers, which would require permanently closing the school and building a costly new school in another location. The Lake Elsinore Unified School District would like to see these effects evaluated in the final EIS along with appropriate mitigation measures.

**Response:** The effects analysis on page 3-305 of the draft EIS, *Effects of Construction on Noise*, discloses the proximity of the Butterfield School to the proposed Santa Rosa powerhouse site and evaluates the worst case scenario for noise levels, concluding that because the majority of the loudest work would occur underground, noise effects would be less than significant and would be within the Riverside County and city of Lake Elsinore's regulations. The effects of operation on EMF is discussed on page 3-250 of the draft EIS, and concludes that there would be no adverse EMF effects at the school. Furthermore, based on comments received on the draft EIS, we have evaluated the scenario of placing the transmission lines underground, thereby diminishing the EMF concerns raised by the District and by Pacific Clay.

**Comment 195:** Anna Lee states that construction of a powerhouse at the Evergreen Site would lower the value of her retirement properties on Evergreen Street (primary residence) and Garner Road (income property).

**Response:** Given that the majority of the powerhouse would be underground and that the property would be landscaped into a park-like setting, we conclude that the powerhouse would not be likely to adversely affect nearby property values except perhaps temporarily, during construction. The co-applicants' proposed acquisition of properties nearest the powerhouse site would help reduce the effects of construction on those living closest to the site. The aboveground substation could adversely affect nearby property values, as described on page 3-269 of the draft EIS.

**Comment 196:** The Lakeland Village/Wildomar Redevelopment Project Area Committee comments that both the proposed and staff alternatives would place a hydroelectric plant adjacent to the redevelopment project area. It states that the draft EIS does not mention the redevelopment project area or address how construction and operation of the proposed project would affect its mission of redevelopment. It expresses concern about traffic during construction on Grand Avenue, the condition of pavement and shoreline staging areas after construction, fluctuating water levels on the appeal of Perret Park, the effect on property values, and the potential for inundation of its project area should there be a dam break at the upper reservoir. It sees no acceptable mitigation relative to these concerns. Linda and Martin Ridenour also request information on the effects of project-induced fluctuation on the use of Perret Park.

**Response:** Construction and operation of the project would affect the redevelopment area in the same way that it would affect the land uses and property owners, which we discuss in the draft EIS on pages 3-227 through 3-233 and pages 3-268 through 3-273. We discuss effects on traffic and pavement on pages 3-251 through 3-259 of the draft EIS, and discuss the risks associated with a dam break on pages 3-29 through 3-33. With respect to effects on property values, the fact that the majority of the powerhouse would be underground and that the property would be landscaped into a park-like setting leads us to conclude that the facility would not be likely to adversely affect the redevelopment project area or property values except perhaps temporarily, during construction. The aboveground substation could adversely affect nearby property values, as described on page 3-269 of the draft EIS.

Perret Park is a county-owned park along the southwestern shore of Lake Elsinore in Lakeland Village. Riverside County closed the park in 1999, but has since reopened the park with renovations. We are not aware of any renovations that included the development of beaches at the park. As such, we maintain that the only developed recreational facilities on Lake Elsinore that would potentially be directly affected by project operations would be boat docks, as stated on page 3-198 of the draft EIS.

**Comment 197:** Linda and Martin Ridenour state that figure 17 in the draft EIS shows their home within the Cleveland National Forest boundary, and they request clarification of this information. They also state that figure 18 is inadequate because it does not show adjacent properties. They state that residents need to know the location of their properties relative to the proposed project facilities including the construction lay-down areas and the water flow pipes.

**Response:** Figure 18 shows the jurisdictional boundary of the Cleveland National Forest, as shown on official USFS maps (USFS, 1994). However, the USFS does not have jurisdiction over private lands (inholdings) within the boundary. The Commission issued a public notice describing the revised co-applicants' proposed transmission alignment and the revised staff alternative transmission alignment to all affected property owners (within 0.25 mile) on October 3, 2006. This notice included the identifying numbers of all parcels located within 0.25 mile of both transmission alignments and the proposed Santa Rosa powerhouse location such that property owners could determine if their lands would be affected by the proposed project. The Commission afforded affected property owners an opportunity to submit additional comments at that time, and this final EIS reflects our assessment of the additional comments that were submitted.

**Comment 198:** Edwin Thorell questions whether the reference to Canadian studies on the effects of transmission lines on property value is relevant to California and suggests that the USFS should engage in land swaps with displaced landowners to provide the landowners with property in the same rural condition of their current land.

**Response:** The effect of any project on property values is a function of the particular circumstances of the project, the affected properties, and the real estate market at large. However, potential effects can be estimated based on the experiences of similar projects. In that respect, the Canadian studies are just as relevant as other studies, which together suggest that transmission line effects on property values are not as significant as property owners generally expect. Any landowners whose land would be used for project facilities would be compensated by the co-applicants for their land.

**Comment 199:** Pacific Clay states that the staff alternative transmission alignment would run directly through its multi-million dollar brick making kilns and brick storage facilities, which would affect and likely destroy the entire manufacturing area. Pacific Clay states that it is being asked to bear a disproportionate economic burden because it, along with affiliated companies, has large-scale commercial and residential development plans that would be affected either directly or indirectly by the route of the transmission line. It estimates the potential economic damage to itself would be in excess of

\$150,000,000. It further states that the two northerly proposed alignments would result in a more equal distribution of the economic damage, and it would not consent to the use of or voluntarily convey any of its property holdings for the advancement of the proposed project. Nevada Hydro comments that placement of towers on Pacific Clay property could be problematic since mining operations create a changing landscape that would prevent the placement of towers within the actively mined area. Nevada Hydro notes that the resources present at Pacific Clay are designated as a mineral resource zone and are of regional and statewide significance. The city of Lake Elsinore also states that transmission alignment alternative no. 2 presents an unnecessary incursion into a soon to be developed area of Lake Elsinore and would adversely affect this new community while providing few off-setting benefits. It further states that although it generally supports the proposed mid-slope alignment, the northern segment should follow the alignment proposed by the co-applicants to begin at the existing SCE substation to the proposed northern substation and then running along the Cleveland National Forest border.

**Response:** We have reconsidered the staff alternative transmission alignment and now recommend an alignment that coincides with the co-applicants' proposed alignment in areas outside of the Cleveland National Forest (to the north and to the south of the Forest). Pacific Clay lands and areas in the city of Elsinore targeted for future development would no longer be traversed or be adjacent to the co-applicants' proposed or staff alternative transmission alignment.

**Comment 200:** Nevada Hydro disagrees with the statement in the draft EIS on page 3-229 that the northern and southern segments of the proposed transmission line are located on undeveloped lands and no homes or buildings would need to be razed or moved to accommodate construction along the proposed transmission alignment. Nevada Hydro states that as proposed the co-applicants' transmission alignment traverses a limited number of forest in-holdings upon which easements or other rights-of-way would be required and that a limited number of existing residences could be displaced. Nevada Hydro also comments that the mid-slope alignment would adversely affect more private property than the co-applicants' proposal.

**Response:** We have revised the text of section 3.3.7.2, *Environmental Consequences, Effects of Construction on Change of Land Use*, to reflect the fact that some residences could be displaced by the co-applicants' proposal and by the staff alternative transmission alignments, both of which have been modified since the draft EIS was published.

**Comment 201:** Rancho Capistrano Property Owners Association and Jon R. Johnson note that safety recommendations during fires prohibit people from being within 100 to 500 feet of transmission lines. Because much of the proposed transmission line route would be within 100-500 feet community escape route, it would be safety hazard during brush fires.

**Response:** Both the proposed and staff alternative transmission alignments now include underground segments that eliminate the conflict between the transmission line routes and the community escape route for Rancho Capistrano residents.

**Comment 202:** Rancho Capistrano Property Owners Association, Jon R. Johnson, and Andrew and Sandra Mauthe note the proposed and staff alternative transmission lines would interfere with the ability for fire crews to fight fires from the air.

**Response:** The USFS' number one priority in firefighting is public and firefighter safety. The USFS does not place aircraft, crews, engines or fire fighting equipment in fire areas unless the agency can provide for their utmost safety. Smoke consists of carbon particles, which can conduct electricity. If the concentration of carbon is high enough, an electrical discharge from the line to the ground, similar to lightning, can occur. The discharge hazard increases as line voltage increases, distance to the ground

decreases, and the amount of smoke increases. High power transmission lines are just one of several safety considerations that need to be addressed in fire suppression. Based on the history of fire suppression in southern California, the presence of transmission lines would interfere with aerial fire suppression operations. Placing the line underground along South Main Divide Road in the vicinity of the two USFS permitted hang gliding launch sites to a point south of the egress road to Rancho Capistrano and along the connection to the Santa Rosa powerhouse as currently proposed by the co-applicants and recommended by the staff would reduce interference with fire suppression activities in these locations.

**Comment 203:** The Fernandez Parties, Rancho Capistrano Property Owners Association, La Cresta Property Owners Association, and Lynice Spangler state that the draft EIS does not adequately identify and mitigate for the potential fire hazard created by the transmission lines near their property. La Cresta Property Owners Association recommends if the transmission lines are built, the co-applicants be required to build alternate evacuation routes for residents of the Santa Rosa Plateau communities.

**Response:** The staff recommended alternative includes several measures that would address your concerns about safe egress from Santa Rosa Plateau communities in areas prone to wildfires. Should the proposed project be licensed, the co-applicants would be required to provide the USFS with a hazardous vegetative fuel treatment plan and the USFS and the city of Lake Elsinore with road and traffic management plans for both USFS and non-USFS roads.

**Comment 204:** The Fernandez Parties indicate that there is a private airport located on the property directly adjacent and south of their property that would not be usable if the transmission lines were built above ground in that location. They state that the State Aeronautics Act prohibits the building of structures such as transmission lines in the vicinity of an airport and require permits for all other structures that may obstruct air navigation in the vicinity of an airport.

**Response:** We have revised the text of section 3.3.7.1, *Affected Environment, Land Use Within and Adjacent to the Project Boundary* to correctly describe the airstrip and have revised section 3.3.7.2, *Environmental Consequences, Effects of Construction on Change of Land Use*, to conclude the co-applicants' proposed or staff alternative transmission alignment would be located within 3,000 feet of the private airstrip and could render the private airstrip unusable.

**Comment 205:** Nevada Hydro comments that the draft EIS concludes that the staff alternative transmission alignment, located about 1.5 miles from the Skylark Airport, would not be expected to pose a safety hazard to aircraft operating according to standard flight rules. The draft EIS concludes that the co-applicants have not provided enough detail to assess the effects of their proposed transmission alignment on operations at Skylark Airport. Nevada Hydro states that given that the co-applicants' proposed transmission alignment is located 2 miles from Skylark Airport, it would be reasonable to conclude that the co-applicants' proposed transmission alignment would have less effect than those associated with an alignment that is closer to the airport. It refers Commission staff to the discussion of aircraft safety hazards in section 11 of the final license application. Nevada Hydro also points out that the description of Skylark Airport as a private dirt airstrip on page 3-297 is incorrect.

**Response:** We have revised the text to clarify that neither the co-applicants' proposal nor the staff alternative transmission alignment would be expected to pose a safety hazard to aircraft operating according to standard flight rules out of Skylark Airport. We have also corrected the text on page 3-297 concerning the airport.

**Comment 206:** Elsinore Hang Gliding Association (EHGA) comments that the Commission must ensure that the project meets all appropriate comprehensive plans associated with the Land Management Plan Cleveland National Forest Strategy R5-MB-077 September 2005.

**Response:** As discussed in section 3.3.7.2, *Environmental Consequences*, Consistency with Land Management Plans, in the draft EIS (page 3-235), we state that the staff alternative transmission alignment would not be consistent with the Land Management Plan land use zones and that an amendment would be required before construction of the transmission line could occur.

**Comment 207:** The Center for Biological Diversity states that the proposed LEAPS Project violates the Cleveland National Forest Land Management Plan by failing to demonstrate why an alternative transmission alignment off the forest would not be entirely reasonable. Further, it states that the draft EIS incorrectly identifies the land use zoning for the proposed Morrell upper reservoir and part of the proposed Decker upper reservoir sites. It points out that these proposed facilities would be located within the Back Country Motorized Use Restricted land use zone and that developed facilities in this zone are suitable only by exception.

**Response:** We agree that the Morrell Canyon upper reservoir site and portions of the Decker Canyon upper reservoir site are located in the Back Country Motorized Use Restricted land use zone and have revised the text in the final EIS accordingly. The USFS indicates that it could consider utility facilities as a suitable use by exception in this land use zone.

**Comment 208:** The Center for Biological Diversity comments that the proposed LEAPS Project would not enable the USFS to meet the desired condition for Elsinore Place under the Cleveland National Forest Land Management Plan.

**Response:** Based on comments on the draft EIS we have included photo simulations to characterize the effects of the proposed project on the aesthetic resources. The EIS does disclose that construction and operation of the proposed project would conflict with the USFS Land Management Plan's Scenic Integrity Objectives, as stated on page 3-242 of the draft EIS. The 2005/2006 revised Cleveland National Forest Land Management may need to be amended to make the project consistent with the plan.

**Comment 209:** The Natural Resource Defense Council and Pacific Clay state that the project is incompatible with Cleveland National Forest and Lake Elsinore land-use plans and policies, such as the High Scenic Integrity Objectives and the BLM's Visual Resource Management Program. Additionally, the Natural Resource Defense Council states the draft EIS dismisses the possibility that Morrell Canyon could be designated a wilderness area by the USFS and Pacific Clay states that the Visual Resource Management Plan recommended in the draft EIS is inadequate mitigation for the level of effects. Mr. Mosier recommends the final EIS affected environment identify the existing viewsheds pertinent to the LEAPS Project and that the surface of Lake Elsinore should be included as a key observation point due to its panoramic views. Additionally, Mr. Mosier suggests the final EIS include an application of the Scenery Management System to inventory and analyze the scenery values of those lands in the final EIS. Mr. Mosier recommends the Scenery Management System should be applied so as to predict future scenic integrity levels and present photo simulations of the proposed alternatives. Mr. Mosier also claims that a more thorough analysis is needed to support the analysis in the draft EIS related to the mid-slope transmission alignment. Lastly, Mr. Mosier recommends using the title Scenery Conservation Plan to be consistent with USFS policy direction as opposed to Visual Resource Management as proposed by the co-applicants and used in the draft EIS.

**Response:** In the final EIS, we have included the viewsheds pertinent to the discussion of the aesthetic affected environment and included Lake Elsinore as a key observation point. We have also developed

photo simulations of the proposed project alternatives as seen from important viewsheds to enhance the presentation of the existing landscape and the potential effects of the project on the visual resources. The simulations portray the full range of the project's effects on scenery expected within the project area's sensitive public viewsheds. The Scenery Management System (SMS) was used by the USFS to develop the current Scenery Integrity Objective's against which the proposed project is evaluated against. The SMS also provides a nationally consistent method for identifying degrees of scenic integrity effects that may be created by project proposals.

**Comment 210:** The Center for Biological Diversity comments that the draft EIS is inappropriately silent on the location of Morrell and Decker upper reservoir sites in the Wildhorse Inventoried Roadless Area. It points out that the USFS has agreed not to authorize road construction of the type contemplated by the proposed project until the state's roadless areas' status under the new Roadless Rule (section 1925.04b of the Interim Directive [1920-2006-1]) has been determined.

**Response:** According to the current Cleveland National Forest Land Management Plan, the areas of the forest where Morrell and Decker reservoirs are proposed is designated as an Inventoried Roadless Area that allows consideration for road construction or reconstruction. However, the USFS is enjoined from implementing the 2005 Roadless Rules. Contrary to the Center for Biological Diversity's comments, the Final Land Management Plan does not specify a Wildhorse Inventoried Roadless Area.

**Comment 211:** Pacific Clay also states that an amendment would be needed to the Cleveland National Forest Land Management Plan to construct either the co-applicants' proposed or staff's recommended transmission line alignments.

**Response:** On page 3-239 of the draft EIS, we acknowledge that construction along either the co-applicants' proposed transmission alignment or the staff alternative transmission alignment would require an amendment to the Cleveland National Forest Land Management Plan.

**Comment 212:** Christopher Willis comments that the proposed project would "destroy the untouched feel and character of the pristine open areas." He is especially concerned about the irreparable damage to the beauty that the current National Forest is mandated to preserve and speaks of the public benefit that extends beyond actual visitors. There is societal benefit to knowing that such unspoiled vistas exist.

**Response:** The Cleveland National Forest Land Use Plan is the framework designed to provide for a balanced management of forest service resources and values. We recognize the USFS has recently gone through an extensive public planning process to identify and develop policy to be balanced stewards of the forest. The plan recognizes the potential for future development within the forest, designates certain lands as acceptable for various land uses, and sets guidelines for allowable alterations to the landscape. The plan provides for the preservation of certain unspoiled vistas and lands. We believe the EIS discloses the effects of the proposed project on the USFS lands and indicate where it is incompatible with the approved plan. The Cleveland National Forest Land Management Plan may need to be amended to accept the project's inconsistencies while retaining the current plan's desired conditions and outcomes.

**Comment 213:** EHGA, Jay Scott, and other individuals comment that the EIS should consider the effects on Preservation Visual Quality Objective under the original Visual Management Plan. It states that no above-ground transmission alignments should be placed on the Trabuco Ranger District, Cleveland National Forest.

**Response:** The EIS evaluates the effects of the proposed project with the most current Cleveland National Forest Land Management Plan, which uses Scenic Integrity Objectives. The "Very High"

Scenic Integrity Objective is essentially the same as, and correlates directly with, the “Preservation” Visual Quality Objective of the original USFS Visual Management System. The Cleveland National Forest Management plan assigns the “Very High” Scenic Integrity Level within the entire San Mateo Wilderness and no other lands near the project area. Since no Project features are proposed within the wilderness, the Very High Scenic Integrity Objective (corresponding to the Preservation Visual Quality Objective) does not apply to this project.

**Comment 214:** Mr. Mosier suggests that the final EIS be more informative by indicating that the Moderate Scenic Integrity Objective applies to less than 2 to 3 percent of the total length of the proposed transmission line.

**Response:** The final EIS discloses the approximate length of the proposed transmission lines that would traverse Moderate Scenic Integrity Objective lands.

**Comment 215:** The Palomar Observatory and the Lakeland Village/Wildomar Redevelopment Project Area Committee state that the draft EIS does not address the issue of outdoor lighting and dark skies and requests that all permanent lighting be fully shielded low-pressure sodium and comply with Riverside County’s lighting ordinance.

**Response:** The co-applicants state that they would comply with Riverside County's lighting ordinance.

**Comment 216:** The city of Lake Elsinore and Riverside County state that the visual aids presented in the draft EIS are not adequate to evaluate the visual effects of transmission line placement and a comprehensive simulated visual study should be done. Linda and Martin Ridenour state that visual simulations of the aesthetic effects should be taken from Grand Avenue and should clearly show the locations of the powerhouses so that residents of Lakeland Village can understand the potential effects on their neighborhood.

**Response:** We have provided visual simulations of the transmission line and the powerhouse in appendix D of the final EIS.

**Comment 217:** Nevada Hydro comments that in the analysis of effects of project construction of the proposed transmission alignment on aesthetics the draft EIS states that over the term of any license, USFS maintenance crews would maintain a fire break below the lines and these fire breaks also would be apparent as a scar across the native vegetation. Nevada Hydro requests that the USFS identify where fire breaks should be developed and maintained. Alternatively, it requests that if fire breaks are deemed not to be beneficial, the final EIS should state that brush clearance activities should be limited to the extent feasible.

**Response:** While the co-applicants are not proposing to clear vegetation under the transmission line, the final EIS states that fuel management in the future may require manipulation to reduce the risk of fire. Methods selected for fuel management would depend on site-specific factors (e.g., vegetation type, slope, aspect, access), and could include grazing, prescribed fire, or mechanical means to create and maintain firebreaks. Existing firebreaks that intersect the proposed alignment would also be maintained, as needed. These issues would need to be addressed in the hazardous vegetation fuel treatment plan and the scenery conservation plan as specified by USFS in their revised preliminary 4(e) conditions under any license issued for the project.

**Comment 218:** The Fernandez Parties, Pacific Clay, Rancho Capistrano Property Owners Association, La Cresta Property Owners Association, and individuals state the draft EIS does not adequately identify the project’s aesthetic and property valuation effects on property owners who purchased land based on the

wide open spaces and natural beauty of the region and national forest. The beauty and property values would be diminished with construction of transmission lines and towers. Pacific Clay states that the claim in the draft EIS, on page 3-232, that the effect of the staff alternative transmission line alignment on future development “cannot be determined” is not true because there are standard appraisal methodologies.

**Response:** In section 3.3.8.2 of the draft EIS, *Environmental Consequences, Effects of Construction and Operation on Property Values and Development* (see pages 3-269 through 3-273), we discuss the potential effects of the project transmission line on property values in great detail, and indicate that various studies have shown transmission line effects on property values ranging from small positive effects to negative effects as high as 53.8 percent. We indicate that most results show a negative impact on property values of 1 to 10 percent. We maintain, however, that despite standard appraisal methods, the precise effect on future development cannot be determined except on a case-by-case basis at this time.

**Comment 219:** The Fernandez Parties, Pacific Clay, and Lake Elsinore Unified School District state that the draft EIS fails to consider the effects of EMFs associated with the project on residents, rare horses, and students along the transmission route. The Fernandez Parties state that the brief analysis on page 3-248 through 3-251 of the draft EIS is inadequate because the World Health Organization has stated there is “sufficient evidence” to apply a “precautionary principle” to power and electromagnetic fields. The District indicates that state school site selection guidelines limit the placement of schools near high voltage transmission lines. John Pecora is concerned regarding his family’s elevated exposure to electromagnetic fields.

**Response:** We are aware of the World Health Organization’s adoption of its precautionary principle, but stand by our analysis of electromagnetic field effects and our conclusion that the project would not have adverse effects on animals or humans in the project area. The transmission line would be far enough away from residences that any potential health effects would be minimized. Additionally, the co-applicants’ proposed transmission alignment and staff alternative transmission alignment now contain longer underground segments that would reduce the risk of any potential health effect. We have revised section 3.3.8.2, *Environmental Consequences*.

**Comment 220:** The city of Lake Elsinore states that it appears that there has been a trade-off of 95 percent of the aquatic mitigation funds proposed by the co-applicants to partially alleviate short-term inconveniences on the Ortega Highway with the recommendation of a measure to excavate an area of Decker Canyon. The city states that this is not a thoughtful use of limited project resources set aside for environmental mitigation and that alternative mitigation measures represent a much more common sense approach to addressing the needs of commuters.

**Response:** Our determination of the level of funding to address aquatic mitigation has no relationship to the staff recommendation to achieve a balance of excavation to fill at the upper reservoir location. Using fill excavated at the construction would greatly reduce the volume of large truck traffic on portions of Ortega Highway and Grand Avenue during construction.

**Comment 221:** Rancho Capistrano Property Owners Association and Andrew and Sandra Mauthe comment that they paid for the paving of South Mountain Divide Road, which was designed as a 35 mph road and express concerns about an estimated potential increase of 400,000 cars annually on this road.

**Response:** We estimated the project related increase in traffic volume on South Main Divide Road to increase to 150 vehicles during the a.m. and p.m. peak travel times, which would still be well below the estimated capacity of 2,100 vehicles and maintain the same level of service. USFS preliminary 4(e) condition no. 26, *Road and Traffic Management Plan*, would address the concerns raised in this

comment. We discuss the effects of construction and operations on South Main Divide Road on pages 3-253 through 3-259 of the draft EIS.

**Comment 222:** Lake Elsinore Unified School District is critical of the traffic analysis in the draft EIS, stating that it did not account for the transportation of imported and excavated soil and arbitrarily divides trip generation numbers among various areas to cover different construction scenarios. It also states that the final EIS should address traffic effects in the event that the 73,750 truck loads of excavated soil cannot be used at the upper reservoir. Robert and Susan Konoske question whether truck trips to import clay have been included, whether truck trips for disposal have been included, and the effects of the construction truck trips on local traffic patterns.

**Response:** We based our truck trip estimates in the draft EIS on the assumption that traffic volume increases associated with construction activities would increase but not above the threshold that would drop the road's Level of Service. The truck trip estimates are for the number of trips necessary to relocate the excavated soil materials under the co-applicants' proposed construction configuration and the staff alternative. We discuss the assumptions and effects of each, including the import of clay material to line the upper reservoir between pages 3-253 and 3-259 of the draft EIS. We discuss the potential traffic effects associated with the potential transport of excavated material away from the proposed powerhouse site in the first paragraph on page 3-256 of the draft EIS.

**Comment 223:** Riverside County states that a comprehensive traffic study should be prepared and submitted to the County prior to finalizing the EIS so that the Transportation Department can complete its review of the EIS. Riverside County and Pacific Clay recommend a traffic management plan be developed and approved by the Riverside County Transportation Department to accommodate truck traffic on county roads such as Grand Avenue. Riverside County also makes numerous recommendations related to road maintenance, traffic flow, light signals, road improvements, and cost sharing responsibilities. These recommendations include road pavement testing be conducted before and after construction and funding should be provided to the Transportation Department to mitigate for project effects that cause pavement deterioration; the co-applicants fund a traffic signal to be located at the adjacent major intersection of Grand Avenue and Ortega Highway; the co-applicants be required to construct truck turnouts, a truck climbing lane, and/or other safety improvements on the affected areas of the Ortega Highway; safety improvements along Grand Avenue, including shoulder widening to accommodate the truck traffic activities; and that the co-applicants contribute on a fair share basis to the Regional Transportation Network by participating in the County's Transportation Uniform Mitigation Fee program. Lake Elsinore Unified School District indicates the traffic hazards from construction traffic would be most severe on Grand Avenue with three schools and no sidewalks, forcing students to travel on the road or dirt shoulder in close proximity to vehicular traffic. Empire Pre-Cast is also concerned about increased truck traffic and safety hazards on Grand Avenue.

**Response:** The EIS considers the need for traffic control plans which would include among other items schedules for the volume and timing of construction traffic and long term monitoring, reporting, and changes to the plan as necessary. Based on comments received on the draft EIS, the co-applicants road and traffic management plan for non-USFS roads should be developed in consultation with the Riverside County's Transportation Department. Pre-construction monitoring and baseline condition documentation could be developed as part of the plan so as construction related effects could be separated from normal traffic effects. The co-applicants also propose to participate in the development of a traffic signal at the intersection of Grand Avenue and Ortega Highway. Further, the co-applicants also propose several specific measures to improve traffic flow on Grand Avenue and Ortega Highway during construction. The details of involvement, measures, responsibilities, and schedule would be included in the co-applicants' proposed final road and traffic management plan, which would be developed in consultation with local agencies and filed for approval with the Commission. Development of the plan prior to

construction would address the concerns of Riverside County and the Lake Elsinore Unified School District.

**Comment 224:** Pacific Clay, Linda and Martin Ridenour, and Robert and Susan Konoske state that the traffic counts conducted by the co-applicants were deficient since the counts only captured data from 1 day in July.

**Response:** Our review of California Department of Transportation (Caltrans), Traffic Operations Division Traffic and Vehicle Data for Ortega Highway and Grand Avenue indicates that recorded peak hour traffic (2005) data are relatively consistent with the co-applicants' traffic study data validating our use of the study. For example the Caltrans traffic volume estimates the peak hourly traffic on Ortega Highway west of Grand Avenue (between Grand Avenue and the Riverside County line) at 1300 whereas the co-applicants peak estimate for Ortega Highway west of Grand Avenue was 1252. In addition, Caltrans peak hourly estimate for Ortega Highway east of Grand Ave (between the intersection with Grand Avenue and Lake Shore Drive) at 1800 vehicles whereas the co-applicants estimated peak hourly traffic volume on Grand Avenue south of Ortega Highway at 1382. Although these two road segments are not the same segment, they do present a reasonable picture of the estimated traffic volumes on Grand Avenue in the vicinity of its intersection with Ortega Highway and in the proposed project area. As such, we feel the Caltrans data supports our use of the co-applicants traffic study. Our review of the co-applicants traffic study also indicated that the 38 trucks per hour (as shown on page 3-254 of the draft EIS) is adequate for the purposes here because this estimate was made for the highest peak hour operation on the most critical street section. Furthermore this construction volume assumes level of service (LOS) "C" is maintained, while LOS "D" would also be generally acceptable. Effects from construction would last 4 years and, with implementation of a road and traffic management plan, traffic scheduling could help alleviate these concerns. In addition we have addressed the scheduling of truck traffic relative to the traffic data on page 3-257 of the draft EIS.

**Comment 225:** Riverside County comments that the draft EIS states that clay may be imported from the Alberhill area but does not analyze the effects of resulting truck traffic.

**Response:** Contrary to Riverside County's statement, we analyze the number of truck trips necessary to transport clay for the lining of the upper reservoir on page 3-256 of the draft EIS. We analyze the air and noise pollution generated by such truck traffic in subsequent sections.

**Comment 226:** Linda and Martin Ridenour state that the 58-acre Ortega Oaks powerhouse would affect park and ride use that currently occurs on that vacant parcel.

**Response:** According to Riverside County's Transportation Commission, whose Transportation Services department oversees the local park and ride program, the 58-acre parcel at Ortega Oaks is not a formal park and ride facility (website: <http://www.rctc.org/transportation/carpool.asp>; accessed September 14, 2006). Therefore we do not evaluate the effects of a potential powerhouse at the site on car-pooling.

## **SOCIOECONOMIC RESOURCES**

**Comment 227:** Francis Hoffman, on behalf of the Elsinore Testing of Experimental Aircraft Mechanism, indicates that the Commission staff is deliberately concealing the appearance, size, noise, and proximity of the facilities from homeowners whose property values might be affected by the proposed project.

**Response:** The draft EIS provides a detailed description of the proposed project facilities and discloses the potential effects on the aesthetic resources of the project area. In addition, we now have included visual simulations of the appearance of the proposed project facilities in the final EIS.

**Comment 228:** The city of Lake Elsinore states that the draft EIS only provides a cursory economic analysis of the potential effects of the project and a more detailed analysis is needed.

**Response:** The city does not indicate in its comments what other economic effects not included in the draft EIS it believes would occur. We stand by our conclusion that the most likely project economic effects would be potential effects on property values, which we discuss in detail.

**Comment 229:** Riverside County states that the EIS should describe mitigation measures due to effects on displaced persons from the construction of the project. It recommends that the co-applicants work directly with the Department of Public Social Services to develop plans to address this issue, prior to construction.

**Response:** In the case of the limited properties where residences would be razed, owners would be compensated for their property. With respect to potentially displaced persons who might be in need of social services provided by the county, the co-applicants now propose to provide relocation assistance for persons who might be displaced from rental properties. We have revised the text in section 3.3.7.2, *Environmental Consequences, Change of Land Use*, to address this point.

**Comment 230:** Riverside County, the Fernandez Parties, and Edwin Thorell inquire as to whether or not eminent domain would be used to acquire properties near the proposed powerhouse. Additionally, they would like to know what other mitigation measures would be proposed to reduce construction-related effects on residents. The Fernandez Parties also state that Elsinore Valley MWD does not have the right of eminent domain, so therefore the draft EIS must identify all project elements and locations that are proposed for private property and discuss alternative locations in instances where use or acquisition of the property is likely.

**Response:** On pages 3-269 and 3-270 of the draft EIS, we discuss the co-applicants' plans to use eminent domain authority if necessary to acquire needed property.

**Comment 231:** Linda and Martin Ridenour comment that the section on growth-inducing impacts states that power would be used locally, but Elsinore Valley MWD has stated publicly that the power would not be used locally and that it would go into the grid.

**Response:** Once power enters the grid, the electricity may be transmitted either locally or elsewhere in the region. However, we have revised the text related to growth-inducing impacts to delete the reference to local power sales.

## **CULTURAL RESOURCES**

**Comment 232:** Nevada Hydro disagrees that the Area of Potential Effects (APE) includes the shoreline around Lake Elsinore to the upper limit of the zone of daily fluctuations expected from the project as stated on page 3-276 of the draft EIS because the operational range of the project is within the range of natural seasonal variations in the lake.

**Response:** Inclusion of an area within an APE does not mean that an undertaking would affect any or all cultural resources within that area. An APE is a hypothetical construct intended to establish a geographic framework in which there is reasonable possibility that an undertaking could affect historic properties. We included the Lake Elsinore shoreline in the APE as a starting point for analysis.

**Comment 233:** Nevada Hydro comments that, contrary to the information on page 3-288 in the draft EIS, no previous study, including the EIR for the Lake Elsinore Stabilization and Enhancement Program and the Corps NEPA documentation for the levee system, did any party, agency, or tribal group identify or assert that Lake Elsinore should be considered eligible for listing in the National Register or that management measures for this property should be developed. It comments that the minimum intrusion into the lake associated with the project and the cycling operation should not predicate the need for a National Register determination. Nevada Hydro agrees with the conclusion in the draft EIS that the proposed project would not likely adversely affect this potential TCP, but disagrees with the statement that there is insufficient information about the TCP to determine whether this aspect of the proposed project (construction of the intake/outlet structure) would alter any characteristics contributing to the importance or cultural value of this resource.

**Response:** In its March 24, 2005, comments on Nevada Hydro's draft HPMP, the USFS stated (Comment no. 22) that resource 33-11009 (Lake Elsinore) was eligible for inclusion in the National Register and that any measures to mitigate adverse effects to this resource should be developed in consultation with the USFS, Tribes, and the SHPO. The analyses on pages 3-283 and 3-284 have been revised to clarify the discussion regarding effects to Lake Elsinore as a TCP and we continue to conclude that construction of the intake/outlet structure and operation of the project would have no effect on the characteristics contributing to the National Register eligibility of Lake Elsinore as a traditional cultural property.

**Comment 234:** Nevada Hydro disagrees with the statement on page 3-281 that the APEs for the Evergreen powerhouse site, both the proposed and alternative transmission alignments, and the access roads remain to be surveyed. It refers the authors to the performance of cultural resource surveys contained in the draft HPMP.

**Response:** On page 2-3 of its draft HPMP, Nevada Hydro states that the locations of access roads from existing roads to the transmission line corridors are not yet known, leading us to conclude that no archaeological surveys have been conducted along access roads. The HPMP's description of cultural resources field studies (p. 2-4) does not specify precisely what areas were surveyed either in 1996-97 or in January 2005.

**Comment 235:** John and Soma Stickler raise concerns about the effects of the proposed and alternative transmission line alignments along the Cleveland National Forest in the vicinity of Tenaja would have on archaeological sites. They indicate that transmission line alternative 4 would avoid this area.

**Response:** The co-applicants' revised and staff alternative alignments now includes alternative 4. For all alignment alternatives, the HPMP, revised and finalized in consultation with the SHPO, Tribes, and the USFS and the Lake Elsinore Historical Society, would provide for processes to determine effects of construction and operation of transmission lines on significant archaeological sites, and to appropriately resolve any adverse effects.

**Comment 236:** Pacific Clay states there is no way to know the potential extent of effects on cultural resources from the staff's recommendations because no cultural resource surveys have been done since project facilities have not been sited.

**Response:** We recommend that the co-applicants, in consultation with the SHPO, the USFS, Tribes, and the Lake Elsinore Historical Society to conduct any additional surveys necessary to identify cultural resources in proposed locations of project facilities, determine effects of the project on such resources, and to develop and implement measures to resolve any adverse effects prior to any construction activities at those locations.

**Comment 237:** The Pechanga Tribe provides confidential information concerning its history in the project area.

**Response:** We thank the Tribe for providing this information.

**Comment 238:** The Pechanga Tribe recommends further evaluation, testing and/or avoidance at several archeological sites in the Morrell Canyon area.

**Response:** The co-applicants' revised and finalized HPMP would contain provisions for consultation with the Tribes regarding measures to resolve any adverse effects to these archaeological sites arising from project construction or operation.

**Comment 239:** The Pechanga Tribe requests applicable agencies consult with the Tribe in person regarding the specific locations and details of the project effects on cultural resources because the Tribe can not disclose specific details in letter.

**Response:** The co-applicants' revised and finalized HPMP would contain explicit protocols through which appropriate tribal liaison would coordinate with the co-applicants, the USFS, and Commission staff regarding communication with the Tribes.

**Comment 240:** The Pechanga Tribe requests assessments be made according to section 106 review process and that the Pechanga Tribe be a consulting party on a government-to-government basis.

**Response:** The co-applicants' revised and finalized HPMP would contain measures to ensure that evaluation of cultural resources would be accomplished through application of the National Register Criteria for Evaluation and in consultation with the SHPO, the USFS, Tribes, and the Lake Elsinore Historical Society.

**Comment 241:** The Pechanga Tribe intends to assert its right pursuant to California law with regards to any human remains or items discovered in the course of the project in the Tribe's traditional territory and it requests that all permitting agencies work with the Tribe to draft an agreement that would address this issue. The Pechanga Tribe also requests all Luiseno cultural resources uncovered in the Tribe's traditional territory and not located on federal properties be relinquished to the Tribe for proper treatment

**Response:** As indicated in its draft HPMP, the co-applicants would follow applicable California law regarding discovery of human remains on state or private land. The co-applicants would also notify USFS of any such discoveries on USFS property; USFS would then be responsible for treatment and disposition under federal law. The draft HPMP also specifies that the co-applicants would consult with the Tribes regarding treatment and disposition of cultural resources of importance to the Tribes that are identified on private or state land.

**Comment 242:** The Pechanga Tribe is concerned no APEs have been set for the project tunnels and believes that the APE for the tunnel portions of the project should be reevaluated in consultation with the Tribe. It further states that wherever the HPMP notes that it would address future decisions regarding APEs or amendments, it should acknowledge that the lead agency would consult with the Tribe as well as the SHPO.

**Response:** The revised and finalized HPMP would provide for consultation with the Tribes as well as the SHPO and USFS regarding identification or modification of APEs.

**Comment 243:** The Pechanga Tribe states that further archeological surveys will need to be completed to meet the legal requirements for the project. It asks that it be allowed to participate in those surveys and be consulted about field and lab methodologies and how surface collections should proceed. The Pechanga Tribe further requests that culturally appropriate evaluation methods be incorporated into the HPMP and that no public interpretations are created for Native American cultural resources. The Pechanga Tribe also requests that the lead agency or its designated agent allow the Tribe to monitor all grading and ground-disturbing activities in culturally sensitive areas within the Tribe's traditional territories and tribal monitors be present during all archeological testing. It also requests that it be allowed to review and comment on any Native American monitoring plans.

**Response:** We recommend that the co-applicants, in consultation with the SHPO, the USFS, Tribes, and the Lake Elsinore Historical Society to conduct any additional surveys necessary to identify cultural resources in proposed locations of project facilities, determine effects of the project on such resources, and to develop and implement measures to resolve any adverse effects prior to any construction activities at those locations. In the HPMP, the co-applicants have proposed to appoint a tribal liaison who would consult with the tribes regarding construction monitoring, archaeological survey, and resource protection measures.

**Comment 244:** The Pechanga Tribe requests the lead agency commit to avoidance and preservation of Native American sacred sites.

**Response:** NHPA does not require federal agencies to avoid effects to cultural resources; it requires federal agencies to consider a variety of measures to resolve adverse effects, among them avoidance, minimization or mitigation. Nevertheless, whenever possible, avoidance is always the best approach for resolving potential adverse effects to cultural resources.

**Comment 245:** SDG&E comments that the draft EIS does not include a discussion of an alternative substation site that may avoid impacts to cultural resources and generally does not contain any on-the-ground surveys for cultural resources. SDG&E states that the extent and significance of any cultural resources is unknown, could affect the routing of the transmission line, and should be disclosed in the EIS.

**Response:** The co-applicants' revised alignment now includes alternative 4 that avoids areas of archaeological sensitivity. However, the co-applicants would need to complete surveys along the final transmission alignment prior to commencing construction.

**Comment 246:** Ruth Atkins comments that the two most prominent historic properties in close proximity of the proposed project are the Elsinore Naval and Military Academy and the Machado Adobe. The former was never used as a club, as indicated on page 3-281 of the draft EIS, and the later was built in 1858 and, when the Butterfield Stage Line was commissioned, used as a stage coach stop. She also comments that in the area there is a marker of the tanning vats built in 1891 by the Luiseno Indians that is a California Registered Historical Landmark. She and Linda and Martin Ridenour would also like assurances that the historic properties near the Santa Rosa powerhouse site, including the naval academy building, would not be adversely affected by ground vibration during construction.

**Response:** We have revised the text in the final EIS to indicate that the Elsinore Naval and Military Academy property was not used as a club, although originally intended as such. Nevada Hydro's draft HPMP contains measures to address potential effects of construction-related ground vibration on significant buildings prior to initiation of heavy construction or blasting near such buildings.

**Comment 247:** Linda and Martin Ridenour state that the Lake Elsinore Historical Society and the Riverside County Office of Historic Preservation were not notified by Elsinore Valley MWD of the filing of a revised HPMP. They ask that the Lake Elsinore Historical Society be invited to participate in the HPMP.

**Response:** We recommend that the Lake Elsinore Historical Society be included as a consulting party to the Programmatic Agreement and will afford this organization opportunity to comment on the revised HPMP.

## **AIR QUALITY AND NOISE**

**Comment 248:** Nevada Hydro comments that the LEAPS Project's ability to store generated energy, including nuclear energy produced at the San Onofre Nuclear Generating Station, results in the more efficient use of energy resources and diminishes the need construct new and operate existing fossil-fuel burning generating facilities within non-attainment basin.

**Response:** We agree that hydropower generation produces less air pollutant emissions compared to natural gas or coal-fuel plants. However, we find the statement about storing nuclear energy to be misleading because nuclear power is a baseload generating resource rather than being used on the margin, and is not used for pumping.

**Comment 249:** Nevada Hydro cites a reference on page 3-294 to the Mojave Desert Air Basin and Salton Sea Air Basin and states that it does not believe that any portion of the proposed project is located within these two air basins and questions why they are included in the draft EIS.

**Response:** The LEAPS Project area is located principally within the South Coast Air Basin which is in Riverside County; however, the proposed transmission alignments extend to Orange and San Diego Counties. Riverside County is partitioned into three air basins: South Coast Air Basin, Salton Sea Air Basin, and Mojave Desert Air Basin. According to CARB, an air basin generally follows political boundary lines and is defined to include both source areas and receptor areas. However, because air masses can move freely from basin to basin, interbasin transport of pollutants is unavoidable. It is for this reason that the Mojave Desert Basin and Salton Sea Air Basin were included in the EIS.

**Comment 250:** Nevada Hydro points out that the San Mateo Wilderness Areas should be included in the list on page 3-302 of areas located within 100 kilometers of a federal Class I area.

**Response:** We have added the San Mateo Wilderness Area to the list of areas located within 100 kilometers of a Federal Class I area in the final EIS.

**Comment 251:** Nevada Hydro provides updated information about the state of California laws pertaining to air emissions and provides an exhibit (Exhibit 4 in the April 25, 2006 filing) that compares LEAPS to other generation technologies for ancillary services and RMR value. It requests that the final EIS augment the existing air quality analysis to describe the beneficial effects of the LEAPS Project. It requests that the final EIS also include an analysis of the project's compliance with the general conformity rule (40 CFR Part 51, Subpart W, and 40 CFR Part 93, Subpart B).

**Response:** We have included information on beneficial effects of the LEAPS Project in the final EIS. As described in section 3.3.10.2 of the draft EIS, the general conformity rule applies to federal actions in non-attainment areas. The LEAPS Project is located in Riverside County, but the proposed transmission alignments extend to Orange and San Diego Counties. The air basins in these three counties are classified as attainment for NO<sub>x</sub>, SO<sub>2</sub> and CO, and non-attainment for Ozone and PM<sub>10</sub>/PM<sub>2.5</sub>. Therefore, a

conformity determination would only be applicable for Ozone (NO<sub>x</sub>/VOCs being the pre-cursors) and PM<sub>10</sub>/PM<sub>2.5</sub>. An emission estimate including construction worker's commutes, construction equipment and use of delivery, hauling and work trucks in pounds per day per pollutant has been included in the EIS as presented in Tables 36 and Table 37. These values can be converted into tons/year based on the expected amount of project days/year and compared with *de minimus* levels in order to make a conformity determination and comply with the general conformity rule. Based upon the proposed construction schedule, it is anticipated that these values could exceed the *de minimus* levels and be applicable to conformity requirements. However, these values are less than the SCAQMD "significant thresholds" for construction activities. Therefore, none of these activities are anticipated to have a significant effect on the surrounding air quality and additional mitigation would likely not be required. A preliminary conformity analysis will be completed prior to the issuance of any license for the proposed project.

**Comment 252:** EPA states the draft EIS does not include mitigation measures to minimize air pollutant emissions from project activities. It recommends the following measures to minimize construction emissions at the reservoir site, the powerhouse site, and along the transmission lines: (1) consult with the South Coast Air Quality Management District and prepare a fugitive dust mitigation plan; and, (2) develop and implement a plan complying with best practices for mitigating exhaust emissions from construction equipment and evaluate the feasibility of measures to reduce construction emissions.

**Response:** We have addressed the need for fugitive dust mitigation in the final EIS. If a license is issued for the proposed project, we recommend that the licensees consult with South Coast AQMD to comply with best practices for mitigating exhaust emissions from construction equipment and evaluate the feasibility of measures to reduce construction emissions.

**Comment 253:** The Center for Biological Diversity comments that the significance of exceedances of carbon monoxide, particulate matter, and ozone standards in the project area and the potential effects of the construction and operation of the project relative to these standards is not addressed in the draft EIS. It states that the draft EIS must fully discuss the proposed project's production of ozone precursor emissions and particulate matter, and the direct, indirect, and cumulative impact both on human health and on vegetation and wildlife habitat, especially for threatened and endangered species.

**Response:** We discuss the air emissions and fugitive dust that could be generated by the construction and operation of the proposed project relative to the appropriate standards and thresholds in section 3.3.10.3 of the draft EIS and conclude that air emissions and fugitive dust would not exceed the current significance thresholds.

**Comment 254:** Lake Elsinore Unified School District indicates that blasting could present a public safety risk and affect the learning environment at schools in the project area. It recommends the final EIS include a detailed disclosure of planned blasting activities, anticipated environmental effects, and appropriate mitigation measures. Lake Elsinore Unified School District also is critical of the fugitive dust discussion in the draft EIS and states that the final EIS should include a greater analysis of local air quality effects created by construction activities in the immediate vicinity of the project. It also states that localized effects should be analyzed and schools viewed as sensitive receptors. John Pecora is also concerned about the effects of dust on his family and home.

**Response:** We address fugitive dust in section 3.3.10.3 of the draft EIS and have added information about the potential effects of blasting. If licensed, we would require the licensee to comply with local and state laws to control fugitive dust and noise from blasting.

**Comment 255:** Pacific Clay and Lake Elsinore Unified School District are critical that the draft EIS does not recommend any mitigation for the potential release of smelly gasses into the atmosphere which could

affect distant communities and individuals who commute along Ortega Highway daily. Linda and Martin Ridenour request CARB data to support staff's statements that gases released from the lakebed during construction are not expected to be toxic.

**Response:** We do not expect that large quantities of smelly gases would be emitted from the lakebed during construction. Mitigation recommendations for any of these gases which could potentially affect distant communities and individuals commuting along the Ortega highway would be taken if it is determined that there may be a significant impact on these areas.

**Comment 256:** Linda and Martin Ridenour state that the discussion of state and national area designations in the draft EIS is hard to read. They request a clear statement in the final EIS about whether the city of Lake Elsinore has air quality problems and whether the project-related emissions are considered significant under NEPA and CEPA.

To control air emissions they recommend compliance with SCAQMD rules governing low sulfur fuels and use of filter traps on truck tailpipes. To control dust they recommend the use of non-potable water to control dust, that all haul truck be covered, 2 feet of freeboard be left between the top of the load and the top of the trail bed, and that construction be halted when wind speeds reach 25 miles per hours in order to reduce the amount of dust released into the air.

**Response:** As noted in our response to comment 252, we address fugitive dust in section 3.3.10.3 of the draft EIS and have added information about the potential effects of blasting. If licensed, the co-applicants would comply with local and state air emissions rules and regulations including those to control sulfur levels, fugitive dust, and noise from blasting.

**Comment 257:** Lake Elsinore Unified School District is critical of the noise discussion in the draft EIS and should consider the effects of construction noise and truck traffic on schools including taking the school schedule into account.

**Response:** The noise analysis presented in the EIS does consider and evaluate project-related impacts from construction and operational activities. As part of the construction impact analysis, noise from truck traffic and mobile/stationary equipment noise were examined. Both morning and afternoon peak traffic conditions were considered. The results of the analysis show that construction traffic would not result in significant noise impacts. Rock drilling activity may generate loud noises during early stages of the construction, but would be substantially attenuated when the excavation goes deep into the ground. Mitigation measures, if required, would be employed to ensure conformance with applicable City or County noise codes.

**Comment 258:** La Cresta Property Owners Association and John Pecora inquire about how the effect of a constant loud humming noise from the transmission lines on residents would be mitigated.

**Response:** The nearest residential sensitive land uses are at distances of 100 feet or more from the proposed transmission alignment. However, the effect of a humming noise from the transmission lines on residents would be minimal because the intensity of noise in decibels (dBA) would be attenuated over distance. The "hum", also referred to as "low frequency sound", is not clearly defined but is generally considered as noise at frequencies below 150 Hz. Exposure to low frequency noise at low intensity noise levels resulting from distance attenuation losses would not be noticed by most receptors as humans are less sensitive to these tonal sounds. Section 3.3.7.2 of the EIS describes precautionary measures that will be undertaken during construction of the power lines to help protect humans from uncertain risks

**Comments 259:** Linda and Martin Ridenour request information on the effects of the use of helicopters to install transmission lines on noise quality in the project area. They inquire about the echo effect from living on the mountain. They state that much of the description in the *Affected Environment* is unclear. For instance, is the noise environment of Lake Elsinore describing the noise in the city of Lake Elsinore or on the lake? What does “except at locations affected by transportation, recreation, and industrial sources” mean?

**Response:** The use of helicopters to install the transmission lines would be temporary in nature. As a result, the impacts on noise quality in the project area are not anticipated to be significant. The Ldn noise descriptor is commonly used to monitor the anticipated increase in the ambient noise levels within the community. Construction activity will be monitored to ensure conformance with applicable local government regulations, including the 60 Ldn recommended in city of Lake Elsinore General Plan. Noise (sound waves) traveling in a direct path to the Santa Ana Mountains may reflect back toward the residential community; however, the sound wave energy intensity would be very much reduced due to transmission losses anticipated as it passes through the mountainous terrain. In addition, any reflected sound wave would be further attenuated over distance and thus would not significantly impact the residential sensitive land uses. The noise environment in city of Lake Elsinore is generally typical of a rural setting (e.g., 47 to 57 dBAs); however, elevated noise levels may be experienced during the daytime at locations influenced by vehicle traffic on Interstate-15 and the arterials roads servicing the community, intermittent power boat and jet ski activities, and aircraft operations from the Skylark Airstrip.

**Comment 260:** Linda and Martin Ridenour point out that there are more sensitive land uses than described in the draft EIS, including Lakeside High School, a soon to be opened Middle School, and Butterfield School, four churches in Lakeland Village, a ball park, and Perret Park.

**Response:** The noise impact analysis presented in section 3.3.10, *Air Quality and Noise*, only considers the nearest sensitive land uses that may be impacted by noise-producing activity associated with the proposed and alternative actions. As such, it was considered to be the worst-case scenario. If no significant impacts were anticipated from this worse-case evaluation, it is reasonable to conclude there would be no significant impacts for sensitive land uses located at further distances from the project-related noise sources. A list of the sensitive land uses is provided in figures 16 and 18 in section 3.3.6 under the subtitles Recreational Resources and Land Use and Aesthetic Resources; respectively. There are other sensitive land uses further north, east and west of the proposed powerhouse sites, including Lakeside High School located on Riverside Drive. We have revised the text in section 3.3.10 to recognize these other receptors.

## DEVELOPMENTAL ANALYSIS

**Comment 261:** Nevada Hydro provides a cost estimate of \$5 million per mile for 500-kV gas-insulated lines as quoted by Seimens Power Transmission & Distribution Inc., and that the projected cost for placing a 1.5 mile segment of the transmission line underground would be less than \$10 million.

**Response:** We have considered your cost estimate in our developmental analysis.

**Comment 262:** SDG&E comments that the draft EIS cost estimate is low and does not fully account for the current level of 500-kV construction costs. It cites recent substantial changes in the cost of steel and a shortage of skilled labor in the construction of high-voltage electric transmission. SDG&E questions the economic benefits of operating the project and asks that the final EIS include an explanation of the methodology used to determine the number of hours and time periods during the typical week in which the Proposed Project was assumed to be in a pumping mode. SDG&E also notes that table note “a” in

table 48 conflicts with the information in table 47 concerning when pumping hours would occur. Finally, SD&E comments that use of a single typical week is unlikely to be representative of the varied system conditions that occur throughout the year and recommend an hour-by-hour simulation of the facility for a full year using actual hourly market clearing prices for energy in southern California from a recent year, accounting for the storage capacity of the upper reservoir and incorporating the pumping/generation efficiency loss. The final EIS should acknowledge that any simulation would likely overstate the benefits.

**Response:** We added a significant contingency to the co-applicants' costs in the final EIS reflecting some of this uncertainty. We have corrected footnote a on table 48, *Summary of Projected Annual Costs and Capital Costs under the Co-Applicants' Proposal*, to read "Pumping energy is based on average energy values at SP-15 for August 2004 through July 2005 assuming pumping during all off peak hours (10 p.m. through 6 a.m., Monday through Friday) and assumed additional pumping operations during 16 hours (four hours Monday through Thursday) of regular peak hours in the final EIS.

**Comment 263:** SDG&E requests that the statement on page 4-30 the TE/VS transmission line would provide "wheeling" benefits to regional utilities, and any other reference to "wheeling," be deleted because under the cost recovery regime proposed by the co-applicants in their March 20, 2006, additional information response, the operational control of the TE/VS transmission would be turned over to the California Independent System Operator Corporation.

**Response:** We have deleted the reference to wheeling in section 4.6.

**Comment 264:** SDG&E suggests that table 52 and the associated discussion be deleted from the final EIS, also citing the March 20, 2006, filing by the co-applicants.

**Response:** We note the March 20, 2006, filing was by Nevada Hydro under a separate proceeding and was later withdrawn from the LEAPS Project proceeding; however, we consider it important to evaluate the incremental cost of key project components such as the pumped storage element and continue to evaluate the economics of the LEAPS Project both as stand-alone project and in combination with the TE/VS Interconnection.

**Comment 265:** Mr. Pinnow provides an analysis of whether the LEAPS Project makes sense from an economic point of view. He comments that the assumption in table 42 that the return on equity rate for investors of 12 percent would be impossible to achieve without subsidization from California rate payers. He questions whether the \$40.00/MWh for off-peak energy value south of path 15 includes the power transportation costs to get power to the LEAPS plant. If not, the final EIS should include this cost. He asks that information about the gross annual profit of the stand-alone pumped storage project be presented in the final EIS. He also concludes that there is insufficient information in the draft EIS to determine if the pumped storage facility in combination with the proposed transmission line would result in a net benefit to rate payers. He asks why the economics for the transmission line have not been included in the draft EIS for public review.

**Response:** Since the Mead Decision of 1995, the Commission no longer evaluates the internal rate of return for a project and leaves the financials analysis and risk in the hands of the co-applicants. Typically, in order to obtain bonds or other financing, an applicant must have an independent engineer certify the economics and feasibility of the project to move forward and procure financing. We do not typically evaluate profits associated with any project; however, we continue to present the annualized costs, benefits and net benefits for both the stand-alone pumped storage project and the combined transmission line and pumped storage project. Transmission benefits in the final EIS are based on additional information provided by the co-applicants in their comments on the draft EIS.

**Comment 266:** Mr. Pinnow provides cost estimates for underground cable (cost of cable and installation) through the Cleveland National Forest of about \$157 million based on current technologies including the use of tight polymer insulation jackets rather than oil-filled jackets and recommends that underground technology be used for any transmission cable routed through the Cleveland National Forest.

**Response:** We have reviewed Mr. Pinnow's and other cost estimates for underground transmission cables and have lowered our estimate accordingly.

**Comment 267:** Mr. Pinnow comments that the configuration of transmitting the power from the LEAPS Project to the TE/VS transmission line must be modified to be brought into conformance with section 71663.5(b) of the California Water Code that requires that any electrical power generated within a water district be used within the district for its own purpose and that only surplus power may be sold over the high voltage transmission line. He asks that the cost of any reconfiguration be included in the final EIS.

**Response:** The co-applicants are required to comply with state laws and regulations.

**Comment 268:** Mr. Pinnow comments that neither the LEAPS Project nor the TE/VS transmission line can be considered reliability must run (RMR) resource because this term is limited to power plants that are available to run hours per day for 7 days per week. He comments that the LEAPS Project would not meet this definition and instead should be categorized under the default qualifying capacity criteria under section 40.13.2 of the CAISO tariff language. He questions whether any RMR value is ascribed to the LEAPS Project in the draft EIS.

**Response:** We did not explicitly consider RMR benefits in conducting our benefits analysis. We noted that pumped storage includes many ancillary benefits and included both a higher energy cost during super peak hours and a dependable capacity benefit in our economic approach. We did review CAISO's RMR units and note that PG&E's Helms Pumped Storage Project units are included as RMR units.

**Comment 269:** Francis Hoffman, on behalf of the Elsinore Testing of Experimental Aircraft Mechanism, disagrees with Commission staff that sufficient costs for eminent domain are provided in the co-applicants' proposal. Douglas Pinnow, Edith Stafford, and Linda and Martin Ridenour point out that Elsinore Valley MWD does not have the power of eminent domain to acquire property for the LEAPS Project as assumed in the draft EIS. Rather, Elsinore Valley MWD must acquire property by direct negotiation with each affected property owner in accordance with section 71663.5(d) in the California Water Code. Mr. Smith indicate that his parcel in the La Cresta area would need to taken by eminent domain should the project proceed and questions whether costs associated with eminent domain proceeding have been included in the cost estimates in the draft EIS. Pacific Clay states that the construction budget in the draft EIS is not large enough to have included costs for involuntary acquisition of the necessary properties. Edwin Thorell notes that measure 64, the acquisition of property through purchase of fee simple or through lease by voluntary sale, has a 0 cost in the measure table. He states that the failure to address the costs of property acquisition increases the cost of the project beyond the \$931 million construction cost indicated.

**Response:** We have modified the cost associated with property acquisition and reflect those changes in section 4 of the final EIS.

**Comment 270:** Francis Hoffman, on behalf of the Elsinore Testing of Experimental Aircraft Mechanism, states that there are no costs included to provide an alternative landing zone during construction.

**Response:** The co-applicants propose to provide funds for an appropriate landing zone if the Commission selected the Ortega Oaks powerhouse site. Both the co-applicants' proposal and the staff recommended alternative would site the powerhouse at the Santa Rosa location. Construction of the underground powerhouse at the Santa Rosa location would not disrupt the continued use of the landing zone at Ortega Oaks.

## STAFF CONCLUSIONS

**Comment 271:** Nevada Hydro comments that the staff conclusions on page 5-5 of the draft EIS that the co-applicants' proposed transmission alignment could interfere with USFS fire suppression activities and that staff alternative mid-slope transmission line would avoid interference with USFS fire fighting suppression activities is a mischaracterization of the of the two alternatives. It points out that both alignments would traverse plant communities with similar fuel loading characteristics and that because the staff alternative mid-slope alignment is 1.2 miles longer, it would produce incrementally more effects. Further, Nevada Hydro requests the presence of beneficial impacts, such as the availability of an upper reservoir as a source of water for fire fighting as well as the additional potable water that the co-applicants would provide to the Rancho Capistrano area.

**Response:** We have revised the staff alternative transmission alignment to include an underground segment in the vicinity of the launch sites and for the connection to the Santa Rosa powerhouse. The use of underground lines in these two locations reduces interference with fire suppression activities.

**Comment 272:** Nevada Hydro notes that the draft EIS on page 3-189 states that recreational use during 2001 within the Cleveland National Forest was estimated at 790,000 visits. It comments that in that context, with an estimated 500 users per year that it may not be accurate to state that hang gliding is a very popular activity in Lake Elsinore on page 5-32).

**Response:** We agree that 500 hang gliding users per year is a small percentage of the overall visitation at Cleveland National Forest. However, we find that Lake Elsinore is a unique and popular destination for hang gliders. We have revised the text in section 5.2.8 to read that Lake Elsinore is a very popular and unique location for hang gliding.

**Comment 273:** Nevada Hydro requests the factual documentation, other than the suggestion by Mike Hilberath, for the need for a 12-acre landing area. It points out that a 12-acre area would constitute 20 percent of the 58-acre Ortega Oaks powerhouse site and request clarification of why a well-planned 5-acre landing area, as now proposed by the co-applicants, would be inadequate.

**Response:** We have revised the staff recommended alternative in the final EIS to include a powerhouse at the Santa Rosa location. Since the provision of the co-applicants' 5-acre or the staff's 12-acre landing site was tied to selection of the Ortega Oaks location for the powerhouse, we no longer include this measure in the staff alternative.

**Comment 274:** Nevada Hydro disagrees with the staff conclusion on page 5-34 that co-applicants should provide O&M funding for developed sites if such funding is not available the intended sources.

**Response:** Nevada Hydro proposed to provide recreational amenities as part of its proposed environmental measures for the licensing of the LEAPS Project. Therefore, O&M for ongoing maintenance of project-related recreational facilities would be appropriate.

**Comment 275:** Nevada Hydro disagrees with the staff conclusion on page 5-36 of the draft EIS that long-term monitoring, reporting, and changes are necessary provisions of the road and traffic management plan because there would only be limited number of employees once the construction period had ended.

**Response:** We concluded in section 3.3.7.2 that operation of the project with its limited number of employees and limited recreational use would have minor effects on local traffic on Grand Avenue. We have revised section 5.6 of the final EIS to make clear our intention that the majority of effects on local roads would result from project construction activities. Therefore, the monitoring, reporting, and changes to the non-USFS road and traffic management plan be confined to the project construction period. We recommend that the co-applicants consult with USFS as part of the road and traffic management plan for USFS roads on responsibilities for post-construction road maintenance resulting any increase in project-related road use to access project-related recreational facilities.

**Comment 276:** EPA recommends the final EIS describe the monitoring and reporting that would be required of the co-applicants, identify all terms and conditions of the FERC license related to the monitoring requirements, and discuss all implementation and effectiveness monitoring that would be conducted by the appropriate agencies.

**Response:** We have added text to section 5 of the final EIS to provide more guidance on the monitoring activities.

**Comment 277:** SDG&E questions the conclusion that the TE/VS transmission line could provide 1,000 MW of import capability into the San Diego area. SDG&E requests that the final EIS either cite studies that support the 1,000-MW increase in import capability or acknowledge the uncertainty surrounding this number and that a lower number would necessarily mean reduced benefits for customers.

**Response:** We have reviewed the available system studies and acknowledge the uncertainty surrounding a 1000 MW increase in import capability. The final EIS now uses a value of 750 MW (testimony of L.P. Brown, Long-Term Resource Plan of SDG&E July 9, 2004)

## CUMULATIVE EFFECTS ANALYSIS

**Comment 278:** The Center for Biological Diversity comments that the draft EIS does not include an adequate cumulative effects analysis on water, soil, and biological resources in the project planning area.

**Response:** In response to your comment, we have added information about several other regional activities, including the Special Area Management Plan, to the appropriate *Cumulative Effects* sections.

## APPENDIX B

**Comment 279:** Mr. Pinnow points out that the statement on page B-13 “A new 30-mile-long, 500-kV transmission line with an approximate 1,000 MW rating” is inconsistent with the capacity information shown graphically on page B-10 and with notice of the application that states that the TE/VS transmission line is to transmit and manage grid flow of approximately 1,600 MW of electricity.

**Response:** We agree that the information on pages B-10 and B-13 is inconsistent. The LEAPS Project transmission line is being proposed as having a maximum thermal rating of 1,600 MW. This is the maximum power that can flow over the line due to the thermal limitations of the substation equipment associated with it and to the possibility of it violating National Electric Code (NEC) minimum ground clearances due to excessive conductor sag. A line’s rating is almost always higher than its expected

loading. We have revised the text on page B-13 to clarify that the proposed 32-mile 500 kV line has a 1,600 MW rating.

**COMMENTS ON THE PUBLIC NOTICE OF OCTOBER 3, 2006 FOR THE REVISED PROPOSES AND STAFF ALTERNATIVE TRANSMISSION ALIGNMENTS**

On October 3, 2006, the Commission issued a public notice to landowners of property crossed by or near either the proposed or alternative routes for the transmission line and other interested parties to the proceeding. The maps attached to this notice showed two transmission alignments: (1) the co-applicants' current proposal, modified in response to staff's draft EIS and filed with the Commission on June 12, 2006; and (2) the staff alternative alignment being considered for the final EIS. The notice invited comments within 30 days of the date of the letter. The following entities filed comments in reply to this public notice:

<b>Entity</b>	<b>Date</b>
Roy Salameh	October 11, 2006
John and Vera Kalachian	October 12, 2006
Theodore and Katie Miller	October 18, 2006
San Bernardino Valley Audubon Society	October 18, 2006
John Willet	October 23, 2006
Christopher Wills	October 25, 2006
Michael Hilberath	October 31, 2006
Bryan Groth	October 31, 2006
Richard and Victoria Bogard	October 31, 2006
Fieldstone Communities	November 1, 2006
Sycamore Creek Homeowners Association	November 1, 2006
Harvey and Lucy Miles	November 2, 2006
Katy Miles	November 2, 2006
Orba Smith	November 2, 2006
Christopher Oates	November 2, 2006
Lois Nosporic	November 2, 2006
Matthew Miles	November 2, 2006
Sandra Weaver	November 2, 2006
Fernandez Parties	November 2, 2006
Jacqueline Ayer	November 2, 2006
James Diamond	November 2, 2006
Sharon West	November 2, 2006
Pacific Clay Products	November 2, 2006
Cheri Phelps	November 3, 2006
Sycamore Creek Marketplace, LLC	November 3, 2006
Center for Biological Diversity and Sierra Club	November 3, 2006

<b>Entity</b>	<b>Date</b>
City of Lake Elsinore	November 3, 2006
County of Riverside	November 3, 2006
Bridgette Moore	November 6, 2006
Ellen Hazinski	November 7, 2006
John Hazinski	November 7, 2006
Marty Kreisler	November 7, 2006
Edwin Thorell	November 7, 2006
Michelle Randall	November 8, 2006

In additional 47 individuals file a form letter in opposition to the proposed transmission alignment expressing concerns about the proposed and alternative transmission lines will run along the border of the Glen Eden community. They cite the potential effect of the construction and operation of the line on the health and beauty of the Glen Eden Sun Club community. They state that the proposed transmission line will mar the landscape, run directly through a wildlife corridor, and destroy the area's vegetation and wildlife. They also comment that the draft EIS makes no reference to the Glen Eden Sun Club community. Using the same form letter, another 20 individuals and the Sycamore Creek Homeowners Association expressed similar concerns about the effects of the proposed LEAPS Project transmission lines on the health and beauty of the Sycamore Creek community.

We have summarized and responded to any new issues raised in the above letters. We have not summarized issued that have already been addressed in the responses to comments on the draft EIS.

## **PROCEDURAL**

**Comment 280:** The Center for Biological Diversity comments on the co-applicants' alternative 4(e) condition no. 5, indicating that the suggested new language concerning the co-applicants' right to a hearing and to propose alternative 4(e) conditions is unnecessary as the applicable regulations already provide for this.

**Response:** The USFS revised preliminary 4(e) condition no. 5 does not include the co-applicants' suggested language. The revised USFS preliminary 4(e) conditions are found in appendix C to this final EIS.

**Comment 281:** The Center for Biological Diversity and Sierra Club comment that the draft EIS does not include sufficient information to evaluate the environmental effects of placing the transmission line underground in the Cleveland National Forest.

**Response:** We did not consider placing lines underground in the alternatives presented in the draft EIS. We eliminated the underground alternatives based on cost; therefore, we did not discuss the effects of placing the transmission lines underground construction on environmental resources. However, we disclose the effects of placing segments of the transmission alignments underground on the environmental resources in the final EIS.

**Comment 282:** The Phillips Development Company reports that it did not receive notification of the modified transmission alignment even though its properties are within 0.25 mile of the proposed alternative alignments. According to Phillips Development Company, parcel number 125-120-38 as shown on the map included with the public notice is incorrect. The map should show two properties—

125-120-38 on the west side and 125-120-37 on the east side—adjacent to parcel number 125-120-004. The new alignments would be in closer to private property owners with El Cariso Village. The Company is also concerned about the possibility of a 3,500-foot-wide Federal Energy Corridor that could allow more than just electrical transmission lines.

**Response:** We obtained parcel information from the Elsinore Valley MWD and made a good faith effort to notify every property owner within 0.25 mile of the two transmission alignments being considered in the final EIS. The parcel information available to us did not show parcel 125-120-37. This proceeding is not considering the TE/VS Interconnect as a Federal Energy Corridor.

**Comment 283:** Jacqueline Ayer comments that when transmission alignments are substantially relocated that the lead Federal agency is required to re-evaluate all of the environmental impacts. In the case of the TE/VS Interconnect a new analysis of land use impacts is warranted. She states that existing develop densities in areas such as El Cariso Village are as high as 5 dwelling units per acre, which, is 100 times more than the .05 dwelling units acre cited on page 3-273 of the draft EIS.

**Response:** The effects of the new transmission alignments on land use and other environmental resources are disclosed in the final EIS. Our characterization of densities ranging from 5- to 20-acre minimum lot size in the rural areas in the draft EIS is correct; however we have added language to section 3.3.7.2 of the final EIS to indicate that some of these areas, such as El Cariso Village, may be rezoned for development at much great densities. Nowhere in the draft EIS do we cite .05 dwellings per acres in rural areas

**Comment 284:** Ms. Ayer comments that the potential effect of the new transmission alignments would be devastating to property values and that the draft EIS trivializes property value impacts.

**Response:** We provide considerable discussion in section 3.3.8.2 of the draft and final EIS about the affects of transmission lines on property values, citing numerous studies on the potential effect of transmission lines on property values.

**Comment 285:** Ms. Ayer states that the NEPA analysis is improperly deferred commenting that the deferral of specific plans to address environmental impacts is inconsistent with NEPA requirements. For instance, she notes that traffic concerns would be addressed in the traffic and management control plan that would be developed after the project is licensed. She also states that the co-applicants are sidestepping any obligation to mitigate impacts to local roads during project construction.

**Response:** With regard to traffic impacts, the traffic and management control plan would be developed prior to construction and would be implemented before the construction and operation of the project. This plan would be developed in consultation with the appropriate local agencies and would address the co-applicants' obligations for pavement repair during and following construction. Our responses to comments 3 through 13 above address concerns about the statement of purpose and need in the EIS.

**Comment 286:** Ms. Ayer comments that contrary to the statement in section 2 of the draft EIS the pumped storage project would depend on fossil fuels.

**Response:** We agree that the pumped storage project would depend on fossil fuels unless the co-applicants are successful in obtaining power sales agreements for geothermal, wind, or other non-fossil based sources of energy and have revised the text in section 2 of the final EIS accordingly.

**Comment 287:** Ms. Ayer comments that the draft EIS insists that the LEAPS Project and TE/SV Interconnect are stand alone projects and that the draft EIS focuses on the LEAPS Project and does not address the TE/SV Interconnect in any substantial detail.

**Response:** We consider the LEAPS Project to consist of the co-applicants' proposal for a pumped storage facility and associated transmission lines. The draft and final EIS disclose the effects of the proposed and alternative project configurations including the effects of the proposed 32 miles of transmission lines on environmental resources. We note that a substantial amount of the analysis in the EIS pertains to ground-disturbing activities, land use, and aesthetics associated with the construction and operation of the transmission line. An effect analysis for the co-applicants' and staff alternative transmission alignments is carried through each environmental resource area addressed in the EIS.

**Comment 288:** Ms. Ayers comments that the draft EIS fails to identify reasonably foreseeable cumulative effects associated with the potential designation of a 3,500-foot-wide TE/SV corridor as a Federal Energy Corridor under the Energy Policy Act of 2005.

**Response:** The Commission has not taken any action on the designation of the TE/SV line corridor and we have no action against which to evaluate cumulative effects.

**Comment 289:** Ms. Ayer raises numerous other issues about the scope and adequacy of the draft EIS including her views that the no-project (action) analysis is flawed and the final EIS should consider additional no-action alternatives, that the discussion of FERC's licensing authority is faulty, that Elsinore Valley MWD does not have eminent domain authority, and that the economics of the new alignments are not justified.

**Response:** As discussed in response to comment 53 above, the draft and final EIS include a sufficient level of detail to assess the potential effects of the proposed project on environmental resources in the project area. We address eminent domain authority in our response to comment 50 above. In appendix B, we address previous studies of proposed transmission systems in southern California and note that these studies do not address some of the strategic benefits (reliability, load diversity, fuel diversity, access to lower cost power plants, firm power purchase, economy energy and surplus hydropower purchases, power exchange, and reserve sharing) which could improve the economics of an interconnection project, especially when combined with pumped storage capacity. We continue to conclude that the power from the LEAPS Project would be useful in meeting part of the regional need for on-peak power and that the TV/SE Interconnect Project would be an appropriate long-term solution to southern California's transmission congestion and transmission-constrained, generation-deficient San Diego area.

## LAND USE

**Comment 290:** The Center for Biological Diversity and the Fernandez Parties comment that the September 2006 decision in the California v. U.S. Department of Agriculture (N.D. Ca. Case No. C05-03508 EDL) reinstated the Roadless Area Conservation Rule (66 FR 3,244 (January 12, 2001)). This rule disallows any road construction and reconstruction, subject to certain limited exceptions, in Inventoried Roadless Areas. This would apply to the Wildhorse/Morrell Inventoried Roadless Area and this must be disclosed in the final EIS.

**Response:** As noted in our response to comment 210, according to the current Cleveland National Forest Land Management Plan, the areas of the forest where Morrell and Decker reservoirs are proposed is designated as an Inventoried Roadless Area that allows consideration for road construction or reconstruction. Contrary to the Center for Biological Diversity's claims, the Final Land Management Plan does not specify a Wildhorse Inventoried Roadless Area. Therefore the cited court decision does not apply.

**Comment 291:** Mr. and Mrs. Hazinski and Mr. Kreisler, residents of Horsethief Canyon, comment that the proposed transmission line would cross Temescal Valley, west of Horsethief Canyon, over and adjacent to proposed residential projects recreation areas, and a shopping center on the Sycamore Creek property. They had been led to believe that any project transmission lines located within one mile of residential communities would be underground. They specifically recommend that the transmission line be placed underground for about 2 miles between parcel #391210014 extending north under Interstate 15 and the proposed northern substation. Ms. Randall objects to the placement of above ground transmission lines. She recommends placing the line underground between the Glen Eden Sun Club and the planned Sycamore Creek residential community and asks that costs associated with an additional 2-mile underground segment in this area be included in the final EIS. The Sycamore Creek Marketplace, LLC, objects to the location of the co-applicants' proposed and staff alternative transmission alignments due the proximity to a planned residential developments. The owner request the location of the proposed transmission line be a minimum of one mile away from the boundary of the Sycamore Creek development and that the towers be at least one and one half miles away from the Sycamore Creek property. The Fernandez Parties, Orba Smith and numerous other individuals continue to oppose the project and also request consideration of additional underground segments in areas near residential developments.

**Response:** The co-applicants do not propose to place transmission lines underground within 1 mile of residential communities. The draft EIS considered but eliminated from detailed study installation of underground lines based on costs. In the final EIS, both the co-applicants' proposed transmission alignment and the staff alternative transmission alignment include underground segments in the vicinity of the launch areas along South Main Divide Road and the powerhouse. We include the costs associated with additional underground segments in the final EIS.

**Comment 292:** Mr. Hazinski reports that the co-applicants' modified transmission alignment ensures that the line would not be built within a mile of the Horsethief Canyon community north of the city. He states that the Elsinore Valley MWD secured a guarantee from Nevada Hydro that if it were to go within a mile of the community, that section would go underground (The Californian, October 5, 2006). He comments that this discriminates against landowners with private wells outside of the water district. He suggests that a more appropriate route would be along Lake Street and Temescal Canyon Road

**Response:** The license application and subsequent filings by the co-applicants made no reference to a commitment made by either applicant to place transmission lines underground within 1 mile of the Horsethief Canyon community. We have considered the environmental effects of the proposed transmission line relative to all parcels regardless of whether they are located within or outside of the water district's jurisdiction.

**Comment 293:** The city of Lake Elsinore and Pacific Clay products state that on balance the co-applicants' modified transmission alignment is preferred because it results in lesser visual impacts on the Lake Elsinore community and adjacent residents, but the city would also support the staff alternative transmission alignment as long as the underground segment to the powerhouse is included.

**Response:** In the final EIS, we include the underground segment from the vicinity of South Main Divide Road to the powerhouse in the staff alternative transmission alignment.

**Comment 294:** The San Bernardino Valley Audubon Society indicates that while putting the entire transmission line underground would protect raptors it would also foster the growth of non-native plants. It comments that the notice implies that Morrell Canyon has been selected over Decker Canyon.

**Response:** The maps included with the notice for the two transmission lines being considered for discussion in the final EIS contain legends that show underground segments of several miles. We do not

propose to place the entire 32-mile transmission line underground. We note that the staff alternative in the final EIS still includes an upper reservoir at Decker Canyon.

**Comment 295:** The Fieldstone Company states that it did not comment on the LEAPS Project before because it recognizes the need for growth must be balance with the imperative for safe and environmentally sound energy. Fieldstone recommends that the Commission reconsider the mid-slope alternative as being more environmentally sensitive than the modified staff alternative and having the least impact to existing residential developments. Fieldstone comments that the draft EIS failed to review the contents of the County of Riverside General Plan, which would be greatly impacted by the co-applicants' modified transmission and the two alignments being considering for the final EIS. Fieldstone comments that only the mid-slope alignment avoids the impacts to approved residential communities.

**Response:** We have reviewed the merits of the mid-slope transmission alignment and concluded that its close proximity to private properties, including two large residential developments in Horsethief Canyon and interference with hang gliding activities created more adverse effects than the revised staff alternative alignment. We did review the County of Riverside General Plan in the draft EIS and reviewed it in relation to the revised staff alternative alignment in the final EIS and conclude that the our revised alternative would have less effect overall on residential communities and would significantly reduce effects on hang gliding activities at Lake Elsinore.

**Comment 296:** Fieldstone states that the draft EIS omits consideration of the Riverside Multi-Species Habitat Conservation Plan approved by the FWS. It comments that the northern segment of the co-applicants' alignment and the new alignments would adversely impact a significant wildlife corridor.

**Response:** We addressed, in section 3.3.4.2 of the draft EIS, the potential effects of the proposed project of wildlife corridors identified in the Western Riverside County Multi-Species Habitat Conservation Plan.

Individuals who filed letters in response to the draft EIS and public notice of October 3, 2006:

Christopher A. Wills, M.D.	March 1, 2006
Elsinore Hang Gliding Association	March 20, 2006
Linda Hale	March 27, 2006
James Provenzano	March 28, 2006
J. Capozzelli	April 12, 2006
Alan L. White	April 12, 2006
Susan Frommer	April 12, 2006
Risser C. Estes	April 18, 2006
Gregory Angsten	April 18, 2006
Jim Shaw	April 18, 2006
Frederick T. Pishotta	April 18, 2006
Dora D. Labellarti	April 18, 2006
Devonne L. Fisher	April 18, 2006
Dennis R. Fisher	April 18, 2006
Lynice Spangler	April 18, 2006
Karen Gilbert	April 19, 2006
Doris J. Singleterry	April 19, 2006
Saul L. Frommer	April 19, 2006
Fred Blaskovich	April 19, 2006
Charles & Yolanda Hoelscher	April 19, 2006
Allyn Cooksey	April 19, 2006
Hansen Family	April 19, 2006

Joan H. Adkins	April 19, 2006
Debbie & Raymond Badham	April 19, 2006
Eric Gilbert	April 20, 2006
Tom Hazelleaf	April 20, 2006
United States Hang Gliding Association	April 20, 2006
Bret M. Daniel	April 20, 2006
John W. Kirk	April 20, 2006
Kriss Larson	April 20, 2006
Bernard M. Lipman	April 20, 2006
James Gaar	April 21, 2006
Bud Mathurin	April 24, 2006
James Flack	April 24, 2006
Eric Gilbert	April 24, 2006
Elsinore Hang Gliding Association	April 24, 2006
Lynn Perry	April 24, 2006
Peter J. & Tina M. Cutuli	April 24, 2006
Martin Kreisler	April 24, 2006
Vance Litchfield	April 24, 2006
Jim Appleby, Sr.	April 24, 2006
Harold Burgess	April 24, 2006
Mitch Frisch	April 24, 2006
Gena Osborne	April 24, 2006
Jeff & Irene Johnson	April 24, 2006
Dawn Swett	April 24, 2006
Anna Marx	April 24, 2006
Susan Cash	April 24, 2006
Karen Snyder	April 24, 2006
Jorgen Moller	April 24, 2006
Patricia Barnes	April 24, 2006
Melody Barnett & Family	April 24, 2006
Dia Peters	April 24, 2006
Linda Nielsen	April 24, 2006
Elizabeth L. Bostian	April 25, 2006
Ray Stinnett	April 25, 2006
Mike Harper	April 25, 2006
Sierra Club, San Diego Chapter, Forest & Wilderness Committee	April 25, 2006
C&C Parties	April 25, 2006
Doug Koch	April 25, 2006
Asher Chapman	April 25, 2006
Michael Estrada	April 25, 2006
Wilmer I. Rohr. IV	April 25, 2006
Mark Mallett	April 25, 2006
John Pitt	April 25, 2006
Robert Carmichael	April 25, 2006
James Wood	April 25, 2006
David W. Biddle	April 25, 2006
Marc Johnson	April 25, 2006
John C. Mulyana	April 25, 2006
John Heiney	April 25, 2006
Brian Dahl	April 25, 2006
David Freman	April 25, 2006

Erik Delf	April 25, 2006
LaCresta Development	April 26, 2006
Kelly Smith, Keller Williams Realty	April 26, 2006
Richard Nakai	April 26, 2006
Melanie Parker and 199 Other Individuals	April 26, 2006
Jo Ann McCracken	April 26, 2006
Marianne & Gerald Cline	April 26, 2006
Patrick & Camilla Davenport	April 26, 2006
Patricia Barnes	April 26, 2006
Linda & Scott Pyle	April 26, 2006
Kathleen Dickey	April 26, 2006
Craig A. Sherman, Esq.	April 26, 2006
Michael Gordon	April 26, 2006
Gordon Kane	April 26, 2006
Albert Temmins	April 26, 2006
Dennis Keith	April 26, 2006
Laurra Maddock	April 26, 2006
Janet Maker	April 26, 2006
Paget Reid	April 26, 2006
Dan Abrams	April 26, 2006
Bill Holmes	April 26, 2006
Jerry Hughes	April 26, 2006
Robert Rocco	April 26, 2006
Casey Hudson	April 26, 2006
Christopher & Mary Louise Muller	April 26, 2006
Philip Glaser, D.D.S.	April 26, 2006
Jennifer Cochrane-Schultz	April 26, 2006
Mikko Helenius, M.D.	April 26, 2006
Brook Bryant	April 26, 2006
Scott Quinnell	April 26, 2006
C. Mollie Bigger, Ph.D.	April 26, 2006
Sharon Connor	April 26, 2006
Karen Thordarson	April 26, 2006
Patricia Bleha	April 26, 2006
Mark Gauthier	April 26, 2006
Mark Sorensen	April 26, 2006
Stephanie Adams	April 26, 2006
Ellen L. Trumpler	April 26, 2006
Claire Frogman	April 26, 2006
Nira Trock	April 26, 2006
Tessa Kershner	April 26, 2006
Don Bremmer	April 26, 2006
Brittany McKee	April 26, 2006
H.E. Kershner	April 26, 2006
Phyllis Watson	April 26, 2006
Lisa R. Marks	April 26, 2006
Marni Majda	April 26, 2006
Samam Dabin	April 26, 2006
Melissa Weyek	April 26, 2006
Barbara Meyer	April 26, 2006
Eugene St. Laurent	April 26, 2006

Jason Hashimoto	April 26, 2006
Lynn Fleischer	April 26, 2006
Stephen E. Rudolph	April 26, 2006
Melba Simms	April 26, 2006
Theresa Brady	April 26, 2006
Dorothy Boberg	April 26, 2006
Betty Schnaar	April 26, 2006
Willis Simms	April 26, 2006
J. Water	April 26, 2006
Michael Stevenson	April 26, 2006
Barry Katzen	April 26, 2006
Julie R. Szende	April 26, 2006
Randy Steinberg	April 26, 2006
Elizabeth G. McMahan	April 26, 2006
John M. Rountree	April 26, 2006
Linda Kleer	April 26, 2006
Jeff Fromberg	April 26, 2006
Clif Potts	April 26, 2006
Barbara & Jacob Rubin	April 26, 2006
Michael Karp	April 26, 2006
Mark Carrow	April 26, 2006
Barbara Gable	April 26, 2006
Trish Tuley	April 26, 2006
Joan Weaver	April 26, 2006
Sierra Club, San Gorgonio Chapter	April 26, 2006
Irene Dunny	April 26, 2006
Lori Kessler	April 26, 2006
Debby McAllister	April 26, 2006
Jim McKnight	April 26, 2006
Ralph Bocchetti	April 26, 2006
Jane Affonso	April 26, 2006
Martha Hess	April 26, 2006
Kyle Daniels	April 26, 2006
Lori Whalen	April 26, 2006
Angela M. Woodcock	April 26, 2006
Guy L. Kirkpatrick	April 26, 2006
Ned Boyer	April 26, 2006
Lynne Jeffries	April 26, 2006
Stacy Brady	April 26, 2006
Gregg Oelker	April 26, 2006
Cathy Sellitto	April 26, 2006
Shirley Ann Szalkowski	April 26, 2006
Thomas & Beatriz Ferguson	April 26, 2006
Adrienne Kligman	April 26, 2006
Andrew Sutphin	April 26, 2006
Robin & Tony Applegarth	April 26, 2006
Kris Ockershauser	April 26, 2006
Mark Watt	April 26, 2006
Ed Amador	April 26, 2006
Susan Shields	April 26, 2006
Andrew Reich	April 26, 2006

Sharon Wright	April 26, 2006
Johanna E. Howard	April 26, 2006
Andrea & Charles Sims	April 27, 2006
Donna Gould	April 27, 2006
Garry & Cheryl Chaban	April 27, 2006
David Perlman	April 27, 2006
Paul Carlton	April 27, 2006
Tom Randel	April 27, 2006
Donald R. Gates	April 27, 2006
Julie A. Gates	April 27, 2006
J.D. & Shirley Sooter	April 27, 2006
Lake Elsinore Soaring Club	April 27, 2006
Eileen R. Baldwin	April 27, 2006
Shawn Rogers	April 27, 2006
House Family	April 27, 2006
Edward & Gert La Faso	April 27, 2006
Damien Schlitt	April 27, 2006
Peter H. Dawson	April 27, 2006
Jane Rice & over 400 Other Individuals of the Sierra Club	April 27, 2006
Debbie Chaddock	April 28, 2006
Kim F. Floyd	April 28, 2006
Susan B., Kay, M.D.	April 28, 2006
Chris Warren	April 28, 2006
Rev. Michael Agliardo, SJ	April 28, 2006
Nolan Farkas	April 28, 2006
Ed Van den Bossche	April 28, 2006
Karen Horn	April 28, 2006
Angeles Chapter, Sierra Club	April 28, 2006
Gary W. Feemster	April 28, 2006
Gabriele Rau	April 28, 2006
Darryl Mar	April 28, 2006
Gabi Dendinger	April 28, 2006
Charles L. Polep	April 28, 2006
Walid Soussou	April 28, 2006
Albert A. Rossi	April 28, 2006
Len Gardner	April 28, 2006
Carolyn Olney	April 28, 2006
Yvetta Williams	April 28, 2006
Greg Bell	April 28, 2006
Cynthia Tuell	April 28, 2006
Lynda Warren	April 28, 2006
Ann McKibben	April 28, 2006
Ann Cantrell	April 28, 2006
Dorrit Ragosine	April 28, 2006
Theresa Brady	April 28, 2006
Ralph Bocchetti	April 28, 2006
David A. Miller	April 28, 2006
Rev. Sarah I. Gibb	April 28, 2006
Bob Faulkner	April 28, 2006
Dr. Lyle C. Henry	April 28, 2006
Tom Hazelleaf	April 28, 2006

Dr. Jack Paxton	April 28, 2006
Kris Ockershauser	April 28, 2006
Jeanette McKinley	April 28, 2006
Ruth Hall	April 28, 2006
Dr. W.D. Botch	April 28, 2006
Marlene L. Brown	April 28, 2006
Steven C. Huskey, Esquire	April 28, 2006
Valerie Zachary	April 28, 2006
Sue Kuramoto	April 28, 2006
Gary Hoover	April 28, 2006
Richard Sanders	April 28, 2006
Kenneth N. Howard	May 1, 2006
Dawn Swett	May 3, 2006
Elizabeth L. Bostian	May 3, 2006
Craig Perkins	May 3, 2006
David Perlman	May 3, 2006
Katharine Gring	May 3, 2006
Stephanie Remington	May 3, 2006
Jim Cokas	May 3, 2006
Van Collinsworth	May 3, 2006
Charles David Stout, Ph.D.	May 3, 2006
Mary Ann Kiger	May 3, 2006
Merri B. Levy	May 3, 2006
Rick Farber	May 8, 2006
Don Bremner	May 8, 2006
Robert Ives	May 8, 2006
Jose Henriquez	May 8, 2006
Erik Counseller	May 8, 2006
Inland Empire Waterkeeper	May 31, 2006
US Fish and Wildlife Service	June 21, 2006
USDA-FS PSW Region	June 23, 2006
Elsinore Valley Municipal Water District	July 6, 2006
State Senator Dennis Hollingsworth and Ray Haynes, Assemblyman, 66 <sup>th</sup> District	August 2, 2006
John Pecora	September 6, 2006
Chris Hyland, Doug Pinnow, and John Lloyd	September 14, 2006
Jay Scott	October 2, 2006
Elsinore Valley Municipal Water District	October 30, 2006
Roxanne Salazar	October 31, 2006
Edna Vallecillo Garcia & Family	October 31, 2006
C & C Parties	November 2, 2006
Louise Hurt	November 2, 2006
Eleanor Haile	November 2, 2006
Jenny Flack	November 2, 2006
Gary Nazaroff	November 2, 2006
Dr. Lisa White	November 2, 2006
Tom Saldana	November 2, 2006
Anne Clendinning	November 2, 2006
Margaret Buttner	November 2, 2006
Erlene Kuentzler	November 2, 2006
Harvey Ailport	November 2, 2006

Ruth Sizemore	November 2, 2006
Ed Littlewort	November 2, 2006
David Gilmore	November 2, 2006
Sherrie Fabian	November 2, 2006
Robert Lemke	November 2, 2006
Heath Friedman and Family	November 3, 2006
Linda Sulkamer	November 7, 2006
Reginald & Aleta Thompson	November 7, 2006
Ben Gradias	November 7, 2006
Krista Bradias	November 7, 2006
Mila Escano	November 7, 2006
Debra Nisporic	November 7, 2006
Josh Miles	November 7, 2006
Bryan Groth	November 7, 2006
John Sheppard	November 7, 2006
David Clarkson	November 7, 2006
Vicki Rembock	November 7, 2006
Minervia Nisporic	November 7, 2006
Justin Merkys	November 7, 2006
Gloria Carrillo	November 7, 2006
Robert & Jackie Albaugh	November 7, 2006
Donna Parrish	November 7, 2006
Victoria Bobard	November 7, 2006
Jeremy Marsh	November 7, 2006
Clara Bernice Sheppard	November 7, 2006
Pam Harris	November 8, 2006
Anne Rendeiro	November 8, 2006
Mike Mrak	November 8, 2006
David Rendeiro	November 8, 2006
Gregory S. Brintle	November 8, 2006
Marlene L. Brintle	November 8, 2006
Kent Carlsen	November 8, 2006
Alolen W. Brumbaugh	November 8, 2006
Lucy Mikj	November 8, 2006
Richard Bogert	November 8, 2006
Gary Goldberger	November 8, 2006
David Leal	November 9, 2006
Dawn R. Carrozzo	November 9, 2006
Fred L. Carrozzo	November 9, 2006
Lois Perez	November 9, 2006
Patsy & Robert Duchesne	November 9, 2006
Yvonne Valasek	November 9, 2006
Jon Basel	November 9, 2006
Peter & Janice Daniello	November 9, 2006
Dale & Carol Hook	November 9, 2006
Eldon H. Gloor	November 9, 2006
Sherrie Fabian	November 9, 2006
JoAnn Brown	November 9, 2006
David Gross	November 9, 2006
Sharon Seidman	November 9, 2006
Ross Edmonds	November 9, 2006

Peggy M. O'Donnell	November 9, 2006
Michael P. Johns	November 9, 2006
Shirley Gross	November 9, 2006
Linda Farley	November 9, 2006
John Farley	November 9, 2006
Carmen D. Calco	November 9, 2006
Gerry Stevenson	November 9, 2006
James C. Zack	November 9, 2006
Joalene Rollison	November 9, 2006
Larry Barnett	November 9, 2006
Laurie Fitzgerrell	November 9, 2006
Robert Hills	November 9, 2006
Regina Zasadzuvusju	November 9, 2006
Nancy Leefe	November 9, 2006
Heidi Dietschi	November 9, 2006
William B. Crosman	November 9, 2006
Brian G. Cleary	November 9, 2006
Wendy J. Crosman	November 9, 2006
Norman Gundenheim	November 9, 2006
Susan Troxler	November 20, 2006
Kathy A. Pierce	December 14, 2006