

RECLAMATION

Managing Water in the West

Draft FINDING OF NO SIGNIFICANT IMPACT

Lake Casitas Fire Station Upgrades

FONSI-12-058

Recommended by:

Ben Lawrence
Natural Resources Specialist
South-Central California Area Office

Date: _____

Concurred by:

Chuck Siek
Supervisory Natural Resources Specialist
South-Central California Area Office

Date: _____

Concurred by:

Randy English
Chief, Resources Management Division
South-Central California Area Office

Date: _____

Approved by:

Michael P. Jackson
Area Manager
South-Central California Area Office

Date: _____



Introduction

Background

The Bureau of Reclamation (Reclamation) acquired certain lands in the Casitas Watershed as part of the Reclamation Development Act (Act). The Act authorized the purchase of 3,560 acres of private lands (referred to as open space land) surrounding Lake Casitas as a means to protect the lake's water quality, and provide for the preservation of public outdoor recreation. In 1962, Reclamation and the United States Forest Service (Forest Service) entered into an agreement granting the Forest Service the right to occupy and use 4.2 acres next to open space lands for the purpose of maintaining an administrative center and fire station on those 4.2 acres. The agreement was later amended in 1976 to expand the fire station to 12.2 acres.

At the north end of the reservoir, a variety of recreational improvements have been added over the years by private concessionaires. These include boat ramps, campsites, hiking trails, a water park and special events areas. These improvements are guided by the Resource Management Plan (RMP) for the property, which balances the need to provide recreational opportunities to the public with the need to store and deliver public drinking water. Reclamation issued a Record of Decision for the most recent RMP on April 11, 2011.

Proposed Action

Reclamation proposes to allow a variety of improvements to the fire station located at Lake Casitas in Ventura County, California. The proposed improvements consist of:

- Sanitary Sewer Leach Line Relocation
- Decontamination Basin Site Preparation
- Additional Helipad Preparation
- 10,000 Gallon Water Tank Installation
- Emergency Equipment Station Installation
- Road, Fence and Gate Improvements
- Emergency Landing/Staging Area Clearing

The improvements are described in more detail below and are shown in Figure 2-1 of the EA.

Sanitary Leach Line Relocation

The Forest Service is proposing to relocate their sanitary sewer line and leach field. The new line would follow the existing driveway generally to the north and then turn to the northwest, where it would split into the new leach field. Infiltration tests for the new leach field location have already been completed and demonstrated that Ventura County's septic installation standards could be met. Following installation of the new sanitary line and leach field, the roadway would be restored to its original state. The old line would be pumped out completely, capped off and buried in place.

Decontamination Basin Site Preparation

A pad is proposed to support a portable basin to decontaminate firefighting equipment that is brought in from outside the area to limit the potential for invasive species to be introduced. The pad would be approximately 12 feet by 12 feet by 4 inches thick and would be composed of decomposed granite. No excavation would be necessary to install the pad, but the site would be compacted and graded prior to placing the pad material. The site is routinely cleared of vegetation with hand tools; no new large-scale clearing would be needed.

Additional Helipad Preparation

The Forest Service has proposed the addition of three additional helicopter pads, two of which would be 20 feet by 20 feet. The third would be designed for larger helicopters and would be 30 feet by 30 feet. The designated areas would be cleared of brush and other obstructions using hand tools. When fire operations require the additional landing areas, temporary landing guides would be placed in the center of the cleared area to guide pilots. No excavation would be necessary, but leveling and compaction may be needed to ensure drainage and stability.

10,000 Gallon Water Tank Installation

The Forest Service has proposed the addition of a 10,000 gallon water storage tank north (uphill) from the decontamination pool pad. The tank would be plastic and measure approximately 140 inches in diameter and 160 inches in height. The base would likely be compacted aggregate.

Emergency Equipment Station Installation

Stands for crash rescue equipment and portable lighting stations would be placed at each of the locations near the helipads.

Road, Fence and Gate Improvements

The existing secondary access road would be upgraded to handle traffic and fire crew equipment. The road base material would be restored and thickened, and drainage would be improved by regrading, installing new culverts and cleaning existing culverts. A widened area for vehicle turnaround would be added at the eastern gate, and internal circulation roads would also be cleared as shown in the EA.

To meet security requirements, the existing fence around the property would also be repaired and upgraded, and additional fencing would be installed as shown. Adjacent property owners have requested that the eastern gate be made automatic. This would require an extension of electrical service (overhead line with drop-pole) from Casitas Pass Road.

Emergency Landing/Staging Area Clearing

An emergency landing area and staging area for fire equipment is proposed to the northeast of the fire station and main helicopter landing area. The area has been used for training purposes in the past and is already heavily disturbed. Some clearing may be necessary to make the area suitable for aircraft or heavy vehicles.

Findings

Water Resources

Relocating the sanitary line away from the intermittent stream that it currently crosses would provide an extra measure of water quality protection. The other upgrades to the fire station are not anticipated to either benefit or adversely affect current uses of the lake. Increased helicopter capacity would increase the rate at which water could be taken from the reservoir to fight fires, but the amount used is considered marginal on the scale of regional hydrology and use patterns.

Land Use

Under the Proposed Action, undeveloped land would be converted for use by the fire station. The following improvements would be implemented:

- Sanitary Sewer Leach Line Relocation
- Decontamination Basin Site Preparation
- Additional Helipad Preparation
- 10,000 Gallon Water Tank Installation
- Emergency Equipment Station Installation
- Road Improvements
- Fence and Gate Improvements
- Emergency Landing/Staging Area Clearing

These improvements are compatible with existing development and consistent with public expectations. No adverse impacts are anticipated.

Executive Order 11988 requires that all Federal agencies take action to reduce the risk of flood loss, to restore and preserve the natural and beneficial values served by floodplains, and to minimize the impact of floods on human safety, health, and welfare. According to Federal Emergency Management Agency (FEMA) maps, the project area is in Flood Hazard Zone X, meaning that the risk of flooding is low.

Biological Resources

A majority of the special-status plants and animals would most likely not occur within the project area. Special-status species with the potential to occur in the project area include the California red-legged frog, grasshopper sparrow, white-tailed kite, least Bell's vireo, and the California condor. The project area contains disturbed non-native grasslands, oak woodland, and chaparral-coastal sage scrub habitats. The proposed project would cause some temporary ground disturbances, removal of vegetation and generation of noise and would occur intermittently over a period of three weeks. The project area is currently subjected to frequent disturbances from the operation of the fire station, and the proposed project would not substantially alter the baseline conditions of the area. Because the ground-disturbing activities associated with the proposed project could potentially impact California-red legged frogs if any are present during construction, the absence of California red-legged frogs would be confirmed prior to the initiation of construction to avoid all impacts to the species. If vegetation removal or ground disturbing activities are conducted during the bird nesting season (February 1 through August 31), a qualified biologist would conduct pre-construction surveys to ensure that there are no

impacts to nesting birds protected under the MBTA. With the implementation of the provided avoidance measures (Table 2-1), Reclamation has determined there would be *No Effect* to proposed or listed species or critical habitat under the Endangered Species Act (ESA) of 1973, as amended (916 U.S.C. §1531 et seq.), and *No Take* of birds protected under the MBTA (16 U.S.C. §703 et seq.) would occur.

Cultural Resources

The Proposed Action is the type of activity that has the potential to affect historic properties. A records search, a cultural resources survey, and Tribal consultation did not identify historic properties within the APE. Since no historic properties would be affected, Reclamation concluded that no cultural resources would be impacted as a result of implementing the Proposed Action. The Forest Service accepted Reclamations' findings and conclusions and completed the Section 106 process for this undertaking under 4.2(a)(1) and 7.8(a) of their Forest Service PA.

Socioeconomic Resources

The Proposed Action does not involve major development which would alter employment or economic conditions in the area. Improving the fire station's capacity to respond to fires would be expected to reduce loss of property and life, which is a benefit.

Air Quality

Construction is expected to take place intermittently over approximately three weeks, with equipment operated an average of four hours per day. The equipment to be used would be a trencher, a backhoe and a dump truck. As shown below, estimated emissions from construction are anticipated to be below *de minimis* thresholds for air quality impacts.

Table 1 Estimated Construction Emissions

| Equipment Type | ROG, lb/hr | NO _x , lb/hr | PM _{10/2.5} , lb/hr | CO, lb/hr |
|------------------------------|------------|-------------------------|------------------------------|-----------|
| Trencher | 0.1507 | 0.4749 | 0.0582 | 0.4749 |
| Backhoe | 0.0862 | 0.5816 | 0.0435 | 0.3824 |
| Dump truck | 0.0100 | 0.0614 | 0.0031 | 0.0324 |
| Total per hour of operation | 0.2469 | 1.1179 | 0.1048 | 0.8897 |
| Total per day | 0.9876 | 4.4716 | 0.4192 | 3.5588 |
| Total for entire project | 14.814 | 67.074 | 6.288 | 53.382 |
| De minimis threshold (lb/yr) | 50,000 | 50,000 | N/A | N/A |

Source: Emissions data calculated from OFFROAD 2007 emission factors
Thresholds from Ventura County Air Quality Assessment Guidelines

Operating firefighting equipment such as trucks and aircraft produces emissions of criteria pollutants similar to other mobile sources of the same type. In addition, gusts from helicopters landing and taking off can produce dust clouds which are localized and temporary.

Emissions from fire station operations depend on the number and type of equipment in use, which is dictated by size and frequency of fires. The location, frequency and size of future fires cannot be precisely predicted; therefore, any quantification of emissions from fire response would be speculative. It is reasonable to expect, however, that with expanded facilities the emissions from equipment operation would increase.

Forest fires produce a range of air pollutants, including carbon dioxide, carbon monoxide, particulate matter, hydrocarbons and nitrogen oxides. Left uncontrolled, they can seriously

degrade air quality in the immediate area as well as downwind. The size and location of future fires cannot be known with any certainty, but it is reasonable to expect that improved firefighting capacity at the fire station would result in shorter fires with reduced emissions. This benefit is expected to far outweigh additional vehicle operational emissions from the Proposed Action.

Global Climate

Construction is expected to take place intermittently over approximately three weeks, with equipment operated an average of four hours per day. The equipment to be used would be a trencher, a backhoe and a dump truck. As shown below, estimated emissions from construction are anticipated to be below the *de minimis* threshold for GHG emissions.

Table 2 Construction Emissions, CO₂ Equivalents

| Equipment Type | CO ₂ , lb/hr | Methane (CH ₄), lb/hr | Nitrous Oxide (N ₂ O), lb/hr | All Emissions |
|---|-------------------------|-----------------------------------|---|---------------|
| Trencher | 58.7 | 0.0136 | 0.6995 | |
| Backhoe | 66.8 | 0.0078 | 0.5816 | |
| Dump Truck | 7.6 | 0.0009 | 0.0614 | |
| CO ₂ equivalence | 1 | 21 | 310 | |
| Total CO ₂ e, lb/hr of operation | 133 | 0.468 | 416 | 550 |
| Total CO ₂ e per year (short tons) | 3,727 | 13 | 11,653 | 15,393 |
| De minimis threshold (short tons) | | | | 27,558 |
| Emissions data calculated from OFFROAD 2007 emission factors. | | | | |

Operating firefighting equipment such as trucks and aircraft produces emissions of GHG similar to other mobile sources of the same type. Emissions from fire station operations depend on the number and type of equipment in use, which is dictated by size and frequency of fires. The location, frequency and size of future fires cannot be precisely predicted; therefore any quantification of emissions from fire response would be speculative. It is reasonable to expect, however, that with expanded facilities the emissions from equipment operation would increase.

Forest fires produce a range of air pollutants, including carbon dioxide, carbon monoxide, particulate matter, hydrocarbons and oxides of nitrogen. The size and location of future fires cannot be known with any certainty, but it is reasonable to expect that improved firefighting capacity at the fire station would result in shorter fires with reduced emissions. This benefit is expected to far outweigh additional vehicle operational emissions from the Proposed Action.

Noise

Under the Proposed Action, noise from recreational activities would be unchanged, and noise from natural sources should be similar to current levels. Expansion of the fire station would be expected to result in greater noise during fire control operations, since more vehicles could operate from the facility.

Federal Aviation Administration studies of aviation noise have shown that public tolerance of noise from emergency service aircraft is very high. While noise from these types of vehicles is an inconvenience, the public recognizes the noise as an acceptable consequence of providing a vital community service. The Proposed Action is not expected to change this public acceptance.

Recreation

Under the Proposed Action, recreational facilities on the property would not be modified. The fire station would remain in its current location, with increased firefighting capacity. This could increase the intensity of short-term, temporary inconveniences such as noise, emergency vehicle traffic and restrictions on recreation. However, with greater capacity, the Forest Service should be able to extinguish fires more quickly and reduce the duration of these inconveniences.

Cumulative Impacts

The Recreation Area's bait shop concessionaire has proposed demolishing and reconstructing their prefabricated building, which was originally placed on the property in 1969. Reclamation prepared a Categorical Exclusion Checklist for that action (CEC 12-063), which is separate and independent from the proposed fire station improvements. The two actions are not anticipated to have cumulative impacts beyond the impacts of each individual project.