

COVER SHEET

FINAL ENVIRONMENTAL IMPACT STATEMENT FOR THE UPPER AMERICAN RIVER AND CHILI BAR HYDROELECTRIC PROJECTS

Docket Nos. P-2101-084 and P-2155-024

**Appendix A
Comments on the Draft Environmental Impact Statement
for the
Upper American River Hydroelectric Project
Project No. 2101-084
and the
Chili Bar Hydroelectric Project
Project No. 2155-024**

FEIS

APPENDIX A

COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT
FOR THE
UPPER AMERICAN RIVER HYDROELECTRIC PROJECT
PROJECT NO. 2101-084
AND THE
CHILI BAR HYDROELECTRIC PROJECT
PROJECT NO. 2155-024

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ACRONYMS AND ABBREVIATIONS

Advisory Committee	Iowa Hill Joint Advisory Committee
CARB	California Air Resources Board
Commission	Federal Energy Regulatory Commission
DO	dissolved oxygen
EIS	environmental impact statement
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
FERC	Federal Energy Regulatory Commission
HPMP	historic properties management plan
Interior	U.S. Department of the Interior
PG&E	Pacific Gas and Electric Company
Reclamation	U.S. Bureau of Reclamation
SFAR	South Fork of the American River
SMUD	Sacramento Municipal Utility District
TCP	traditional cultural property
UARP	Upper American River Project
VQO	visual quality objective

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The U.S. Environmental Protection Agency's (EPA) notice of availability of the draft environmental impact statement (EIS) was issued on September 21, 2007, and comments on the draft EIS were due on November 13, 2007. In addition, the Federal Energy Regulatory Commission (Commission) staff conducted a public meeting in Placerville, California, on November 5, 2007.

About 20 people spoke at the public meeting. Two individuals who are signatories to the Settlement Agreement and several recreational boaters expressed concern about the modifications that staff made in the draft EIS to the proposed recreational streamflows downstream of Slab Creek dam. They stated that staff misunderstands the connection between the construction of the Iowa Hill development and the enhanced whitewater boating flows and request that the staff adopt the language of the Settlement Agreement in the final EIS. The majority of speakers, however, were local residents, participants on the Iowa Hill Joint Advisory (Advisory Committee), or representatives of the Apple Hill Growers Association, and they raised numerous concerns about the effects associated with the construction of the Iowa Hill development. These speakers cited blasting, heavy equipment damage to county roads, dust, threat of fire, the potential effects of fire, loss of habitat, and ultimately fewer visitors to the area as major concerns. With regard to use of roads during construction, many speakers asked if traffic studies were done; noted that Cable Road is only one lane; and cited safety concerns for the children, walkers, bicyclists, and pets that use the roads that would be upgraded to handle the construction traffic. Many speakers indicated that they attended meetings of the Advisory Committee with Sacramento Municipal Utility District (SMUD) representatives and requested that the final EIS consider the many mitigation measures that were identified by the Advisory Committee. Many of the points raised by the speakers at the public meeting are also raised in letters filed in response to the draft EIS and are addressed in our responses to those comments.

At the public meeting as well as by teleconference on November 15, 2007, Commission staff requested that SMUD file any new studies and modifications to its proposed action resulting from consultation with the Advisory Committee. In its response filed on December 7, 2007, SMUD indicated that it is conducting preliminary analyses of mitigation measures proposed by the Advisory Committee and has not adopted any new measures beyond what is proposed in the license application and Settlement Agreement. Several local residents including Jim and Nancy Summers, Mike DeBord, and Steve Speth also filed correspondence with SMUD from 2005 through 2007 that contains feedback and recommendations from Advisory Committee members on SMUD draft plans. Because the information contained in these filings relate to discussions between SMUD and the Advisory Committee that are not part of the public record and because SMUD has not modified its proposed action in response to the feedback, we do not provide point by point responses to these comments. However, we have taken the feedback into consideration in our recommendations in the final EIS.

In this appendix, we⁴⁹ summarize the written and oral comments received; provide responses to those comments; and indicate, where appropriate, how we modified the text in the final EIS. We grouped the comment summaries and responses by topic for convenience. We did not summarize statements that are simply in support of or against the Settlement Agreement or Staff Alternative measures without providing any new information. We did not summarize comments that point out minor edits to the draft EIS; however, we have made these edits in the final EIS. The following entities filed comments on the draft EIS.

Commenting Entity	Filing Date
UARP and Chili Bar Project	
Christa Campbell	November 5, 2007
Hilde Schweitzer	November 6, 2007
American Whitewater ⁵⁰	November 9, 2007
Teresa Simsiman	November 9, 2007
U.S. Department of the Interior	November 9, 2007
U.S.D.A. Forest Service	November 9, 2007
Lois Bailey-Hacker	November 8, 2007
California Department of Fish and Game	November 12, 2007
Friends of Slab Creek	November 13, 2007
David Maurier	November 13, 2007
Pacific Gas and Electric Company	November 13, 2007
Chuck Seidler	November 13, 2007
Sacramento Municipal Utility District	November 13, 2007
U.S. Environmental Protection Agency	November 13, 2007
Bryant Burkhardt	November 14, 2007

⁴⁹In this section “we” means the Commission staff. This is a standard section for the Commission’s NEPA documents that presents the Commission staff’s preferred alternative and rationale in support of the preferred alternative; it does not necessarily reflect the Forest Service’s conclusions.

⁵⁰Filed on behalf of American Whitewater, California Outdoors, Friends of the River, California Sportsfishing Protection Alliance, American River Recreation Association and Camp Lotus, and Hilde Schweitzer

Commenting Entity	Filing Date
Jane Arteaga	November 19, 2007
U.S. Army Corps of Engineers	November 19, 2007
UARP Only	
Christa Campbell	November 5, 2007
Annamarie Clark	November 5, 2007
Mike DeBord	November 5, 2007
Richard Morris	November 5, 2007
Bob Penn	November 5, 2007
Hilde Schweitzer	November 5, 2007
Chris Shackleton	November 7, 2007
Jeffery Hansen	November 13, 2007
Jim and Nancy Summers	November 13, 2007
Michael and Eleanor Kuehn	November 21, 2007

PROCEDURAL AND GENERAL

Comment-1: Mr. Hansen and several individuals who commented at the public meeting questioned the Commission's decision to include SMUD's Iowa Hill development in the EIS for the relicensing of the Upper American River Project (UARP) and Chili Bar Project. These individuals request that environmental effects of the Iowa Hill development be considered in a separate EIS.

Response: SMUD proposes the Iowa Hill development as part of its application for a new license for the UARP to improve its ability to provide energy during peak demand periods. Because the operations of the proposed Iowa Hill development would affect the operation and environmental effects of the existing UARP, it is reasonable and appropriate to consider the Iowa Hill development at the same time that we are assessing the environmental effects associated with the relicensing of the UARP. Commission staff analyzed the potential effects of relicensing the UARP with and without the construction and operation of the proposed Iowa Hill on environmental resources in the draft EIS. In response to comments, we updated information about the use and improvements of local roads for construction and added more analysis of fire threats. However, we do not agree that a separate EIS is required for the Iowa Hill development.

Comment-2: Mr. Hansen and several individuals who commented at the public meeting noted that the draft EIS is completely silent about an extensive set of proposed Iowa Hill development construction and operation mitigation measures generated

during the past several months by the Advisory Committee. The Advisory Committee includes representatives from SMUD, El Dorado County, El Dorado Irrigation District, Apple Hill Growers Association, Camino Community Action Committee, and the Iowa Hill Action Committee. Mr. Hansen states that these proposed measures will not be reviewed and adopted by SMUD until it decides to proceed with the development. Nevertheless, Mr. Hansen points out that these measures represent a significant effort in identifying meaningful mitigation and therefore should be included and analyzed in the final EIS.

Response: We requested that SMUD provide us with information about the role of the Advisory Committee as well as any changes to the license application or proposed measures based on discussion with the Advisory Committee. SMUD filed the requested information on December 7, 2007. We incorporated the information into the final EIS. According to that letter, SMUD has not adopted any of the recommendations contained in the Advisory Committee's matrices but is conducting preliminary analyses of the proposed mitigation measures. Some of these measures may be included in our recommended final Transportation Management Plan to be developed in consultation with the Advisory Committee.

Comment-3: Mr. Penn states that the EIS should include a detailed review of alternative power plant sites for the Iowa Hill development. He asks that such a review at a minimum include consideration of two sites (Deer Knob and Big Hill) bordering the Union Valley reservoir that have favorable features, easy access roads, in-place power lines, adequate elevation, no residential or commercial development, and much less exposure to fire.

Response: We added a discussion of the alternative sites analysis performed by SMUD in section 2.4.5, *Alternative Sites Analysis*, of the final EIS.

Comment-4: Interior notes that the proposed UARP operational changes, as described in the draft EIS, would change the seasonality of inflow from the South Fork of the American River (SAFR) into Folsom reservoir that is operated by the U.S. Bureau of Reclamation (Reclamation). Reclamation reserves the right to review the effects of the proposed UARP operational changes on Folsom dam and reservoir operations relative to its current contracts with SMUD and the city of Sacramento.

Response: The Commission's standard reopener article would be included in any license as the vehicle for making changes to the license if unforeseen and unanticipated adverse environmental effects occur in the future. The Commission can address any unintended changes in inflow to Folsom reservoir through the standard license reopener.

Comment-5: Pacific Gas & Electric (PG&E) points out that the word *Project* is used inconsistently in the draft EIS and requests that the final EIS clearly distinguish when a reference is in regard to both Projects or only the UARP or Chili Bar Project. PG&E further points out that virtually all of the Project-related reaches are outside of the Project boundaries and terminology in the final EIS should clarify this fact.

Response: In the draft EIS, staff used the capitalized term *Projects* to refer to both the UARP and Chili Bar Project and used the lower case term *project* or *projects* to refer to projects other than the UARP and Chili Bar Project. We searched on these terms to ensure that they are used consistently in the final EIS. We also clarified in the final EIS that the Project reaches are generally outside of the Project boundaries.

NEED FOR POWER

Comment-6: Mr. and Mrs. Summer raise numerous questions about the *Need for Power* discussion in section 1.0 of the draft EIS. First, they observe that the net rate of efficiency would be closer to 60 percent rather than the 80 percent projected by SMUD and that a lower net rate of efficiency would result in greater annual losses of energy than estimated. Second, they question the statement that SMUD and possibly other utilities would use the electricity from the Project to displace the use of gas-fired energy during on-peak hours. Third, they comment that the statement in the draft EIS that California utilities and generators have some options for shifting power supplies from off-peak to on-peak periods through the use of pumped storage implies that was a conclusion cited in the 2004 Integrated Energy Policy. They point out that pumped storage is only one option and all other options should be fully explored prior to making any decision on the Iowa Hill development. Finally, Mr. and Mrs. Summer comment that the fourth paragraph in section 1.2.2 of the draft EIS implies that there will be power benefits to the local community. He notes that there is not one user of SMUD power in El Dorado County.

Response: The Summers did not provide any citations to support the contention that pumped storage projects have a net efficiency of 60 percent. The hydro-mechanical equipment in this Project would likely be new equipment designed to state-of-the-art standards. Therefore, efficiency in the range of 75 to 80 percent would not be unrealistic. Note the total head on this Project is on the order of 1,200 feet and variations in net head would not significantly affect the efficiency.

We see no reason to question the displacement of gas fired generation during on-peak hours. The power from by the Iowa Hill development would generally be produced during on-peak hours and hence would displace gas fired combustion turbines. We reviewed the recently issued *2007 Integrated Energy Policy Report* (CEC, 2007a) as issued by the California Energy Commission. The California Energy Commission continues to include pumped storage as a primary load management technique and an important tool for storing renewable energy on windy nights. There are other methods of shifting off-peak power to on-peak power, such as storage batteries; however, large-scale implementation of battery technology currently is not economically feasible.

We acknowledge that SMUD's service includes Sacramento County and a small portion of Placer County. We did not specifically reference El Dorado County a beneficiary in the draft EIS; however, SMUD is an interconnected utility, and energy as well as

ancillary services may be incidentally provided to the region including El Dorado County.

Comment-7: Mr. DeBord states that the cost analysis does not include the new capital costs of supplying power to pump the water from Slab Creek reservoir to the new Iowa Hill reservoir. He also comments that SMUD repeatedly states that it would use wind power to supply this power, and he wonders why SMUD does not include the cost of the windmills needed to generate this power in its cost analysis. He states that factoring the capital cost of the planned windmills or other new power generating facilities could easily make the Project cost prohibitive.

Response: In its license application, SMUD assumes the pumping generation would come from gas-fired combustion turbines, not wind turbines. We agree with this assumption and have used it in our analysis. We show the cost of the pumping energy based on combustion turbines in table 4-13 of the draft EIS and continue to use that cost in the final EIS

PROJECT DESCRIPTION

Comment-8: PG&E makes a general comment that the draft EIS refers to the 19.1 mile-long reach between the Chili Bar dam and the Folsom reservoir in at least 20 different ways. PG&E consistently referred to this reach as “the reach downstream of Chili Bar” in its license application and technical reports and suggests that it be referred to as such in the final EIS.

Response: We revised the text in the final EIS to use consistently “the reach downstream of Chili Bar and 19.1-mile-long length.”

Comment-9: SMUD questions the discussion on page 2-9 of the draft EIS about expanding the Project boundary. First, SMUD notes that staff recommends expansion of the boundary to include the entire Jones Fork penstock. SMUD clarifies that the entire Jones Fork penstock is included in the Project boundary as depicted on exhibit G, as are the Robbs Peak, Camino, and White Rock penstocks. Second, SMUD states that the Deer Crossing camp (referred as Deer Camp in the Settlement Agreement and shown on figure 3-32 as Deer Creek Crossing Camp in the draft EIS) is a small private camp operated under a special use permit by the Forest Service but is not a Project-related campground. SMUD notes that the Forest Service originally included this camp in the preliminary section 4(e) conditions but subsequently deleted it from the revised 4(e) conditions and the camp is not included in the Settlement Agreement and should not be included in the Project boundary. Third, The Northern Union Valley road cited on page 2-9 of the draft EIS is a 7.5-mile-long system of connecting Forest Services roads that are not solely used for Project purposes but provide the primary access route to the Sierra Pacific Industry owned lands and should not be included in the Project boundary.

Response: We reviewed exhibit G and agree that the Jones Fork penstock is shown as completely within the Project boundary. We also deleted the reference to the private Deer Camp. Our analysis indicates that the proposed new campground on the south side of Loon Lake would provide publically accessible camping at that location. Because the Northern Union Valley Road is not used primarily for Project purposes, it should not be included within the Project boundary, consistent with Commission policy. We revised the text in section 2 of the final EIS accordingly.

Comment-10: U.S Department of the Interior (Interior), PG&E, and American Whitewater note that the informal boat launch described on page 2-10 of the draft EIS is managed by PG&E is for administrative use only and that the site is inaccessible to the public. PG&E provided suggested text for the final EIS.

Response: We revised the text in section 2 of the final EIS to clarify that PG&E uses the informal boat launch for inspections and maintenance and that this informal boat launch is inaccessible to the public.

Comment-11: PG&E points out that the draft EIS omits the description of the second section of Proposed Article 1-4 dealing with coordination in implementing certain license conditions. PG&E states that this provision is critical to the implementation of Proposed Articles 4 though 12 and 21 through 23, and Proposed Article 1-4 must described and adopted in the Staff Alternative in the final EIS.

Response: We added the second component of Proposed Article 1-4 to table 2-3 and to the Staff Alternative in section 5 in the final EIS to explicitly include SMUD's coordination with PG&E in the implementation of Proposed Articles 2-1, 2-2, 2-4, 2-5, 2-6, 2-14 and 2-15 for the Chili Bar Project. We note that we do discuss the importance of this coordination in the relevant resources sections of the EIS.

Comment-12: SMUD provides several clarifications to the description in section 2.0 about the construction of the Iowa Hill development. First, on page 2-14, SMUD clarifies that underground spoils would be transported to the upper reservoir site using a vertical material handling system consisting of either a conveyor belt or bucket-and-cable system located in the cable shaft as stated in exhibit C of the license application. Second, SMUD requests that the description of the proposed tie-line and switchyard locations on page 2-14 be revised to be consistent with exhibit C and exhibit G-036 of the license application.

Response: We modified the Project description to include SMUD's comments about the proposed vertical material handling system and revised the description of the proposed tie-in line and switchyard locations.

Comment-13: American Whitewater comments that the staff descriptions in section 2.0 of the water chemistry monitoring programs in Proposed Articles 1-5 and 2-4 on pages 2-20 and 2-21 of the draft EIS omit any reference to the general chemistry monitoring elements of that program. Interior comments that tables 2-3 and 2-4 in the draft EIS omit any reference or summary of the general chemistry monitoring element

of the water chemistry monitoring program in Proposed Article 1-5 (item 10) of the Settlement Agreement. Interior requests that staff summarize both elements, in situ and general chemistry monitoring, in the final EIS.

Response: We added the general chemistry monitoring elements to the descriptions of the Proposed Articles in tables 2-3 and 2-4 in section 2 of the final EIS.

Comment-14: SMUD notes the descriptions of Proposed Articles 1-25 and 2-14 on pages 2-27 and 2-36 of the draft EIS are incorrect and should be revised to make clear that SMUD would provide two simple staff gages only on the two stream reaches proposed for whitewater boating consistent with the intent and language of the Settlement Agreement. SMUD states the staff repeats these incorrect descriptions on pages 5-10 and 5-15 of the draft EIS.

Response: We revised the text in the final EIS to correctly refer to Proposed Articles 1-25 and 2-14.

Comment-15: PG&E notes several discrepancies in the draft EIS with regard to storage capacity and usable storage in Chili Bar reservoir. First, PG&E notes that the storage capacity of 3,700 acre-feet given for Chili Bar reservoir in figure 2-2 is incorrect. PG&E points out that exhibit A-7 shows the storage capacity of Chili Bar reservoir as constructed as 3,319 acre-feet when full to the spillway crest elevation of 997.5 feet (NGVD), and the reservoir has a normal usable storage capacity of 1,339 acre-feet. Second, PG&E requests that the legend to figure 3-1 be clarified to show the full pool storage (3,319 acre-feet) at elevation 997.5. PG&E also requests that staff revise the usable storage volume of 1,088 acre-feet to 1,339 acre-feet on page 3-32 and add a footnote to page 3-58 to note that the 3,139 acre-feet at elevation 997.5 is based on as-constructed data.

Response: We revised figures 2-2 and 3-1, as requested. A usable storage volume of 1,088 acre-feet is based on the results of a 2004 bathymetric survey of Chili Bar reservoir as described in the *Chili Bar Reservoir Incremental Storage Modification Technical Report*, which was part of the license application. We added a footnote to table 3-2 stating that the usable storage based on as-constructed data was 1,339 acre-feet.

Comment-16: PG&E states that in addition to the discussion of PG&E's proposed Project boundary revision on page 2-37 of the draft EIS, PG&E plans to propose a future modification to the Chili Bar Project boundary to avoid a conflict with the UARP licensee's future Slab Creek reach boating take-out. PG&E indicates that although the exact location of the future UARP facility is unknown, it is anticipated that it would be in the vicinity of the White Rock powerhouse. PG&E proposes to develop and submit a revised proposed Project boundary after consultation with BLM and SMUD and requests that the schedule for the submittal of revised exhibit G drawings be consistent with the schedule for the UARP licensee's development of the UARP's Slab Creek recreation management plan.

Response: We added the additional boundary revisions contemplated by PG&E to section 2.5.4 of the final EIS. Under Proposed Article 2-13, PG&E would provide the new or improved recreational facilities within 3 years of license issuance. Under Proposed Article 1-49, SMUD would develop a recreation access plan for Slab Creek reservoir prior to the commencement of construction of the Iowa Hill development in 2009. Given these timelines, it would be reasonable for PG&E to provide revised exhibit G drawings after SMUD has prepared the recreation access plan for Slab Creek reservoir because that plan also would include the proposed Slab Creek boating take out and access facilities.

CUMULATIVELY AFFECTED RESOURCES

Comment-17: EPA recommends including a discussion about the potential effects of climate change relative to the proposed action in the cumulative effects analysis of the final EIS. EPA requests that the discussion summarize the applicable climate change studies, including the findings and recommendations for addressing potential effects on environmental resources and water supplies.

Response: Future climate change effects on water resources and water temperatures in the UARP and Chili Bar reservoirs and reaches are unknown, although some models may attempt to predict change in certain river basins. The Commission's standard reopener article would be included in any license as the vehicle for making changes to the license if unforeseen and unanticipated adverse environmental effects occur in the future.

GEOLOGY AND SOILS

Comment-18: Mr. Summers questions the statements in the draft EIS that the upper reservoir would be not likely affected by the known fault or fault systems any more than the structures that already impound Project waters and, with the earthen berm construction and impermeable liner, might actually withstand an earthquake better than the closest dam. He requests an analysis of failures at other pumped storage projects and a discussion of what would be done to prevent such a failure at the Iowa Hill development.

Response: We have no record of any pumped storage projects that have failed do to earthquake forces. An analysis of probable earthquake effects on Iowa Hill was done in the SMUD's Preliminary Safety Analysis Report, where the consultant concludes that the proposed reservoir would not be significantly affected by movements along fault lines resulting from earthquakes

Comment-19: Ms. Bailey-Hacker questions the findings of the geotechnical studies done in 1972 and 2004 that led to SMUD's conclusion that the Iowa Hill site is suitable for development of the upper reservoir. Ms. Bailey-Hacker questions why the surface geology would be suitable for use in the construction of the upper reservoir berm since it is likely to break down to soil and gravel during construction. She suggests that using

larger rock in the upper reservoir berm would be more stable. She cites the Taum Sauk pumped storage project failure as an example of why she is concerned about the structural stability of the berm. She also states her concern that the foliation of the rock could allow seepage from the upper reservoir to cause geologic instability. Finally, Ms. Bailey-Hacker questions why an exploratory tunnel was not drilled to verify the type and quality of rock surrounding the proposed powerhouse and tunnel structures. She states that sample drill holes were only taken from residential parcels of land near the site, along Chute Camp Road, and from Slab Creek Reservoir.

Response: First, we note that the failure of the Taum Sauk reservoir was reported to have been caused by instrument malfunction, not instability of the embankment retaining the upper reservoir. Second, with regard to the stability of the berm, using a variety of crushed rock from the excavation of the upper reservoir site and tunnel is consistent with engineering practices that mix gradations of rock, from small to large sizes for this type of construction. By using a mixture of various sizes, or “well-graded” rock, the spaces between pieces of rock and gravel are filled with smaller particles to produce an embankment with no unstable voids. We analyzed SMUD’s proposed measures to control seepage in the EIS and conclude that installing a toe drain and drain pipes in the rock fill embankment, filling voids in the rock under the reservoir with construction grout, and installing an impermeable liner at the bottom of the upper reservoir would control seepage from the upper reservoir. Finally, in addition to the geotechnical studies performed on the site, SMUD maintains records from the construction and recent examination of nearby project facilities, including the Slab Creek dam, and the Camino and Whiterock tunnel, which confirm the presence of stable geology in the area. Therefore, at this phase of investigation, we do not think an exploratory tunnel at that specific location is needed. If unstable rock is encountered during SMUD’s final geologic studies, SMUD would excavate the unstable rock and replace it with concrete or similar material.

WATER RESOURCES

Comment-20: PG&E points out that USGS gage no. 11444500 (SFAR near Placerville) is not part of the UARP as listed in table 3-11 on page 3-49 of the draft EIS. PG&E states that this gage is actually on the SFAR below Chili Bar dam and is used for compliance purposes for the Chili Bar Project and requests that table 3-11 be revised.

Response: We revised the layout of the last rows of table 3-11 to clarify that that this gage is not part of the UARP. Page 3-40 of the draft EIS includes a description of the gage use for compliance downstream of the Chili Bar Project.

Comment-21: The Forest Service, SMUD, Interior, and American Whitewater question the staff’s modification to Proposed Article 1-8. The modification would require SMUD to maintain Gerle Creek reservoir at a set reservoir elevation of 5,288 feet from August through October to provide for the passage of brown trout spawning runs from the reservoir upstream into Gerle Creek. SMUD comments that

this measure as modified by staff would not have the intended results and would place undue constraints on SMUD operations and maintenance activities at the Loon Lake and Robbs Peak developments. First, SMUD states that new bathymetric data from studies conducted during maintenance activities in the fall of 2006 confirm the presence of an alluvial deposit at the confluence of Gerle Creek and the reservoir that has the potential to pose a migration barrier. SMUD comments that this new information suggests that the water surface elevation of Gerle Creek reservoir may not facilitate fish passage into Gerle Creek. Second, SMUD states that the staff's modification to Proposed Article 1-8 would constrain SMUD's need to use the Gerle Creek reservoir as an afterbay to Loon Lake powerhouse. Third, the modification would limit SMUD's ability to conduct maintenance activities at the Loon Lake and Robbs Peak developments. The Forest Service and Interior point out that although maintaining the reservoir elevation at 5,288 feet may currently allow for fish passage, this could change over time. Therefore, these entities all request that the Commission adhere to the intent of Proposed Article 1-8 and require that SMUD maintain Gerle Creek reservoir at an elevation that would allow for passage of brown trout spawning runs from August through October and adjust that level as needed in consultation with the agencies.

Response: We reviewed the information provided by SMUD and agree that there are uncertainties as to whether passage of brown trout into Gerle Creek can be maintained by managing the level of Gerle Creek reservoir. Although the rationale report for the Settlement Agreement identified a reservoir elevation of 5,228 feet as being needed to provide effective fish passage into Gerle Creek, the new information provided by SMUD indicates that because of backwater effects from Gerle Creek reservoir, there is a deposit of cobbles and boulders extending upstream along Gerle Creek. Portions of this deposit now extend to an elevation that is higher than the normal maximum level of the reservoir, and that the geometry of this deposit may have a greater effect than reservoir levels on fish passage conditions. We note that future changes in the size and geometry of this deposit, which may affect fish passage conditions, are difficult to predict. As a result, we agree that additional studies, site visits, and consultation with the agencies, as proposed by SMUD, would be needed to determine how to ensure that upstream fish passage from the reservoir into Gerle Creek is maintained. Therefore, we revised the final EIS to include the new information provided by SMUD in section 3 and now recommend a Gerle Creek fish passage plan in section 5 that would include measures, such as periodic channel modifications, if needed, to ensure upstream passage of brown trout, consistent with the intent of the Settlement Agreement.

Comment-22: SMUD notes the staff recommendation on page 3-83 of the draft EIS to install a new gage downstream of the Rubicon reservoir. SMUD comments that there are alternative means to satisfy compliance needs and requests that the Commission not limit SMUD's options for minimum/pulse flow compliance to constructing a new gage. Specifically, for minimum flows, SMUD would continue to measure flow using acoustic flow meters attached to the outlet pipe following installation of the larger capacity valves. For pulse flows, SMUD would likely propose the use of the existing Rubicon reservoir water surface elevation recorder along with a rating of the Rubicon dam spillway, consistent with current practice. SMUD states that measuring flow using the spillway weir would likely be more accurate than modifying and using the abandoned auxiliary gage as recommended by staff and would avoid stream channel modification in the wilderness area. SMUD would prefer to consult with the Forest Service and USGS as to the most efficient means of establishing a compliance gage plan with the least effect to the wilderness area.

Response: We modified the text of the final EIS to allow for use of a gaging method that is best suited for this location based on consultation with the USGS and the Forest Service. We also noted that the use of the existing Rubicon reservoir water level recorder might be technically challenging.

Comment-23: PG&E points out that the statement on page 3-100 of the draft EIS that Chili Bar reservoir water is released from the low-level outlet, which is at a depth of about 73 feet below Chili Bar reservoir's normal maximum level is incorrect. PG&E primarily releases water from Chili Bar reservoir through the turbine or the turbine bypass valve and that they only operate the low-level outlet once a year in accordance with maintenance and emergency test requirements.

Response: We revised the text in the final EIS to describe the invert of the penstock intake as about 46 feet below the reservoir's normal maximum level.

Comment-24: Interior, SMUD, and American Whitewater agree the description of the temperature monitoring location in item k in the water quality section of Proposed Article 1-5 of the Settlement Agreement should read Silver Creek immediately upstream of the Camino reservoir's high water line.

Response: We note your agreement with our understanding of the temperature monitoring locations in the final EIS.

Comment-25: Mr. and Mrs. Kuehn comment that since 1983 more than half a million cubic yards of sediment originating from landslides and debris torrents have entered the river and most of it should be in Slab Creek reservoir. They ask why SMUD did not perform a sediment study for the Slab Creek reservoir in light of the deep-water pump storage intake.

Response: We reviewed and generally agreed with the “Iowa Hill Pumped Storage Development Turbidity Analysis” filed by SMUD in October 2004. This document analyzed effects of the proposed operation of the Iowa Hill development on sediment within Slab Creek reservoir. Based on this analysis, we determined that only initial and small-scale changes in the turbidity of the reservoir would be likely. The document also analyzed the existing and future growth of sediment delta in the upstream portion of the reservoir, and we agree with the determination that the proposed operational regime of the Iowa Hill development would not affect the delta for at least 100 years.

Comment-26: Interior and American Whitewater note that in the draft EIS, staff states that monitoring of certain water quality parameters may not be necessary during the full term of any new license. Interior and American Whitewater point out that Proposed Article 1-5 of the Settlement Agreement offers science-based options for future modifications or reduction in the frequency or number of stations what would require long-term monitoring. These entities recommend that the Staff Alternative be consistent with the Settlement Agreement.

Response: Our rationale on page 5-27 of the draft EIS for supporting Proposed Article 1-5 (see draft EIS page 5-27, paragraph 2) is consistent with the intent of the Settlement Agreement, which we interpret to allow SMUD to reduce monitoring of some water quality parameters once data have consistently documented that the parameter supports the desired aquatic resources. ,

Comment-27: In reference to the statement on page 3-106 of the draft EIS, PG&E requests that in the final EIS, staff clarify that water temperature modeling was not conducted for the Chili Bar Project or the reach downstream of Chili Bar.

Response: We revised the text in section 3.3.2.2 of the final EIS in the *Water Temperature Modeling* analysis to clarify that water temperature modeling was not conducted for the Chili Bar Project or the reach downstream of the Chili Bar Project.

AQUATIC RESOURCES

Comment-28: Interior, PG&E, American Whitewater, Friends of Slab Creek, Ms. Schweitzer, and several recreational boaters comment that on page 3-136 of the draft EIS, staff incorrectly defines a Super Dry water year type.

Response: We corrected the definition of a Super Dry water year type in the final EIS.

Comment-29: Interior and American Whitewater comment that the term *naturalized* as used on pages 3-147 and 3-156 to describe populations of rainbow trout is a politically sensitive term and suggests that in the final EIS the term *wild* be substituted for *naturalized*.

Response: We substituted the term *wild* as requested.

TERRESTRIAL RESOURCES

Comment-30: PG&E notes that the draft EIS states on pages 3-178 and 3-194 that overlapping studies were conducted to identify riparian vegetation and for foothill yellow-legged frogs within both Project boundaries and requests that the final EIS indicate that the stream reaches, which lie primarily outside of the Project boundaries, were also included in these overlapping studies. PG&E further requests that the final EIS clarify that the 18 survey sites for the foothill yellow-legged frogs were in the reach downstream of Chili Bar.

Response: We revised the final EIS to clarify the locations of the riparian and foothill yellow-legged frog surveys.

Comment-31: Mr. and Mrs. Kuehn indicate that Scotch broom invaded Iowa Hill about 5 years ago and is present on their property that adjoins the east boundary of SMUD's Iowa Hill property.

Response: Invasive species are prevalent throughout the Project area, and California as a whole. The presence of the invasive Scotch broom located on the Kuehn's property is not Project-related. SMUD proposes an invasive weed and vegetation management plan that would minimize the effects of the Iowa Hill development construction on the spread of invasive species.

Comment-32: Interior and American Whitewater note that Interior no longer maintains a list of federal Species of Concern as stated on page 3-188 of the draft EIS and that the fisher is currently on the FWS Candidate Species List.

Response: We revised the final EIS to correct the status of special-status species.

Comment-33: Interior requests that staff include *FD* in the list of notes for table 3-57 to indicate that the species has been federally delisted. Interior also points out that delisting from the list of endangered and threatened species does not remove all federal protections and requests that staff address the current status of federal protection for the bald eagle in the subsection on bald eagles in the final EIS.

Response: We revised table 3-57 of the final EIS to include the federally delisted designation. As pointed out by Interior, although the bald eagle has been federally delisted, it continues to be protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. The proposed UARP is consistent with the National Bald Eagle Management Guidelines, which have been developed to ensure activities do not violate the protections provided by the acts. We added this information to the final EIS.

Comment-34: EPA questions the finding in the draft EIS that no riparian vegetation or wetlands would be affected by the construction of the Iowa Hill development because of the wetlands and intermittent drainages identified in the draft EIS as being located on both the proposed transmission line route and Iowa Hill site. To clarify the potential

effects on waters of the United States that would occur with the construction of the Iowa Hill development, EPA recommends that staff indicate in the final EIS how the Project would comply with the 404(b)(1) guidelines, such as identifying how the preferred alternative avoids waters of the United States and what design measures could be used for further avoidance. EPA suggests including a map or more information about jurisdictional waters, if available, in the final EIS.

Response: According to the *Iowa Hill Wetlands Technical Report* (2004g), SMUD had the Iowa Hill development area, including the proposed reservoir, intake structure, and transmission line studied using aerial photography to locate potential wetland areas, followed by field surveys to delineate any wetlands. As described in section 3.3.4.1 of the draft EIS, the surveys did not locate any palustrine wetlands within these areas. Seven small drainages were located during field surveys, although only one, located along the proposed transmission line route, is classified as a riverine wetland. Our finding that the proposed Iowa Hill development would not affect any wetlands or riparian vegetation is based on the fact that the wetland study did not locate any wetlands within the proposed reservoir or intake sites and only one small intermittent riverine wetland was located along the proposed transmission line route. Narrow, riverine wetlands located within the proposed transmission line can be avoided by siting towers such that the transmission line spans the wetland with no fill required. As such, we do not anticipate construction of the proposed Iowa Hill development would result in fill of any jurisdictional wetlands. We revised the final EIS to clarify this statement.

Comment-35: Ms. Bailey-Hacker states that the biological “reports” do not discuss the effects of the proposed Iowa Hill development construction on wildlife and that the draft EIS does not discuss the fact that the Iowa Hill upper reservoir would be located on a spotted owl Protected Activity Center.

Response: Section 3.3.4.1 of the EIS describes wildlife, including California spotted owls, occurring in the vicinity of the proposed Iowa Hill development. Although one Protected Activity Center is located within 0.25-mile of the Iowa Hill development footprint, the upper reservoir is not located within a Protected Activity Center. Section 3.3.4.2 analyzes the effects of the construction and operation of the Iowa Hill development on wildlife, including California spotted owls, mule deer, black bears, and other species.

Comment-36: PG&E notes that the first two paragraphs under *Our Analysis* under *Vegetation and Noxious Weed Management* seem to apply to the UARP and the third paragraph seems to apply to the Chili Bar Project, but this is not clear. PG&E requests that staff clarify the final EIS to be explicit about when a particular section is discussing one Project or the other Project, or both Projects.

Response: We revised the final EIS to clarify which Project is being discussed.

Comment-37: Interior comments that recommendation no. 15 on page 5-14 of the draft EIS should reference the BLM Sensitive Species List instead of the Eldorado National Forest Watch List.

Response: Although Article 2-9 of the Settlement Agreement incorrectly defines special status plant and wildlife species as “species that are Federal Endangered or Threatened, Forest Service Sensitive,” we revised the final EIS to indicate that the definition should be BLM Sensitive instead of Forest Service Sensitive.

THREATENED AND ENDANGERED SPECIES

Comment-38: Interior comments the water storage and supply functions of the UARP would allow El Dorado County to fully implement its General Plan, and the prospective development that would result from the full implementation of the plan has the potential to directly affect all five of the Pine Hill endemic listed plants. Interior states that the final EIS should include an analysis in the resource section of this indirect effect and a discussion of cumulative effect of relicensing the UARP on the listed plants in the cumulative effects summary in section 5.0 of the final EIS.

Response: SMUD filed an informational copy of the El Dorado County – SMUD Cooperative Agreement with the Commission in December 2005. However, none of the terms of that agreement are included in the Settlement Agreement as they are outside the scope of the relicensing proceeding. The acquisition of water rights by the El Dorado parties and the provisions dealing with delivery of water from and storage of water in certain UARP facilities would be subject to the Water Board approval and would require a separate NEPA analysis after the El Dorado parties secure the requisite water rights.

Comment-39: Interior and American Whitewater disagree with the staff modification to Proposed Articles 1-12 and 2-9 that a draft biological assessment be prepared by the applicant for the relevant federal agencies and instead states that only the final biological assessment should be filed with the Commission. Interior and American Whitewater recommend the final EIS adopt the language in Proposed Articles 1-12 and 2-9.

Response: Under section 7 of the Endangered Species Act (ESA), it is the Commission’s responsibility to consult with FWS or NMFS. Although the Commission can designate SMUD to conduct informal consultation with FWS and NMFS, only the Commission can enter into formal consultation with these federal agencies. Therefore, only the Commission can file a *final* biological assessment with FWS and NMFS and request formal consultation. As such, under this recommended measure, SMUD would prepare and file a *draft* biological assessment with the Commission, and the Commission would then prepare a *final* biological assessment and submit it to the appropriate federal agency requesting formal consultation, if necessary.

RECREATIONAL RESOURCES

Comment-40: Interior, PG&E, American Whitewater, Friends of Slab Creek, Ms. Schweitzer, and several recreational boaters note that table 3-67 does not include the proposed recreational flows downstream of the Chili Bar dam specified in the Settlement Agreement and requests that staff include the table from the Settlement Agreement in the final EIS. PG&E suggests that staff interpreted the flow values in the table in the Settlement Agreement to be in military time, when in fact, the values are in clock time.

Response: You are correct. We revised the information in table 3-67 to be consistent the proposed recreational flows downstream of the Chili Bar dam specified in the Settlement Agreement.

Comment-41: The Forest Service, American Whitewater, the Friends of Slab Creek Ms. Schweitzer, and several recreational boaters comment that the draft EIS does not convey an understanding of the connection between the construction of the Iowa Hill development and the release of recreational streamflows in the SFAR downstream of Slab Creek dam. These commentors state the construction of the Iowa Hill development would facilitate the provision of whitewater flows because (1) the upper reservoir would provide another source of water for these flows, and (2) the cost of making physical modifications to provide these flows would be less because SMUD would have the equipment and personnel already at the Iowa Hill construction site. SMUD comments that by using the constructed Iowa Hill development to better manage water in the Slab Creek reservoir, SMUD could provide boating flows without building expensive release structures. SMUD also requests that staff correct the description of Proposed Article 1-24 on pages 2-276 and 2-278 in the final EIS to reflect the language in the Settlement Agreement that SMUD would enhance recreational streamflows at year 15 after license issuance, if Iowa Hill is not constructed and if certain triggers are met. In addition, the Forest Service and American Whitewater comment that the draft EIS incorrectly summarizes Proposed Article 1-24 of the Settlement Agreement by substituting the words *constructed within 15 years* for the words *commenced construction within 15 years* as the trigger for consultation on a whitewater boating recreation plan.

Response: We revised the text on pages 3-276 and 3-278 to reflect the intent of Proposed Article 1-24. We acknowledge SMUD's comment that with the construction of the Iowa Hill development, it may be able to provide the enhanced recreational boating flows without expensive structural modifications to existing facilities. Therefore we have eliminated SMUD's original estimate of \$10,000,000 for anticipated physical modification from the cost of the staff alternative. However, providing the enhanced recreational streamflows, with or without the construction of the Iowa Hill development, would reduce the energy the Project now generates. At the same time, we recognize the value of allowing SMUD and the Agencies as much time as possible to determine if the recreational triggers can be met. We continue to recommend that after

10 years of monitoring, in year 15 after license issuance, that recreational streamflow releases only be provided if the environmental and recreational triggers are met. However, we agree that the volume of these releases need not be revisited. We revised our conclusions about recreational streamflows in section 5 of the final EIS to be consistent with the clarifications made in section 3.

Comment-42: Mr. Shackleton comments that the whitewater run downstream of the Slab Creek dam is a high-quality Class IV/V section of whitewater with easy access to major population centers. He states that SMUD was able to provide the proposed level of flows during the whitewater flow study and urges the Commission to adopt the proposed recreational streamflows included in the Settlement Agreement.

Response: We understand that SMUD was able to provide the proposed level of flows during the whitewater flow study. We take issue with the assumption that whitewater flows would be provided regardless of the level of demand for these flows, and we would continue to require an assessment of the level of demand prior to requiring the proposed whitewater flows as a condition of any license issued for the Project.

Comment-43: Interior and American Whitewater comment that the Staff Alternative in the draft EIS does not include Proposed Article 2-20, which reserves BLM's authority under section 4(e) of the FPA, consistent with the Recreation Payment Agreement dated February 1, 2007, to provide for the protection and utilization of BLM lands through the inclusion of conditions in the license for the Chili Bar Project.

Response: We added Proposed Article 2-20 to table 2-3 in section 2 of the final EIS. However, because the Recreation Payment Agreement (found in appendix 6 of the Settlement Agreement for the UARP and Chili Bar Projects) was filed for information purposes only, we do not include this measure in the Staff Alternative.

Comment-44: Interior, PG&E, and American Whitewater comment that the limited recreational use of the Project facilities would not seem to warrant a separate recreation plan. PG&E further notes that such a plan was not included in the Settlement Agreement and that existing and proposed processes and consultation for monitoring and reporting are sufficient to address public recreation use.

Response: A recreation plan would formalize the existing consultation and reporting requirements and provide the rationale and description for the proposed new and improved recreational facilities for boating access and can be done at relatively minor cost to the Project.

LAND USE

Comment-45: The Forest Service, SMUD, and American Whitewater disagree with the Commission staff's limitation on the scope of the transportation system management plan to Project roads used solely for Project purposes because of the extensive, but not exclusive, use that SMUD makes of these roads. For instance, the Forest Service comments that SMUD's road plowing in the winter to provide access to Project

facilities also increases recreational use that otherwise might not occur. SMUD comments that this provision is one that the Commission would not normally include as a condition of license, but as a matter of settlement, SMUD agreed to a broader plan. The Forest Service continues to request that the Commission's policy on Project access roads allow for cost-sharing of facilities on or adjacent to National Forest System lands and that the staff alternative be consistent with the provisions in the Settlement Agreement. For many of the same reasons, the Forest Service and American Whitewater also disagree with the staff's limitation on the scope of the trail system management plan to trails that are needed [solely] for Project purposes. SMUD indicates that while it would include these trails, such as the 7-mile-long segment of the Rubicon hiking trail that is used by SMUD staff to operate the Project and hikers traveling north to Project and non-project destinations, in the trail system management plan, these trails should not be included in the Project boundary.

Response: Commission policy would limit SMUD's and PG&E's responsibilities for road and trail maintenance to those roads and trails that are required solely for Project purposes and would include these facilities in the Project boundary. SMUD and PG&E may enter into a variety of arrangements with other entities to provide for road and trail maintenance as they so chose.

Comment-46: Mr. Summers comments that the draft EIS is incorrect in stating that Carson Road to Cable Road would be the primary access to the proposed upper reservoir site and that Carson Road to Larsen Drive to Slab Creek reservoir would provide primary access to the lower reservoir site. He points out that Larsen Road and Slab Creek Reservoir Road do not intersect and construction traffic would have to travel 1.8 miles between them. However, he states that SMUD now indicates that all Project traffic would access the site via the North Canyon and Slab Creek Reservoir Road but no decision has been made about how traffic would access North Canyon Road. Without this information, he questions how any informed decisions can be made relative to the effects of construction traffic on the local residents, roads, and air quality.

Response: In its comments on the draft EIS, SMUD points out that, as described in exhibit C of the license application, underground spoils would be transported to the upper reservoir site using a vertical material handling system. We provided this information in the final EIS (see response to Comment 12). SMUD also indicates, in a filing dated December 7, 2007, in response to questions raised at the public meeting on the draft EIS, that consultation with the Advisory Committee has produced an alternative route for construction traffic, the Iowa Hill SW connector route, which SMUD currently is considering. We provide SMUD's description of this alternative route for construction traffic access to the site in section 2 and 3 of the final EIS and recommend that SMUD include a detailed traffic analysis for this alternative in the final transportation management plan for the Iowa Hill development. We encourage selection of a route that would minimize user conflicts.

Comment-47: Mr. Summers observes that the draft EIS does not provide the number of vehicles currently using Larsen Road, North Canyon Road, or Carson Road, and the draft EIS does not provide the number of trips a day the Project would generate. He notes that there is no discussion about how workers would get to the construction site or the traffic effect for contingencies, such as imported materials on which to bed the poly membrane liner, which he states could add as many as 13,000 heavy truck trips. With this many potential truck trips, he requests an analysis of the truck traffic effects on property values, safety for local residents walking and bicycling along the roads, pets, and air quality.

Response: You are correct that the draft EIS does not provide the number of vehicles currently using Larsen, North Canyon, or Carson Roads because SMUD did not conduct traffic counts on Larsen or North Canyon Roads during the pre-application studies. SMUD conducted traffic counts on U.S. Route 50 and on Carson Road. SMUD's analysis that found that the traffic generated by Project construction would not affect the level of service categories as defined by El Dorado County, except at the East Camino eastbound ramp in the morning. This means that the roads are capable of handling the additional traffic and the additional traffic would not cause unacceptable delays under the county guidelines. We state the number of daily trips that the Project would generate in the discussion of construction impacts on local traffic in section 3.3.10.2 in the draft EIS. The proposed access routes to the upper reservoir and powerhouse construction sites are described in both section 2 and section 3.3.7.1 of the draft EIS. We, however, added the description of the alternative access routes considered by SMUD in the Transportation Route Technical Report filed on January 31, 2008. SMUD does not propose to haul in clay or other materials to place under the poly membrane at the upper reservoir site. Instead, SMUD would balance excavation and fill quantities on site. This means that excavated material would be crushed on site and used as fill material for the earthen berm. Consequently, fill material would not be trucked in from outside the construction sites nor would excavated material be trucked off the site. We revised the final EIS to make clear that SMUD proposes to use a vertical material handling system consisting of either a conveyor or bucket and cable system located in the cable shaft to transport material excavated from the proposed tunnel and powerhouse cavern to the upper reservoir site. Therefore, these materials would not be trucked. To transport the construction materials and equipment that are needed for construction, about 25 truck-trips are expected per day during initial mobilization and during other periods when deliveries are necessary, such as the liner itself.

Comment-48: Ms. Arteaga comments that the draft EIS does not take into account that the lower access road (Slab Creek Road referred to as Slab Creek dam access road in the draft EIS) goes through private property and does not have a recreational easement. She notes SMUD obtained an easement for the construction and operation of the Slab Creek development but not for public right-of-way and that the intent of the original easement is not sufficient for the needs of the Iowa Hill development. Therefore, she concludes that the proposed improved recreational access to both the river and the reservoir would

be unauthorized use of private lands and that new easements would be needed for the construction of the Iowa Hill development. She also comments that adequate access for management and public use of National Forest System lands has not been acquired.

Response: We agree that SMUD would need to obtain the appropriate easements to use the lands prior to construction.

Comment-49: Ms. Arteaga cites the discussion on page 3-292 of the draft EIS about the potential for development that might result from improvements to the roads used for construction and states that Slab Creek Road is a private road and no other entity (SMUD, the Forest Service, or the county) takes responsibility for maintenance and public safety of the road. She asks, “Who will be responsible for the maintenance and public safety of the road?”

Response: As described in the Forest Service Road Maintenance Plan included in the license application, SMUD would maintain the Slab Creek Road (Dam Access Road and Reservoir Access Road)—grading, maintaining ditches, and removing rocks. Slab Creek Road would be maintained at a level needed to access Slab Creek dam facilities.

Comment-50: Mr. Summer, Mr. DeBord, and several commentors at the public meeting raise concerns about the increased potential for wildfires in the Slab Creek Canyon with the construction of a major project and the potential increase in public access to the canyon. They and others comment that the combination of an extreme fuel build-up in the canyon and the near constant breezes up and down the valley would turn a fire into a major wildfire very quickly. They recommend removal of the fire-fuel build-up, including the high pile of debris that SMUD stacked on National Forest System lands near the Slab Creek reservoir 10 years ago, prior to the commencement of any construction. In their opinion, the draft EIS must include an analysis of how the proposed Iowa Hill development and the associated increase in public use would affect the current potential for wildfires.

Response: We discuss the high fire hazard in the Iowa Hill area in sections 3.3.7.1 and 3.3.10.2 of the draft EIS. SMUD would file a fire risk and protection plan prior to any land disturbing/construction activity at Iowa Hill. This plan would be developed to reduce fire risk associated with construction and address issues such as blasting and equipment use, emergency and evacuation procedures, procedures for removing brush and other fire hazardous materials, and rules about construction workers smoking and other related fire risks.

Comment-51: Mr. and Mrs. Kuehn make several comments related to the proposed use of local roads for construction traffic. They comment that (1) that there is no detailed map showing the access route to the proposed powerhouse in the canyon or to the upper reservoir location; (2) the draft EIS implies that all construction traffic would pass through the town of Camino which is already congested and has limited parking; (3) Larsen Road is only 20 feet wide and provides an inadequate base for heavy trucks given the yearly damage done by local logging trucks; (4) Chute Camp Road is a very

narrow, old road that would require full bench construction and retaining walls; and (5) excavated material from the powerhouse would be moved to the upper reservoir by a conveyor belt and not be trucked as stated in the draft EIS.

Response: We agree that there is not a detailed map in the draft EIS showing the proposed and alternative access routes to the construction. In response to a Commission request for additional information, SMUD filed a traffic analysis of an alternative access routes that were developed in consultation with the Advisory Committee that would channel construction traffic to the west of the construction site away from the Camino town center. We added descriptions of these alternative routes to section 3.3.7 of the final EIS. With regard to the proposed access routes, we acknowledge that Larsen Road and Chute Camp Road are unimproved rural roads that would require widening and strengthening to accommodate heavy truck traffic. SMUD would widen Chute Camp Road to meet guidelines for a narrow two-lane road and would retain the adjacent slope by tie-back anchors where necessary. SMUD also proposes to perform an engineering analysis of roadways to the upper reservoir site prior to finalizing the Transportation Management Plan to address issues of roadway width and capacity. Finally, we revised the Project description in section 2 of the final EIS to clarify that SMUD proposes to use a vertical material handling system to move excavated materials from the powerhouse site to the upper reservoir and not truck this material through the streets of Camino. We also corrected the names of road segments in the final EIS and corrected information about road names and width.

Comment-52: Mr. and Mrs. Kuehn comment that contrary to the statement on page 3-327 of the draft EIS, the El Dorado Transit serves Camino and Carson Road on a scheduled daily basis and will service unscheduled areas by appointment. They further comment that bicycling and walking are common in the area.

Response: We modified the text in section 3.3.10.2 of the draft EIS to clarify that SMUD indicated that because the area does not have public transportation facilities and is generally not suitable for walking or bicycling, its study focused on automobile and truck traffic likely to be generated by the Project. We also note that SMUD is considering alternative routes for construction traffic and heavy equipment that would avoid many of the user conflicts on the local roads.

Comment-53: Ms. Bailey-Hatcher comments that the information provided on page 3-292 of the draft EIS is incorrect and states that the El Dorado County General Plan (General Plan) land use designations in place for SMUD's parcels on Iowa Hill is Rural Residential and the zoning designation is RE-10, Residential Estate, 10 acres. She notes that the land that SMUD wants to clear-cut, blast, clear, and build over is heavily used for hunting, residential use, birdwatching, and hiking and states that the industrial use envisioned by SMUD is completely out of character with the area.

Response: The draft EIS refers to the 2004 General Plan Land Use Diagram that shows the land within the proposed boundary of the Iowa Hill development to be designated as Natural Resources. SMUD's land use technical report for the Iowa Hill development

clearly states that its lands in the proposed boundary of Iowa Hill development are designated Rural Residential with a platted overlay under the General Plan. The General Plan designations are intended to maintain a low residential density. The proposed Iowa Hill development would not increase the residential density on SMUD lands. SMUD also states that the provisions of the El Dorado General Plan would not be applicable to a FERC-licensed project. If licensed, the proposed Iowa Hill development would be constructed entirely within the proposed project boundary as shown on figures 2-4 and 3-36 of the draft EIS on lands currently owned by SMUD, the Eldorado National Forest, and Sierra Pacific Industries. We also note that the Iowa Hill area currently includes hydroelectric uses at the Slab Creek dam and that the Sierra Nevada Forest Plan Amendment (2004) includes hydroelectric generation as a permitted use within the Eldorado National Forest.

AESTHETIC RESOURCES

Comment-54: Mr. Summer and several commentors at the public meeting state that the view of the American River Canyon is vitally important to many more properties than suggested in the draft EIS. He comments that SMUD has said that it intends to clear-cut the entire Project site, which he assumes to mean all the land within the Project boundary, including the transmission and road right-of-ways as shown on figure 2-4 (on page 2-13) of the draft EIS. Under this assumption, he states that the clear-cut area would extend well over the summit of Iowa Ridge and run down the west side of Iowa Hill and would affect the property values of many more parcels than mentioned in the draft EIS.

Response: Prior to construction, SMUD would clear the majority of the land within the proposed Project boundary, including the footprint of the upper reservoir, earthen berm, construction lay down areas, and the locations where organic top soils would be stored. In addition, SMUD would clear a 100-foot-wide corridor about 2 miles long for the new Project transmission line as well roadways and adjacent lands sufficient for grading the new or improved roads. The cleared areas would extend downslope and would be visible from the hillside across the Slab Creek reservoir prior to and during construction. SMUD's Iowa Hill development revegetation plan shows areas to the north and south of the upper reservoir that would be cleared to accommodate the organic top soils removed during excavation for the upper reservoir and that would be revegetated following construction. As discussed in section 3.3.7.2 of the draft EIS and as documented in the Visual Resources Technical Report Addendum filed by SMUD on January 31, 2008, under the current design, the berm would be seen from several viewpoints and may not meet the Forest Service visual quality objectives (VQOs) for Eldorado National Forest. However, under Proposed Article 1-44, SMUD would develop a design for the Iowa Hill development that meets the visual quality standards.

CULTURAL RESOURCES

Comment-55: PG&E questions the use of *TCP* (i.e., traditional cultural properties) on pages 3-304 to 3-11 and suggests that the staff refer to *potential TCPs* rather than *TCP*.

Response: We reviewed section 3.3.9.1 through 3.3.9.3 of the draft EIS and determined that the term *TCP* generally is used appropriately. However, we agree that for clarity, reference should be made to potential TPCs in two instances on page 3-309 and 3-311, and we revised the text in the final EIS.

Comment-56: PG&E provides a clarification about the Chili Bar Toll House Cemetery. PG&E comments that the text should be revised to note that this cemetery also consists of a flat area that may have been prepared as a cemetery pad and to state that the wife of the toll house keeper was reportedly Native American.

Response: We revised the text in section 3.3.9.1 to provide the suggested clarifications.

Comment-57: The Forest Service, PG&E, and American Whitewater comment that Commission staff recommends that SMUD finalize and implement the Historic Properties Management Plan (HPMP) within 1 year of license issuance and states that the recommendation is unclear relative to the Forest Service review and approval and therefore is inconsistent with Proposed Article 1-28 that calls for completion of the HPMP within 6 months for the Forest Service approval. Similarly, Interior and American Whitewater comment that the recommendation that PG&E file a final HPMP with the Commission within 1 year of licenses does not explicitly provide for BLM review and approval. Both agencies and American Whitewater recommend that these measures be consistent with the Settlement Agreement.

Response: On February 11, 2008, the Commission issued a draft Programmatic Agreement and draft HPMP with a 30-day comment period. The Commission directs SMUD to file a revised HPMP within 90 days after the end of the comment period. It is the intent of the Commission to issue a final PA with a final HPMP attached prior to issuing any license for the project. Therefore, we modified Proposed Article-28 and related text in the final EIS to specify that SMUD implement the final HPMP.

Comment-58: Mr. and Mrs. Kuehn comment that there are remnants of historic logging operations throughout the area. They state that Cable Road was an access road to the South tower and today much of it follows the old narrow gage railroad grade. Ms. Bailey-Hacker comments that the unevaluated sites mentioned in SMUD's cultural reports should be evaluated before construction begins at the Iowa Hill development and requests a more thorough study of historical sites and peoples before the final EIS is completed.

Response: We are aware of the area's logging history and artifacts from that industrial use. SMUD conducted prehistoric, historic, and ethnographic studies of lands within Project's Area of Potential Effects including the Iowa Hill development site prior to submitting its license application and the results of these studies were summarized in the draft EIS. These reports have been reviewed by Commission staff and the Forest

Service and provided to the State Historic Preservation Office. We determined that the these reports covered the lands that could be affected by relicensing the project with the proposed Iowa Hill development and were sufficient for assessing the potential effects on cultural properties. Prior to any license issuance, the Commission will execute a Programmatic Agreement for the protection of historic properties. SMUD has prepared a draft HPMP that sets forth its procedures for monitoring potential effects to and completing evaluations of properties that could be affected by project operations. A revised HPMP, reflecting the comments of the Forest Service and others involved in the consultation process under section 106 of the National Historic Preservation Act, will be attached to the Programmatic Agreement.

SOCIOECONOMICS

Comment-59: SMUD comments that the updated construction costs it filed with the Commission in April 2007 are not reflected in table 3-71.

Response: The socioeconomic analyses in the draft EIS are based on the data provided in the 2004 and 2005 study reports. We included a new footnote in the final EIS to explain this. We also deleted table 3-71 both because the values in the table are not directly used in the IMPLAN analysis and to avoid confusion with the current cost estimates provided in table 4-5 in our developmental analysis.

Comment-60: Mr. Morris states that he is opposed to the Iowa Hill Project as initially proposed because it would overwhelm his small community. He states that the construction traffic on a one-lane, rural neighborhood street would devastate his quality of life and threaten his family's safety and property value. Mr. Morris notes that SMUD would not compensate him or his neighbors if they felt it necessary to sell their homes or businesses. He asks FERC to please identify how it would address that issue if the Commission decides to grant approval of the Project. He notes that he has participated in many sub-committee meetings where potential mitigation measures have been identified, and that at a minimum, all of these mitigation measures (Advisory Committee recommendations) should be adopted as a comprehensive package with no exceptions. He states that the safety of the children and local residents should be of paramount concern during the construction phase of the Project if it is built.

Response: Draft EIS section 3.3.7.2, *Environmental Effects, Land Ownership, Management, and Use*, stated that construction of Iowa Hill would begin with updating existing access roads, including Cable Road, Slab Creek dam access road, and Slab Creek reservoir access road, to accommodate construction vehicles. Given the improvement to Cable Road prior to the start of construction, and the analysis showing that the increased traffic would not reduce the level of service on these roads, we concluded in the draft EIS that residents in the area, while they would likely be inconvenienced, would not experience serious disturbances during construction. We revised final EIS section 3.3.10.2, *Environmental Effects, Construction Traffic Impact*

and Impact on Tourism at Apple Hill, to reflect the results of SMUD's January 2008 *Transportation Route Technical Report*, which investigated several routes as alternatives to the proposed route described in the draft EIS (that is, the route using Cable Road, among others). It also evaluated the use of park and ride and/or equipment staging facilities as a means of alleviating traffic pressures. The study found that construction of the SW Connector would resolve the issues of large truck traffic on Cable Road, and that other measures such as a park-and-ride facility and use of multiple routes for different types of traffic could also help reduce adverse effects on neighborhoods. The final Transportation Management Plan may include these and other measures recommended by the Advisory Committee. However, we must emphasize that the Commission lacks any statutory authority to award or require compensation for harm or damages.

AIR RESOURCES

Comment-61: EPA comments that the Clean Air Conformity Analysis in appendix A of the draft EIS states that the construction schedule for the Iowa Hill development would be adjusted to eliminate the exceedances of oxides of nitrogen, but it notes that this measure is not included in the preferred alternative. EPA requests that in the final EIS staff include a revised General Conformity analysis that reflects the adjusted construction schedule to show that emissions are below the *de minimis* for all pollutants and that the adjustment to the construction schedule be included as a condition of any license issued for the Iowa Hill development, consistent with appendix A.

Response: In response to the California Air Resources Board (CARB), we revised our air conformity analysis using their OFFROAD model. The results of our analysis using the CARB model show that emissions would be below the *de minimis* for all pollutants. Based on these results, SMUD would not need to adjust the construction schedule. We provide the results of the revised air conformity analysis in section 3.3.11 and appendix B of the final EIS.

Comment-62: Mrs. Summers states that her property is in proximity to the Project and she is an asthmatic. Therefore, she wants assurances that SMUD will be in compliance with all California standards and guidelines in effect at the time of construction regarding particle pollution, ozone air pollution, ROG, and NOx on a daily basis.

Response: Based on our independent air conformity analysis included in the EIS, we conclude that the air emissions during construction of the proposed Iowa Hill development fall below the *de minimis* thresholds under California standards. We provided our analysis to the CARB for review.

STAFF'S CONCLUSIONS

Comment-63: Interior and American Whitewater note that recommendation no. 62 on page 5-11 of the draft EIS fails to include FWS in the reservation of authority to prescribe fishways at the UARP consistent with Proposed Article 1-35. Interior further

points out that section 5.0 does not refer to Proposed Article 2-19 that reserves Section 18 authority for FWS and NMFS at the Chili Bar Project. Interior and American Whitewater state that staff should correctly paraphrase and include both Proposed Articles in the final EIS.

Response: We revised the text of the final EIS to include these corrections.

Comment-64: CDFG, SMUD, PG&E, Interior, and American Whitewater point out that the Staff Alternative in section 5 of the draft EIS modifies Proposed Articles 2-1 and 2-1 of the Settlement Agreement such that the minimum streamflow and ramping rate provisions would only apply when inflow to the Chili Bar Project is greater than the proposed minimum streamflow instead of when inflow to the Chili Bar reservoir is sufficient to maintain the proposed minimum streamflow and ramping rates. CDFG states that its HEC-ResSim model, which takes into account available storage in the reservoir, demonstrates that PG&E could comply with the minimum streamflow and ramping rates specified in the Settlement Agreement. CDFG, SMUD, PG&E, Interior, and American Whitewater request that the Commission adhere to the language in the Settlement Agreement and allow the storage in the Chili Bar reservoir to help PG&E meet the proposed minimum streamflow and ramping rates.

Response: We agree with the HEC-ResSim modeling results that show that under modeled conditions, storage in the Chili Bar reservoir could be used to maintain the minimum stream flow and ramping rates. We have modified proposed measures 1 and 2 for Chili Bar to reflect the language in the Settlement Agreement that allows for the usage of storage within Chili Bar reservoir when feasible.

Comment-65: PG&E notes that the draft EIS qualifies the development of the water temperature monitoring plan to install and maintain continuous recording devices to occur as soon as weather and flow conditions allow. PG&E states that it was not the intent of the Settlement Agreement to so restrict this measure and requests that the final EIS delete the phrase “as soon as weather and flow conditions allow.”

Response: We revised the text in section 5 of the final EIS to be consistent with the intent of the Settlement Agreement.

Comment-66: Interior, SMUD, and American Whitewater comment the Staff Alternative does not include gages for real-time reporting on non-project diversion structures in the Rubicon watershed. Interior and American Whitewater recommend the Staff Alternative include these gages to be consistent with the Settlement Agreement for gaging on the Rubicon River. SMUD agrees with the staff conclusion that there is no nexus between the real-time telemetry of this gaging data and the UARP relicensing. However, SMUD points out that in summarizing the conclusions on this recommendation on page 5-22, staff appears to classify the tunnels and powerhouses as non-project diversion structures. SMUD requests that staff clarify the reference to gages located at the tunnels and powerhouses in the final EIS.

Response: We clarified that neither the Project gages at the tunnels and powerhouses, nor those on non-project diversion structures located within the upper Rubicon River watershed have real-time reporting in section 5 of the final EIS. As discussed in the draft EIS, real-time reporting gages requested by Placer County are not necessary for SMUD to ensure compliance with the recommended streamflow schedules or reservoir levels and their omission is not inconsistent with the Settlement Agreement.

Comment-67: The Forest Service, SMUD, Interior, and American Whitewater question the staff recommendation to not include the provisions of Proposed Article 1-23 to make every reasonable effort or good faith effort to meet specified reservoir elevations for several smaller reservoirs in the UARP, and these entities suggest that monitoring and adjusting the specified reservoir elevations every 5 years would address the staff's concern that these smaller reservoirs would not be able to comply with the specified elevations. SMUD comments that it agreed to keep reservoir elevations in non-storage reservoirs at historical levels for recreational and aesthetic reasons and its commitment to do so was important to the settlement negotiations. Therefore, these entities all recommend that the Staff Alternative adopt the language of Proposed Article 1-23 to be consistent with the Settlement Agreement.

Response: We appreciate the effort that will be made to meet the specified reservoir elevations on the smaller reservoirs. However, as noted in the draft EIS, "good faith," "every reasonable" and related efforts to meet a measure would be impracticable to enforce as a license condition in the license articles. Therefore, we will not recommend the inclusion of these measures in any license that may be issued for the UARP.

Comment-68: SMUD notes the staff recommendation at page 5-8 of the draft EIS to expand the geographic scope of invasive weed management plan to include all lands within the Project boundary. SMUD states that staff's modification to this measure extends beyond the intent of Proposed Article 1-13 and would cost substantially more than estimated by the staff, especially in the lower 30 miles of the UARP transmission line boundary. Therefore, SMUD requests that the Commission adopt the plan described in the Settlement Agreement in the final EIS.

Response: As discussed in sections 3.3.4.2 and 3.3.5.2 of the draft EIS, managing Project-related invasive weeds infestations on all Project lands would benefit native plants and wildlife, particularly rare plants. We recognize that the increased coverage of this plan would result in some increased cost, and we recommend that monitoring be conducted during your annual inspections to cut down on expenses. Additionally, although SMUD states the effort to determine which new infestations are Project-related would be "impossible," determining which infestations are Project-related would involve the same methodology SMUD would be employing to implement Proposed Article 1-13. Although SMUD states that the cost of this plan would be substantial, it does not provide an estimated cost. Therefore, we revised the final EIS to include our estimated cost based on the information you provided about the level of effort envisioned.

Comment-69: SMUD requests that the staff-recommended wildlife lands mitigation plan, as described on page 5-39 of the draft EIS, not limit SMUD’s options with respect to the issue of land ownership and inclusion of such wildlife mitigation plans in the Project boundary. Instead, SMUD requests that the staff-recommended plan allow for alternative approaches, such as an ownership transfer of SMUD-purchased land to a conservancy for wildlife preservation and management in perpetuity.

Response: Proposed Article 1-41 states that SMUD would purchase lands or obtain a conservation easement for lands to be managed as wildlife habitat for the term of the license. As stated in section 3.3.4.2 of the draft EIS, we were unable to analyze whether or not this proposed measure would adequately mitigate for the lost habitat without knowing what land would be purchased, what habitat types it contains, or which wildlife management goals SMUD would apply to the property. To ensure that the loss of wildlife habitat at the Iowa Hill development is properly mitigated, these mitigation lands need to be within FERC’s jurisdictional authority. Therefore, these lands need to be within the Project boundary.

Comment-70: SMUD takes issue with the conclusion on page 5-31 of the draft EIS that it is reasonable to include the Cleveland Corral Information Center within the Project boundary. SMUD believes that the facility is not project-related because it is a Forest Service facility that is open to all visitors to Crystal Basin, including visitors to non-project lakes, stream, lands, and trails throughout the 68,000-acre basin. Further, SMUD states that this facility is not needed for Project purposes, is not currently included in the Project boundary or adjacent to a Project reservoir, and is not included in the Settlement Agreement. Therefore SMUD requests that the Commission not include this facility in the Project boundary in the final EIS.

Response: Although SMUD assisted in the construction of this facility and continues to provide support, we agree that there is no Proposed Article that would require continued support for the facility. Therefore, we revised sections 3 and 5 of the final EIS, and we longer would recommend inclusion of the Cleveland Corral Information Center within the UARP boundary.

Comment-71: SMUD comments that the discussion on page 5-31 of the draft EIS is unclear about what facilities at the Big Hill Overlook staff recommends for inclusion in the Project boundary. SMUD requests that, consistent with the discussion on page 3-267, the final EIS include only those recreational-specific facilities of Big Hill Overlook within the Project boundary and not the non-public facilities, such as the Forest Service heliport facilities.

Response: We revised section 5 of the final EIS to clarify that only the public accessible recreational facilities of the Big Hill Overlook would be included within the Project boundary.

Comment-72: The Forest Service and American Whitewater do not agree with the staff's position that Proposed Article 1-21 is contrary to the Commission's policy on the imposition of funds and cost caps and comment that the collection agreement between SMUD and the Forest Service described in Proposed Article 1-21 is the appropriate vehicle to direct and define the maintenance activities and estimated costs that are directly related to Project operations. The Forest Service and American Whitewater point to the data Rationale Report (CDFG, 2007, as cited in the main text of the draft EIS) that demonstrates a Project nexus and states that the annual dollar amount specified in Proposed Article 1-21 is considerably less than the actual costs to the Forest Service. SMUD comments that this provision is one that the Commission would not normally include as a condition of license and that it agreed to an annual payment to the Forest Service as a matter of settlement. However, SMUD points out that the annual amount was carefully negotiated, and it agrees with the Forest Service that the proposed annual payment is less than the cost estimates by the Forest Service for the operation, maintenance, and administration of the developed sites, facilities, or uses that are adjacent to or in the vicinity of UARP reservoirs and facilities. Furthermore, SMUD states that it would be a mandatory condition under section 4(e) and requests that the Commission include Proposed Article 1-21 as presented in the Settlement Agreement in any license issued for the Project. SMUD also comments that the discussion of its responsibilities for maintaining Project features combined with elimination of the cost cap suggests that SMUD would have responsibility for non project-related recreation.

Response: As a matter of Commission policy, we do not recommend inclusion of conditions that impose cost caps. We do, however, recognize the complex collaborative effort between SMUD and the Forest Service to provide recreational facilities at and near the UARP. We revised our analysis of Proposed Article 1-21 for Recreation Operation, Maintenance, and Administration in section 3.3.6.2 to conclude that the continued provision of funding by SMUD to the Forest Service for the day-to-day management and operation of Project recreation facilities benefits the public and that the proposed collection agreement would clearly define activities and costs related directly to Project recreational facilities. We also conclude that though the costs the Forest Service incurs outside the Project boundary are only a small part of the total funding, based on the recent Commission settlement policy, we would not recommend these costs be part of the an article the Commission would enforce.

Comment-73: SMUD notes the statement on page 5-33 concerning SMUD's obligations under any new license implies a staff concern that SMUD may be trying to limit its responsibility for Project-related recreational facilities. SMUD points out that under Proposed Article 1-20, it would maintain full responsibility for keeping UARP recreational facilities in safe and usable condition.

Response: We did not intend to suggest that SMUD would be limiting its responsibilities for maintaining Project recreational facilities in safe and useable conditions. We clarified this in the final EIS.

Comment-74: The Forest Service, American Whitewater, the Friends of Slab Creek, and several recreational boaters do not agree with the staff's recommended provision to determine within 10 years of licensing, what the recreational streamflows downstream of Slab Creek dam would be for the remainder of the license period. These entities state that Proposed Article 1-24 provided 15 years, if Iowa Hill development were not to be constructed, to provide whitewater flows based on monitoring because that period would allow SMUD a reasonable amount of time to construct Iowa Hill development, to allow a reasonable maximum period to install new facilities before increasing whitewater flows, and to meet the interests of whitewater boaters in having a specified period in which to increase whitewater flow days if monitoring studies indicate the increases are warranted. The Forest Service and American Whitewater further note that the draft EIS presents the most costly scenario for providing future whitewater flows rather than conveying the range of options discussed during settlement negotiations. According to the Forest Service and American Whitewater, the provision of whitewater boating flows was one of the most contentious issues addressed in the Settlement Agreement and modifications to the provision should not be made without agreement of the parties to the Settlement Agreement.

Response: As noted in response to Comment 40, we take issue with the assumption that whitewater flows would be provided regardless of the level of demand for these flows, and we would continue to require an assessment of the level of demand prior to requiring the proposed whitewater flows as a condition of any license issued for the Project.

Comment-75: Interior and American Whitewater do not agree with the staff's position that an annual fund of \$15,000 for BLM to provide Project-related recreation brochure/map and an interpretive, education, public information plan is contrary to the Commission's policy on the imposition of funds and cost caps.

Response: As a matter of policy, the Commission holds licensees accountable for fully implementing the environmental measures included in a license and does not limit implementation of measures to specific cost caps. We, however, included the provision of Project-related recreational brochure/map and an interpretive, education, and public information plan in the Staff Alternative as reasonable measures that would benefit recreational users at the Chili Bar Project.

Comment-76: Interior notes on page 5-32 of the draft EIS staff indicates that PG&E's proposal to exclude 152 acres from the current Project boundary would likely have minimal environmental effects, but it does not make a recommendation because PG&E had not demonstrated the lands are no longer needed for Project purposes. Interior does not support PG&E's proposal to exclude these lands, but agrees that the new trail from Rock Creek road should be included in the Project boundary. PG&E comments that it proposes to develop and submit a revised proposed Project boundary after consultation with BLM and SMUD and request that the schedule for the submittal of revised exhibit

G drawings be consistent with the schedule for the UARP licensee's development of the UARP's Slab Creek recreation management plan.

Response: PG&E would be required to provide revised exhibit G maps after completion environmental measures that would require boundary changes, such as the proposed trail. Given that PG&E has 3 years to complete the proposed recreational improvements and that SMUD would need to file its Slab Creek recreation management plan prior to the commencement of construction of the Iowa Hill development, it would not be unreasonable for PG&E to file its revised exhibit E drawings after SMUD files its recreational management plan, assuming the schedules hold up over time.

CUMULATIVE EFFECTS

Comment-77: Mr. Hanson comments that although pages 3-290 and 3-292 of the draft EIS suggest that road improvements and maintenance associated with the construction of the Iowa Hill development may enhance the potential for development, nowhere in the draft EIS are the cumulative effects of this potential for development analyzed. He recommends that staff either augment the final EIS to include this analysis or preferably prepare a separate EIS for the Iowa Hill development.

Response: We augmented the cumulative effects summary in section 5 of the final EIS to include the cumulative effects of road improvements in the Iowa Hill area.

CONSISTENCY WITH COMPREHENSIVE PLANS

Comment-78: The Forest Service and American Whitewater comment that, contrary to the statement on page 5-44 of the draft EIS, the Iowa Hill development as described in the draft EIS, particularly the proposed berm, does not meet the visual quality standards in the Eldorado National Forest Land and Resource Management Plan and requests that the final EIS reflect this information.

Response: We revised the section 5 of the final EIS to reflect the conclusion in our analysis in section 3.3.8.2 that the Iowa Hill development as proposed would not meet the Eldorado National Forest VQOs. Under Proposed Article 1-44, SMUD would develop a visual resource protection plan that would include final designs for the development that would meet the Forest Service VQOs.

Comment-79: The Forest Service and American Whitewater point out that page 5-37 of the draft EIS incorrectly states that an HPMP is currently under review by the Forest Service and provides a copy of the Forest Service comment letter on the HPMP.

Response: We revised the text in section 5 of the final EIS to note that the Forest Service has provided comments to SMUD on the draft HPMP.

Comment-80: SMUD estimated the high-end cost to build the Iowa Hill development to be \$855,362,000 in 2007 dollars.

Response: Staff corrected the high-end cost to be \$855,362,000.