UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

October 30, 2008

Robert Epperson
Bureau of Reclamation
U.S. Department of the Interior
1243 N. Street
Fresno, CA 93721

Subject: Draft Resource Management Plan (RMP) and Environmental Impact Statement (EIS) for Cachuma Lake, Santa Barbara County, California (CEQ# 20080293)

Dear Mr. Epperson:

The U.S. Environmental Protection Agency (EPA) has reviewed the above-referenced document pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act.

The Cachuma Lake Resource Management Plan/Environmental Impact Statement (RMP/EIS) will establish management objectives, guidelines, and actions for Cachuma Lake and surrounding federal lands for the next 20 years. EPA supports the development of a comprehensive RMP to guide future management actions. EPA commends the efforts by the Bureau of Reclamation (Reclamation) to address key resource management issues such as (1) the increasing demand for use of trails, campsites, facilities, and the lake, and (2) the presence of unique vegetation and wildlife, including special-status species. We acknowledge Reclamation's commitment to avoid and minimize impacts to rare plants and oak trees when possible and implement specific mitigation measures.

While there are positive management goals proposed in the RMP, we have rated the Draft EIS as Environmental Concerns – Insufficient Information (EC-2) (see the enclosed "Summary of Rating Definitions"). The rating is due to the need for additional information and analysis regarding potential air and water quality effects from proposed activities. We recommend the Final EIS demonstrate general conformity to the applicable State Implementation Plan and include a detailed list of air quality mitigation measures for construction projects that will be incorporated as appropriate. EPA also recommends including current data and analysis of the cumulative impacts that increased boating may have on water quality. While we recognize the programmatic nature of this Draft EIS, we recommend the Final EIS provide additional data and more specific information regarding these issues to ensure all relevant effects are considered. Our detailed comments are enclosed.

We appreciate the opportunity to review this Draft EIS. When the Final EIS is released for public review, please send one hard copy and one CD ROM to the address above (mail code: CED-2). If you have questions, please contact me at (415) 972-3521, or Jennifer Blonn, the lead reviewer for this project. Jennifer can be reached at (415) 947-4109 or blonn.jennifer@epa.gov.

Sincerely,

Kathleen M. Goforth, Manager
Environmental Review Office (CED-2)

Enclosures:
Summary of EPA Rating Definitions
Detailed Comments

SUMMARY OF EPA RATING DEFINITIONS

This rating system was developed as a means to summarize EPA's level of concern with a proposed action. The ratings are a combination of alphabetical categories for evaluation of the environmental impacts of the proposal and numerical categories for evaluation of the adequacy of the EIS.

ENVIRONMENTAL IMPACT OF THE ACTION

"LO" (Lack of Objections)

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

"EC" (Environmental Concerns)

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

"EO" (Environmental Objections)

The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

"EU" (Environmentally Unsatisfactory)

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

ADEQUACY OF THE IMPACT STATEMENT

Category 1" (Adequate)

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

"Category 2" (Insufficient Information)

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analysed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

"Category 3" (Inadequate)

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analysed in the draft EIS, which should be analysed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640, "Policy and Procedures for the Review of Federal Actions Impacting the Environment."

EPA DETAILED COMMENTS ON THE DRAFT RESOURCE MANAGEMENT PLAN AND ENVIRONMENTAL IMPACT STATEMENT FOR CACHUMA LAKE, SANTA BARBARA COUNTY, CALIFORNIA, OCTOBER 30, 2008

Air Quality

Demonstrate general conformity to the applicable State Implementation Plan. The Draft Environmental Impact Statement (EIS) does not appear to evaluate whether the direct and indirect emissions from the federal action conform to the applicable State Implementation Plan (SIP) as required by the General Conformity Rule (40 CFR 93.150).

Recommendation:

- Include in the Final EIS a description of the General Conformity regulatory framework and how it applies to the proposed Resource Management Plan (RMP) and future project-specific implementation. The Final EIS should demonstrate conformity for all pollutants for which Santa Barbara County and the South Central Coast Air Basin are in nonattainment or maintenance status. Conformity may be demonstrated by a showing that the total direct and indirect emissions from the action are specifically identified and accounted for in the SIP.
- If analysis of general conformity to the SIP is more appropriate at the project-specific analysis level, we recommend the Final EIS include a specific commitment to future project-specific general conformity analysis.

Describe and commit to air quality mitigation measures during future project-specific construction. Cachuma Lake and surrounding federal land (Plan Area) are located in a nonattainment area for the state 8-hour ozone standard and the state particulate matter 10 microns or less (PM_{10}) standard (p. 3-7). Construction-related emissions of nitrogen oxides (NO_x), a precursor for ozone, and PM_{10} could contribute to adverse cumulative air quality impacts. Mitigation measures will likely be necessary to reduce these construction emissions.

Under all alternatives, dust and other sources of air pollution could result from improvements to existing facilities (p. 2-10), reconfiguring the entrance roadway (p. 2-11), and other maintenance projects. Alternatives 2 and 3 additionally allow new trails and campsites in various locations throughout the Plan Area, and a potential new water park (p. 2-27). Alternative 3 allows for the greatest increases in trails and camping throughout the Plan Area, in addition to miniature golf, game arcades, and athletic fields in the County Park (p. 2-28). Alternative 3 also allows for the potential development of a resort in Live Oak Camp (p. 2-21).

With regard to air quality from construction and maintenance activities, text on p. 4-11 states, "If major impacts to air quality were to be identified, the proposed project would be modified or mitigation measures would be implemented to reduce these impacts to no impact level. For example, exposed soils could be watered to prevent dust".

Recommendations:
Expand guidance on mitigation measures for construction and maintenance impacts to air quality. In addition to meeting all applicable local, state, and federal requirements, we recommend the Final EIS include an appendix listing mitigation measures to consider when designing specific construction projects. Possible measures to include are:

Fugitive Dust Source Controls:

- Stabilize open storage piles and disturbed areas by covering and/or applying water or chemical/organic dust palliative where appropriate. This applies to both inactive and active sites.
- Install wind fencing and phase grading operations where appropriate, and operate water trucks for stabilization of surfaces under windy conditions.
- When hauling material and operating non-earthmoving equipment, prevent spillage and limit speeds to 15 miles per hour (mph). Limit speed of earth-moving equipment to 10 mph.

Mobile and Stationary Source Controls:

- Minimize use, trips, and unnecessary idling of heavy equipment.
- Use the most recent pollution control equipment for all off-road equipment.
- Utilize cleanest available fuel engines in construction equipment and identify opportunities for electrification. Use ultra low sulfur fuel (diesel with 15 parts per million or less) in engines where alternative fuels such as biodiesel and natural gas are not possible.
- Distribute material hauling and disposal to minimize haulage miles.
- Maintain and tune engines per manufacturer's specifications to perform at EPA certification levels and, if engines have been modified, to perform at verified standards applicable to retrofit technologies. Employ periodic, unscheduled inspections to limit unnecessary idling and to ensure that construction equipment is properly maintained, tuned, and modified consistent with established specifications.
- Prohibit any tampering with engines and require continuing adherence to manufacturer's recommendations.
- If practicable, lease new, clean equipment meeting the most stringent of applicable Federal or State Standards. In general, only Tier 2 or newer engines should be employed in the construction phase.
- Utilize EPA-registered particulate traps and other appropriate controls where suitable to reduce emissions of diesel particulate matter and other pollutants at the construction site.
- Use electrical power for all stationary equipment.

Administrative controls:

- Identify all commitments to reduce construction emissions.
- Identify where implementation of mitigation measures is rejected based on economic infeasibility.

- Prepare an inventory of all equipment prior to construction and identify the suitability of add-on emission controls for each piece of equipment before groundbreaking. Suitability of control devices is based on (1) whether there may be significant damage caused to the construction equipment engine, and (2) or whether there may be a significant risk to nearby workers or the public.
- Develop a construction traffic and parking management plan that minimizes traffic interference and maintains traffic flow.
- Identify sensitive receptors in the project area, such as children, elderly, and infirm, and specify the means by which you will minimize impacts to these populations. For example, locate construction equipment and staging zones away from sensitive receptors and fresh air intakes to buildings and air conditioners.
- Schedule and sequence work so there is not a significant overlap with other activities that contribute to air quality emissions.

Water Quality

Provide current information on water quality related to gasoline components.
According to text on p. 2-26, under Alternatives 1 and 2, the number of motorized boats allowed on the lake at one time would range from 40 to 120. Under Alternative 3, the maximum allowable pool would increase to 160.

Text on p. 3-6 states that, to date, the only sampling of raw water at Cachuma Lake conducted for methyl tertiary butyl ether (MTEB) and other gasoline components occurred 1997. All detections were below Maximum Contamination Levels (MCL), and the sampling was limited to 1 season and 90 samples.

Text on p. 4-2 reads, "Motorized vehicle emissions would have minor impacts on water quality in the Plan Area under all three alternatives. Impacts are considered minor because the only testing to date has not shown exceedance of MCL standards".

Understanding cumulative impacts on water quality from increased motorized boating requires knowledge of current levels of MTEB, as well as benzene, toluene, ethylbenzene, and xylene (collectively, BTEX), and other gasoline components. The 1997 data may not reflect current conditions.

Alternatives 2 and 3 include creation of a Boating Management Plan (BMP) and a 5-year phase-out of non-conformant two-stroke engines (p. 2-26). Even with a BMP, EPA is concerned with potential cumulative impacts to water quality from fuel discharges. On p. 4-8, cumulative impacts listed for water quality do not discuss increased boating.

Recommendation:

- Collect and analyze additional data to provide a sound basis for predicting the cumulative impacts that increased motorized boating may have on water quality.

- Consider reducing the timeframe for phasing-out non-conformant two-stroke engines.

Provide details on planned water quality monitoring of boat related pollutants. The Bureau of Reclamation (Reclamation) commits, on p. 4-7, to monitor for adverse water quality impacts through the existing water quality testing program. The text states that the existing monitoring program would, "be used to verify that BTEX compounds remain below MCL standards as reported in 1997". For the phase-out of non-conformant two-stroke engines, text states, "If pollutants exceed state limits, an accelerated phase-out would be implemented for Alternatives 2 and 3".

Recommendation:

- Provide details on how BTEX monitoring will be incorporated into the existing program and who will be responsible for the monitoring.
- Identify and commit to take steps to reduce pollution levels before MCLs are reached.

Cumulative Effects of Climate Change

Discuss climate change and its effects on the Plan Area, RMP/EIS, and proposed actions. A number of studies specific to California have indicated the potential for significant environmental impacts as a result of changing temperatures and precipitation.[1] The discussion of cumulative effects in the Draft EIS does not appear to address the effects of climate change on the Project Area. The Draft EIS also does not appears to address effects of climate change on the implementation of the proposed RMP/EIS.

The Government Accountability Office recently released a report entitled, "Climate Change: Agencies Should Develop Guidance for Addressing the Effects on Federal Land and Water Resources" (August 2007). According to the GAO report, federal land and water resources are vulnerable to a wide range of effects from climate change, some of which are already occurring.

Based on the freshwater ecosystem case study in the GAO report, possible effects to the proposed projects could include average temperature increases in Spring with earlier initial and maximum snow melt and higher water levels; vulnerability to fire due to evaporative stress (drying) from more hot days; changing precipitation patterns with more rain and less snow in winter causing winter streamflows to increase; decreased snowpacks and altered timing of spring runoff; larger and more severe storms and lightning causing more forest fires and drier conditions, feeding larger, more intense wildland fires; warming temperatures and more severe drought with increased risk of insects and diseases to trees; possible increases in invasive species, and warmer stream temperatures negatively affecting aquatic organisms and fish species that thrive in cold water.

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[1] For example: Our Changing Climate: Assessing the Risks to California, A Summary Report from the California Climate Change Center, July 2006; Climate Change and California Water Resources, Brandt, Alf W.; committee on Water, Parks & Wildlife, California State Assembly, March 2007.

Recommendation:

- The Final EIS should include a discussion of climate change and its potential effects on the proposed action and the action's impacts.
- This discussion should include a short summary of any applicable climate change studies, including their findings on potential environmental and water supply effects and their recommendations for addressing these effects.

Wildfire Control

Evaluate wildfire impacts from discontinuing grazing on the north shore. Under Alternative 3, grazing leases would be discontinued on the north shore. Under Alternatives 1 and 2, grazing on the north shore is a method to supplement fire management.

Recommendation:

- Evaluate the impacts discontinuing grazing on the north shore could have on the likelihood and severity of wildfires.
- If increased wildfire risks are found to be associated with discontinued grazing, provide detailed mitigation measures to maintain or improve upon current wildfire risk levels.

Wildlife Impacts

Commit to protecting bird populations. Text on p. 4-32 states, "High levels of disturbance within ½-mile radius of a nest site or a decline in prey base could cause the bald eagle to abandon nesting areas and would be a major adverse impact".

Under Alternative 3, a radio-controlled (RC) airplane landing strip could be constructed and placed away from existing and prime eagle nesting habitat. Text on p. 4-34 also states, "RC airplanes should be limited to use only during the nonbreeding season…"

Recommendation:

- Commit to keeping all facilities and trails over ½-mile away from existing and prime eagle nesting locations.
- Place signs and provide information to inform visitors of the need to stay away from nesting areas.
- Commit to only allowing RC airplanes during nonbreeding season and provide measures for enforcement.
- Provide analysis detailing the impacts RC planes are likely to have on bird populations.

Naturally Occurring Asbestos

Provide information on the presence of naturally occurring asbestos (NOA) on trails and roads and the potential effects on recreation. Asbestos-bearing ultramafic rocks are found in at least 44 of California's 58 counties. Disturbance of rocks and soils that contain NOA can result in the release of asbestos fibers to the air and exposure to the public. Asbestos is a known human carcinogen and represents a potential human health risk for those exposed while using roads or trails where it occurs. For information on the occurrence of NOA and health impacts, see EPA's NOA webpage at http://www.epa.gov/asbestos/pubs/clean.html. The Draft EIS does not indicate whether NOA has been identified in the Plan Area. Nor does it evaluate potential risks to current and future visitors who may be exposed to NOA on existing and proposed trails and roads through recreational activities.

Recommendations:

- Determine whether or not NOA is present on trails or roads within the Plan Area. Assess the potential for exposure to elevated levels of NOA from common activities such as hiking, mountain biking, camping, and patrols and road maintenance activities. Provide information in the Final EIS.
- If NOA is found to be present, review the California Air Resources Board (CARB) regulations and guidance at http://www.arb.ca.gov/toxics/asbestos/asbestos.htm, which address California's Asbestos Airborne Toxic Control Measures for Surfacing Applications that apply to unpaved roads. Additional road surfacing recommendations are available in the Department of Toxic Substances Control report "Study of Airborne Asbestos From A Serpentine Road in Garden Valley, California" (April 2005) at: http://www.dtsc.ca.gov/loader.cfm?url=/commonspot/security/getfile.cfm&pageid=33546.
- Evaluate existing trails and roads for sediment production and drainage in areas where NOA is likely to be present.
- If appropriate, post signs informing visitors that NOA is present, what the risks are, and how visitors can avoid exposure. EPA will be happy to assist your office in developing signage for these areas.
- If appropriate, these measures should be incorporated into the Preferred Alternative in the Final EIS and committed to in the Record of Decision (ROD).

Use of Herbicides

Identify herbicides used and any associated human health or environmental impacts. Text on p. 4-57 states that herbicides will continue to be used on invasive Italian thistle under all alternatives.

Recommendations:

- Specify herbicides that will be used in the Plan Area.
- Provide information on human health impacts associated with exposure to the specific herbicides that will be used.
- Provide information on environmental impacts associated with specific herbicides that will be used, including impacts to non-target organisms, ground water, surface water, and soils.
- Commit to specific best practices for herbicide use to protect human health and the environment.
- Consider and provide information regarding alternatives to herbicides for controlling Italian thistle.

Mass Transportation

Consider mass transportation. A public comment listed on p. 2-22 recommended use of electric shuttles at the lake and to access the lake in order to reduce traffic and associated emissions.

Recommendation:

- Consider mass transportation in the Final EIS. Electric or hybrid shuttles could be a valuable service for park visitors and reduce air pollution. At a minimum, include information on why mass transportation is not feasible.

Scope of Potential Water Park and Resort Facilities

Provide more details on the possible size, energy usage, and features of the potential water park and resort facilities. Alternatives 2 and 3 include the possible development of a water park facility (p. 2-27). Alternative 3 allows also allows for the potential development of a resort facility (p. 2-21). The scope of these facilities is unclear.

Recommendation:

- Clarify the scope of the potential water park facility and provide more details on the potential resort facility. At a minimum, provide a tentative range for the size and energy usage of each.
- Commit to green building practices, including designing for energy efficiency and incorporating recycled materials into building design. Consider practices recommended by the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) program.

Procedural Comments

Explain the context for the timing of the Draft RMP. It unclear if this is the first RMP for Cachuma Lake or if this document will replace an existing RMP. Further, it is unclear why the Draft RMP is being produced at this time. Text on p. 2-5 states that public scoping meetings for this RMP began in March of 2002.

Recommendation:

- Over six years have elapsed since initiation of work on this Draft RMP. We believe it would be useful for the public and decision-makers to understand the context for this period of time. We recommend the Final EIS include a short description of the reasons for the timing of the Draft RMP.

Commit to Monitoring and Enforcement. The Draft EIS includes some procedures for monitoring and enforcement to help ensure that the RMP is followed. For example, private boats are currently, and will continue to be, subject to inspection, treatment, and quarantine requirements to avoid the introduction of invasive species (p. 3-64).

Recommendation:

- In the Final EIS, commit to allocating funding and providing detailed plans for on-going, project-specific monitoring of visitor use and environmental impacts.
- Commit to allocating funding and providing detailed plans to enforce park visitor rules defined in the RMP.