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

October 31, 2008

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

Subject: Draft Environmental Impact Statement for the Millerton Lake Resource Management Plan/General Plan (RMP/GP), Madera and Fresno Counties, CA. (CEQ# 20080292)

Dear Mr. Epperson:

The Environmental Protection Agency (EPA) has reviewed the Draft Environmental Impact Statement (DEIS) for the above project. Our review and comments are 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. Our comments are provided in accordance with the EPA-specific extension of the comment deadline date from September 23, 2008 to October 31, 2008 granted by you on September 29, 2008. We appreciate the additional time to review the DEIS.

The Millerton Lake Resource Management Plan/General Plan (RMP/GP) will establish management objectives, guidelines, and actions for the Millerton Lake State Recreation Area through the year 2035. 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 to implement specific mitigation measures. We encourage prompt development of the proposed activity-specific management plans.

Of note is the proposed phase-out of nonconformant two-stroke engines, including two-stroke personal watercraft, within one to three years. EPA supports phase-out after one year of finalizing the RMP/GP because of the significant air and water quality benefits. Marinas, boats, personal watercraft, and off-highway vehicles such as all-terrain vehicles (ATV) are significant sources contributing to nonattainment of ozone standards. Madera and Fresno Counties are in nonattainment of federal and state ozone standards.

Although there are beneficial management actions proposed in the RMP/GP, we have rated the DEIS as Environmental Concerns – Insufficient Information (EC-2) (see enclosed "*Summary of Rating Definitions*") due to the need for additional information regarding air quality, naturally occurring asbestos, water resources, biological resources, climate change, noise, funding, and enforcement. While we recognize the programmatic nature of this DEIS, we recommend the final environmental impact statement (FEIS) provide additional data and more specific information regarding these matters to ensure all relevant issues and effects are considered during development of the RMP/GP. Our detailed comments are enclosed.

We appreciate the opportunity to review this DEIS. When the FEIS is released for public review, please send one hard copy to the address above (mail code: CED-2). If you have any questions, please contact Laura Fujii, the lead reviewer for this project, at (415) 972-3852 or fujii.laura@epa.gov, or me at (415) 972-3521.

Sincerely,

/s/

Kathleen M. Goforth, Manager
Environmental Review Office

Enclosures:
Summary of EPA Rating Definitions
Detailed Comments

cc: Central Valley District, California Department of Parks & Recreation

US EPA DETAILED COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE MILLERTON LAKE RMP/GP, MADERA & FRESNO COUNTIES, CA, OCTOBER 31, 2008

Air Quality

Provide a description and impact analysis of air emissions from the proposed marina expansion and increased number of boats, personal watercraft and recreational vehicles. The Resource Management Plan/General Plan (RMP/GP) proposes an expansion of the marina up to 200 slips, an increase in camp sites, improved and expanded facilities (food services, parking), and a significant increase in recreational activity (p. 2-12). Marinas, boats, personal watercraft and off-highway vehicles such as all-terrain vehicles (ATV) are significant sources contributing to ozone nonattainment.[1] Part of the emissions are aromatic hydrocarbons, including polyaromatic hydrocarbons, which, as a group, are considered to be the most toxic component of petroleum products. Aromatic hydrocarbons are also associated with chronic and carcinogenic effects. The proposed marina expansion and increased use of boats, personal watercraft, and recreational vehicles could increase pollutant emissions in locations that may have inversion conditions and periods of poor air dispersion, exacerbating the current nonattainment for ozone.

> ***Recommendations:***
> The FEIS should provide a description and impact analysis of the potential increase of hazardous air pollutant emissions and ozone formation likely to result from the proposed marina expansion and increased number of boats, personal watercraft and recreational vehicles. Of specific concern are potential increases of emissions in use areas subject to inversion conditions.
>
> We recommend tracking the results of studies regarding the air emission effects of personal watercraft, ATV, and recreational vehicle use and factoring these results into future management direction. Where appropriate we recommend the Millerton Lake State Recreation Area (SRA) Interpretive Program include information on the air emissions, noise, and safe and minimal impact use of boats, personal watercraft and recreational vehicles.

Describe and commit to aggressive air quality mitigation measures during future project-specific construction. The SRA is located in a nonattainment area for ozone and fine particulate matter (p. 3-7). Future construction-related emissions of nitrogen oxides (NOx), a precursor for ozone, and particulate matter less than 10 and 2.5 microns in diameter (PM10 and PM2.5) could exacerbate nonattainment of air quality standards and contribute to adverse cumulative air quality impacts. Mitigation measures will be necessary to minimize these construction emissions.

[1] EPA Fact Sheets on Spark-Ignition Engines, Equipment, and Vessels; Snowmobiles, Dirt Bikes, and ATVs; and Marinas/Boating. http://www.epa.gov/OWOW/NPS/marinas.html.

Recommendation:
In addition to meeting all applicable local, state, and federal requirements, we recommend the FEIS include in an appendix a list of 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, during workdays, weekends, holidays, and windy conditions.
- 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.
- Distribute material hauling and disposal to minimize haulage miles.
- Maintain and tune engines per manufacturer's specifications to perform at EPA certification levels and 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.
- Use the most recent pollution control equipment for all off-road equipment.
- Utilize the 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.

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: whether there is reduced normal availability of the construction equipment due to increased downtime and/or power output, whether there may be significant damage caused to the construction equipment engine, 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.

Provide a description and air quality effects analysis from reduced roadway Level-of-Service. Consider promoting mass transportation for SRA access. The DEIS states that the action alternatives would not create traffic patterns that would cause air quality issues (p. 4-8). However, Table 3.10-2 (p. TABLES-60) indicates that three out of the four access roads will reach a Level-of-Service (LOS) F by 2025. LOS F is the worst LOS rating, signifying high congestion, significant traffic delays, and associated air quality issues.

Recommendations:
Provide, in the FEIS, a description and air quality effects analysis of reduced access roadway LOS. If feasible, we recommend the FEIS include more specific data to support the claim that increased levels of visitation under the action alternatives would not lead to significant traffic congestion and exacerbation of existing nonattinment of the ozone and fine particulate matter air quality standards.

Given the potential adverse LOS, consider promoting mass transportation to provide access the SRA. 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.

Demonstrate general conformity to the applicable State Implementation Plan. Millerton Lake SRA is located in the San Joaquin Valley Air Basin which is classified as "nonattainment" for federal and state 1-hour ozone and particulate matter 10 microns or less in diameter (PM10)(p. 3-7). Fresno and Madera Counties are also designated as "serious nonattainment" under the new 8-hour ozone standard and as "nonattainment" for particulate matter 2.5 microns or less in diameter (PM2.5).[2] Proposed actions include an increase in boating capacity from 196 up to 743 boats (p. TABLES-70), as well as increased trail use, camping, and other recreational activities; including an associated

[2] EPA, http://www.epa.gov/ozonedesignations/regions/region9desig.htm and http://www.epa.gov/region09/air/maps/r9_pm25.html

increase in traffic. The DEIS does not appear to evaluate whether the direct and indirect emissions from the federal actions conform to the applicable State Implementation Plan (SIP) as required by the General Conformity Rule (40 CFR 93.150).

> ***Recommendation:***
> Include in the FEIS a description of the General Conformity regulatory framework and how it applies to the proposed RMP/GP. If analysis of general conformity to the SIP is more appropriate at the project-specific level, the FEIS should include a specific commitment to future project-specific general conformity analysis.

Update citation regarding gasoline spark-ignition marine engines. The DEIS cites EPA's "Final Rule for New Gasoline Spark-Ignition Marine Engines" (EPA 1996)(p. 4-2). Regulations regarding spark-ignition engines have been updated.

> ***Recommendation:***
> The FEIS should be updated to be consistent with the most recent rule regarding nonroad spark-ignition engines, equipment, and vessels. We recommend a review of the following websites:
> http://www.epa.gov/oms/regs/nonroad/marinesi-equipld/420f08013.htm
> http://www.epa.gov/oms/marine.htm

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 FEIS.
>
> 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 FEIS and committed to in the Record of Decision (ROD).

Water Resources

Conduct additional water quality testing to determine the cause of the summer water color change. The DEIS notes that Millerton Lake often turns green in the summer. Water quality sampling by an aquatic ecology class found nanoplankton to be negligible (p. 3-5). EPA remains concerned with cyanobacteria or blue-green algae blooms which may be indicated by the summer water color change. Some species of blue-green algae, such as *Microcystis Aeruginosa (*MSAE), can generate levels of toxins in reservoirs that are a risk to human health.

Recommendation:

The RMP/GP should include an element to conduct additional water quality testing to determine the cause of the summer water color change and to determine if cyanobacteria or blue-green algae blooms could be an issue for Millerton Lake.

If further testing indicates there may be an algae issue, we recommend pursing monitoring and management measures to address algae blooms and to minimize public health exposures, when such blooms occur. For instance, we recommend the RMP/GP include development of a comprehensive water quality management plan that manages controllable factors that may enable or promote bloom conditions. Controllable factors may include nutrient loadings, temperatures, water residence time, turbidity, and the extent of vertical mixing.

Evaluate the feasibility and effects of expanded wastewater treatment services. Wastewater treatment services for the SRA are provided by septic systems with leach fields permitted by the Regional Water Quality Control Board, vault toilets, and chemical toilets. There are also 3 floating toilets for the body of the lake. The DEIS states this infrastructure is adequate for current use; but that expansion could be a problem due to leach field constraints (p. 3-63). The analysis for effects on water resources does not appear to address potential water quality effects of increased wastewater treatment services.

Recommendation:
The FEIS should evaluate the feasibility and potential water quality effects of providing expanded wastewater treatment services for each action alternative. For example, describe the additional wastewater treatment services required by Alternative 1 - Expanded Recreation and the feasibility of providing these services given leach field constraints.

Provide additional information on cattle grazing. Grazing within the Millerton Lake SRA may continue under all four alternatives (p. 4-13), although cattle were removed from Big Table Mountain between 1992 to 2000 due to overgrazing concerns (p. 3-42). While there is a general description of the effects of grazing on riparian habitat and vernal pools (p. 4-17), there does not appear to be an evaluation of potential grazing effects on other resources such as water quality.

Recommendation:
The FEIS should include additional detailed information on existing cattle grazing in the SRA (e.g., on- and off-dates, number of animal units, pasture locations, rotation frequency and methods) and the effects of grazing on existing and future resource conditions. Of specific interest is whether cattle grazing at current and/or proposed levels may have water quality and habitat effects.

Biological Resources

Provide data and analysis to support conclusion of little or no impact on biological resources. The DEIS states that, at a programmatic level, expansion of camping and day-use facilities would result in no impact to biological resources in the North Shore or South Shore areas (p. 4-16). Increased activities such as boat and trail use would only have minor adverse impacts on biological resources due to noise and human presence (pps. 4-20, 4-23). There does not appear to be an evaluation of potential impacts on habitat fragmentation or the disruption of wildlife corridors. EPA remains concerned with potential impacts to biological resources from increased noise, human presence and activities, habitat fragmentation, and disruption of wildlife corridors.

Recommendations:
The FEIS should provide additional data and analysis to support the statement that there would be little or no impact on biological resources. For example, summarize studies and data regarding the noise and human presence level of tolerance of typical wildlife species such as deer, coyote, bald eagles, other raptors, bobcats, mountain lions, and wild turkey. We also recommend the FEIS describe and evaluate the potential for habitat fragmentation and disruption of wildlife corridors from the proposed increased recreational use and infrastructure.

Describe additional measures to avoid and minimize adverse effects on special status species and their habitats. Increased camping and access to Temperance Flat would have adverse direct and cumulative impacts to Prairie falcon, California western mastiff bat, and vernal pool species present in the Table Mountain cliffs and atop Big Table Mountain and McKenzie Table (p. 4-24). EPA is concerned with effects to special-status species

from increased recreational activity in the Temperance Flat, Big Table Mountain, and McKenzie Table region. Our concern is heightened because the DEIS states that optimal enforcement staffing may not be available in any given year depending on state funding (p. 2-19).

> ***Recommendations:***
> The FEIS should describe additional measures to avoid and minimize adverse effects on special status species and their habitats. For instance, describe measures to ensure sufficient enforcement staff are available to monitor visitor activity. We recommend pursuing the joint Memorandum of Understanding (MOU), referenced on page 3-18, with the Sierra Foothill Conservancy (SFC), California Department of Fish and Game, and other agencies, to protect vernal pools and rare species of Big Table Mountain and McKenzie Table.

Relocate or phase-out facilities in sensitive areas. Alternative 1 – Recreation Expansion would retain recreation or maintenance facilities currently in sensitive areas. New uses may also be planned in these areas with mitigation (p. 4-53). EPA advocates the relocation or phase-out of facilities in sensitive areas such as wetlands, vernal pool complexes, riparian zones, and special-status species habitats.

> ***Recommendation:***
> Relocate or phase-out facilities in sensitive areas, as feasible.

Climate Change

Discuss climate change and its effects on the SRA, RMP/GP 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.[3] The discussions of cumulative effects in the DEIS does not appear to address the effects of climate change on the project area or the implementation of the proposed RMP/GP.

The Government Accountability Office (GAO) 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.

We believe a discussion of climate change and its potential effects on the project area, RMP/GP, and proposed actions would better serve long-term management planning for the Millerton Lake SRA.

[3] 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.

Recommendations:

The FEIS should include a discussion of climate change and its potential effects on the SRA, implementation of the RMP/GP, and impacts of the proposed actions.[4] Of specific interest are potential effects on Millerton Lake water levels, recreational carrying capacity, fire and invasive species management, and ability to operate consistent with the primary purpose of Millerton Lake for water supply.

This discussion should include a short summary of applicable climate change studies, including their findings on potential environmental and water supply effects and their recommendations for addressing these effects.

Funding

Include a description of funding and management resources to ensure implementation of RMP/GP priority actions. The DEIS does not appear to provide a list of proposed actions, the responsible Agency/Group, or an estimated implementation timeframe. Nor does the DEIS describe funding sources and resources to support implementation of these actions or to address the consequences of not meeting RMP/GP objectives and guidelines.

Recommendations:

The FEIS should include a list of proposed actions, the responsible Agency/Group, and an estimated implementation schedule, if feasible at this time. We recommend including a brief description of funding and management resources available to support implementation of the high priority proposed actions. The FEIS should also describe the consequences of not implementing high priority actions, especially if sensitive or valuable resources may be at risk.

Enforcement

Describe measures to enforce RMP/GP guidelines. The DEIS describes general measures that will be used to manage boat speed limits, boat capacity regulations and multi-use trails (p. 4-49). EPA remains concerned with the ability to adequately enforce RMP/GP requirements, especially given the potential that optimal enforcement staffing may not be available in any given year, depending on State funding (p. 2-19).

Recommendation:

The FEIS should describe in more detail the enforcement program to ensure implementation and compliance with General Plan guidelines.

General Comments

Address in the RMP/GP the potential for land subsidence from adjacent development. The DEIS states that groundwater withdrawal by development outside the SRA may cause land subsidence in the SRA if not adequately regulated (p. 4-14).

[4] We recommend reviewing "Addressing Global Warming (Climate Change) in CEQA and NEPA Documents in Post AB 32 Regulatory Environment, Jones & Stokes for Climate Change Focus Group, January 1, 2007.

Recommendation:
The FEIS and, if appropriate, the RMP/GP should address the potential for land subsidence in the SRA as a result of cumulative effects of adjacent development. For example, describe forums or other tools by which the SRA manager can coordinate with nearby developments to address potential adverse effects on the Millerton Lake SRA.

Evaluate the effects of pets and their management. The DEIS does not appear to address the management of pets of recreational users or from adjacent developments.

Recommendation:
The FEIS should describe and evaluate the potential effects of pets and RMP/GP measures to manage these animals.

Include more recent population and recreation growth estimates. The DEIS states that Madera and Fresno Counties are expected to grow by 86% and 42% respectively based upon 2000 Census information (p. 2-5, Table 3.9-16, p. TABLES-55). However, there has been an unprecedented national economic and housing decline which may adversely affect growth estimates. The San Joaquin Valley has been one of the most severely affected regions.

Recommendation:
The FEIS should include more recent population and recreation growth estimates.