



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

JUN 30 2016

Thomas A. Contreras  
Forest Supervisor  
Angeles National Forest  
701 N. Santa Anita Avenue  
Arcadia, CA 91006

Subject: Draft Environmental Impact Statement for the Littlerock Reservoir Sediment Removal Project, Los Angeles County, CA (CEQ #20160101)

Dear Mr. Contreras:

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

Palmdale Water District has applied for a special use authorization from the Forest Service to construct a grade control structure and to remove sediment from Littlerock Reservoir for the purpose of restoring the Reservoir to historic water storage and flood control capacity. The Forest Service has not identified a Preferred Alternative in this Draft EIS, but indicated that it is "likely to be the same as the environmentally preferable alternative," identified in the Executive Summary as Alternative 1.

Based on our review of the Draft EIS, we have rated the Action Alternatives as *Lack of Objections (LO)* (See attached "Summary of EPA Rating Definitions"). We note that, compared to the Proposed Action Alternative, Alternative 1 will reduce the intensity of daily construction impacts through extension of the construction schedule, thereby reducing the severity of impacts associated with air quality, traffic, and noise. EPA agrees with this approach and supports Forest Service implementing all feasible measures to reduce impacts as much as possible. We offer the attached Detailed Comments for your consideration in the Final EIS.

EPA appreciates the opportunity to review this Draft EIS. When the Final EIS is released for public review, please send one copy to the address above (mail code: ENF-4-2). If you have any questions, please contact me at (415) 972-3521, or contact Stephanie Gordon, the lead reviewer for this project, at 415-972-3098, or [gordon.stephanies@epa.gov](mailto:gordon.stephanies@epa.gov).

Sincerely,

*FOR*  
  
Kathleen Martyn Goforth, Manager  
Environmental Review Section

Enclosure: Summary of EPA Rating Definitions

cc via email: Lorraine Gerchas, Forest Service  
Daniel Swenson, U.S. Army Corps of Engineers  
Jan Zimmerman, Lahontan Regional Water Quality Control Board

## **SUMMARY OF EPA RATING DEFINITIONS\***

This rating system was developed as a means to summarize the U.S. Environmental Protection Agency's (EPA) 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 Environmental Impact Statement (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 should 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 Council on Environmental Quality (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.



### Water Supply and Drawdown Effects

Littlerock Reservoir is operated and managed by the Palmdale Water District (PWD) and provides part of the water supply for the PWD and Littlerock Irrigation District (p. C.7-1). Given the status of the Littlerock Reservoir as a drinking water source, as well as increasing concerns with water quality and quantity in California due to climate change, drought and other factors, protecting the reservoir's water quality and supply is a sensible strategy. EPA supports the need to develop well planned solutions for providing adequate local water supplies so long as environmental impacts can be reduced as much as possible.

The purpose of the project is to increase the storage capacity of the reservoir, thereby increasing the volume of water diverted from the reservoir. The document states that the annual inflow range is variable, such that the reservoir is not filled one in every six years (p. C.7-2). Although it is understood that the volume of water diverted from the reservoir may vary from year to year, neither the expected increase, nor the Reservoir's contribution to Palmdale's overall total water supply, is quantified in this Draft EIS.

Additionally, the Draft EIS is unclear in its explanation of how reservoir drawdown happens year to year. In some instances, it appears that the lake is purposely drained at the end of summer to provide for off highway vehicle use (p. C.3-5). In other places, it appears the Reservoir supports perennial water and year-round fish populations (p. C.3-14).

#### *Recommendations:*

Quantify, in the Final EIS, the expected change in reservoir water levels during the course of a year. Identify the reservoir high water mark under the Alternatives as compared to the No Action Alternative.

Discuss, in the Final EIS, whether the Forest Service would expect the growth of vegetation or wetlands in the reservoir perimeter area exposed as a result of the reservoir drawdown. Specifically, the Final EIS should identify any reason that wetlands could not form around the perimeter of the reservoir after drawdown.

Discuss the potential ramifications of the increased allocations of each Alternative to municipal water supply. Clarify whether reservoir water would still be used for irrigation needs and describe how the additional water will be used.

### Wetlands

The Draft EIS does not clarify whether dredged material will be placed in the waters of the U.S. (WOUS) on the 47<sup>th</sup> Street East sediment disposal site (p. C.3-45). If material will be placed in a WOUS, it will need to be tested in accordance with the 404(b)(1) Guidelines. We note that some sediment testing has already been conducted per recommendations from the Lahontan Water Quality Resources Control Board and we appreciate the inclusion of the testing results in Appendix D. However, it is unclear why the tested chemicals were selected and why others such as metals and PAHs (polyaromatic hydrocarbons) were not included. Neither Chapter 3 nor Appendix D shows a map of where the sediment tests were collected. Typically, permitting agencies would review a sampling plan prior to testing; however that doesn't appear to have happened in this case. Therefore, the agencies may require additional testing at the time of permitting.

*Recommendation:*

In the Final EIS, include additional information about the completed sediment testing. Provide the rationale for the list of chemicals tested, describe the sediment sampling methods, and include a map of sample locations. EPA recommends that the Final EIS state that additional testing could be required at the time of permitting.

**Climate Change**

The Draft EIS provides little detail about how climate change may affect the study area. Since the purpose of the project is to remove sediment from Littlerock Reservoir through annual sediment removal for the purposes of water supply, EPA recommends that the Final EIS include a discussion of the vulnerabilities of the local water supply to drought and other changing conditions in California in the context of climate change (e.g. flashier storms, more variability in precipitation).

*Recommendations:*

In the Final EIS, include a discussion of climate change and its potential effects on the study area, implementation of the action, and impacts of the proposed actions. Of specific interest are potential effects on Littlerock Reservoir water levels, recreational carrying capacity, fire and invasive species management, and the ability to operate consistent with the purpose of Littlerock Reservoir for water supply.

Include, as part of the discussion, 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.

Describe any measures that would be undertaken to improve the adaptability and resilience of the proposed project to climate change.

Describe how increased variability in precipitation due to climate change may affect the Project's active work season (Labor Day through January) and frequency or ability to overtop the Reservoir.

**Fish**

The Draft EIS states that fish tissues were sampled in August 2014 and they all tested positive for mercury and PCBs (p. C.3-15). The Forest Service proposes to eradicate all fish from the lake by stranding them at the end of summer, but does not state how many fish this may be (as indicated earlier, there may not be many fish due to the yearly reservoir drawdown and recent drought). The Draft EIS does not analyze the potential water quality impacts from fish eradication. For example, herbicidal treatments may be required if there are more frequent algal blooms.

*Recommendation:*

Describe the potential environmental impacts to recreation, water supply, water quality, wetlands, and other species that may occur from removing a population of fish from the reservoir.

**Naturally Occurring Asbestos**

Asbestos-bearing ultramafic rocks are found in at least 44 of California's 58 counties. Disturbance of rocks and soils that contain naturally occurring asbestos (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 study 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 study area. Assess the potential for exposure to elevated levels of NOA from common recreational (including OHV use) and maintenance lake activities. Provide information in the Final EIS.
- If NOA is found to be present, review the California Air Resources Board 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.
- 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.

**Valley Fever**

The Draft EIS states that Coccidioidomycosis, (kok-sid-oy-doh-my-KOH-sis), or Valley Fever, is a fungal infection that is almost always acquired from the environment via the inhalation of fungal spores. It can affect humans, many species of mammals and some reptiles. The fungus, *Coccidioides*, is endemic (native and common) in the soil of the southwestern United States, Mexico, and parts of Central and South America. *Coccidioides* can live for long periods of time in soil under harsh environmental conditions including heat, cold, and drought.<sup>1</sup> *Coccidioides* can be released into the air when soil containing the fungus is disturbed, either by strong winds or activities such as farming or construction. Distribution of the fungus is typically patchy, but in some "hot spots," up to 70% of the human population has been infected.

According to the Centers for Disease Control and Prevention, workers engaged in soil-disturbing activities in endemic areas should be considered at risk for the disease. Occupational groups at risk include farmers, agricultural workers, construction workers and archaeologists. Some groups of people appear to be at increased risk for disseminated disease and can become seriously ill when infected.

*Recommendations:*

The EPA recommends that the Final EIS assess potential exposures to the fungus, *Coccidioides*, and susceptibilities of workers at the Reservoir site and nearby residents to Valley Fever due to soil-disturbing activities of the project.

Since the project area is suspected endemic for Valley Fever, the standard project commitments should include training for construction workers on the health hazards of Valley Fever, how it is contracted, what symptoms to look for, proper work procedures, how to use personal protective equipment, the need to wash prior to eating, smoking or drinking and at the end of the shift, and the need to inform the supervisor of suspected symptoms of work-related Valley Fever. The training should identify those groups of individuals most at risk and urge individuals to seek

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<sup>1</sup> Coccidioidomycosis Fact Sheet, California Department of Public Health. Web June 12, 2013, <<http://www.cdph.ca.gov/HealthInfo/discond/Pages/Coccidioidomycosis.aspx>>

prompt medical treatment if Valley Fever symptoms (flu-like illness with cough, fever, chest pain, headache, muscle aches, and tiredness) develop.

In addition to regulatory required fugitive dust controls committed to in Appendix A, the Applicant should:

- Avoid areas that may harbor the fungus if practicable.
- Restrict high risk workers from contaminated areas if possible.
- Test soils to be disturbed for presence of the cocci fungus, understanding that even in known endemic areas, the distribution of the fungus in the soil is sporadic and very limited.
- Require that grading and construction equipment cabs be enclosed, HEPA ventilated, and air-conditioned.
- Use personal protective equipment in dusty work areas:
  - Disposable clothing.
  - Method to clean work boots at the end of the shift.
  - NIOSH certified N95 respirator, at a minimum or one with a higher protection factor.
- Provide personal hygiene (washing) facilities.
- Require crews to work upwind from excavation sites.
- Pave construction roads.
- Minimize ground disturbance as much as possible. Revegetate temporarily disturbed areas promptly.
- Discourage workers from carrying any fomites home with them. Institute hygiene measures to limit dust transport offsite.
- Consider limiting visitor site access without proper training or personal protective equipment.
- Prohibit work activities when wind speeds exceed 25 mph.
- Consider mitigation measures that would provide advanced notification to sensitive receptors of the potential effects of a *Coccidioides* infection.
- Contact the local or state public health agency to better understand the incidence of Coccidioidomycosis in the project area and surrounding region. Provide local public health officials with a schedule of project activities that disturb soil. Ensure local physicians consider Coccidioidomycosis in diagnoses involving flu or flu-like symptoms.