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**Appendix B – USFWS Concurrence Letter**



# United States Department of the Interior

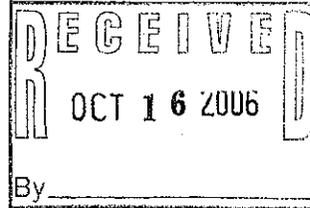
## FISH AND WILDLIFE SERVICE

Sacramento Fish and Wildlife Office  
2800 Cottage Way, Room W-2605  
Sacramento, California 95825-1846



IN REPLY REFER TO:  
1-1-06-I-1955

Mr. Alessandro Amaglio  
Regional Environmental Office  
U.S. Department of Homeland Security  
Federal Emergency Management Agency  
1111 Broadway, Suite 1200  
Oakland, California 94607-4052



OCT 13 2006

Subject: Informal Consultation on the proposed Lick Observatory Vegetation Management Project Santa Clara County, California (FEMA file PDMC- PJ-09-CA-2005-065)

Dear Mr. Amaglio:

This letter is in response to the letter from the Federal Emergency Management Agency (FEMA) providing additional information regarding informal consultation on the proposed Lick Observatory Vegetation Management project on Mt. Hamilton in Santa Clara County, California, dated August 31, 2006. This information was received in this office on September 1, 2006. The proposed project involves vegetation management activities to minimize effects associated with potential wildfires at the Lick Observatory. At issue are the potential effects of the proposed project on the federally threatened California tiger salamander (*Ambystoma californiense*) (tiger salamander), tiger salamander critical habitat, and the threatened California red-legged frog (*Rana aurora draytonii*) (red-legged frog). This response is made under the authority of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) (Act).

This document was prepared based on: (1) a request for informal consultation, dated April 12, 2006; (2) a letter providing additional information on the proposed project dated August 31, 2006; and (3) other information available to the Service.

Vegetation management is proposed on approximately 27.4 acres under the Pre-Disaster Mitigation program (PDM) on Mt. Hamilton on the University of California at Santa Cruz's Lick Observatory (LO). The proposed project is designed to reduce future impacts associated with wildfires by reducing the available fuel load through a combination of hand clearing and mechanical removal of potential fuels.

The LO consists of approximately 64 structures located near the top of Mt. Hamilton at an elevation of 4,200 to 4,300 feet. Vegetation management will consist of both mechanical and

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IN AMERICA 

Mr. Alessandro Amaglio

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hand treatments. Vegetation management would be performed in two areas, those areas within 100-feet of a structure and "area treatments," which are beyond 100-feet from existing structures. Approximately 16.3 acres are included within the 100-foot buffer and 11.1 acres in the area treatments. Mechanical treatments would consist of push mowers and tractor mounted mowers, with the majority of the site being push mowed. Mowing would be conducted on an annual basis. To reduce potential impacts to wildlife, the Service recommends a mowing height of no less than six inches. Hand treatments would consist of hand pruning of trees and application of Garlon 4 (triclopyr) or Roundup (glyphosate) and applied directly to the cambium layer of freshly cut stumps within a few minutes after cutting. Initial application would occur during the dry season (i.e., late summer or fall). Trees within approximately 25-feet of a structure would be hand pruned every 5 years. Refuse material would be stored on paved roads adjacent to buildings and then removed once vegetation treatments are complete.

According to the information provided, no small mammal burrows were observed on site and there are no stock ponds or areas that hold water for at least 10 weeks present within approximately 1.5 miles of the proposed project. Based on our review of the information provided, the Service concurs that the proposed vegetation management project is not likely to adversely affect the California red-legged and California tiger salamander due to the absence of suitable upland dispersal habitat (i.e., small mammal burrows) and the absence of suitable aquatic habitat (i.e., standing water for a minimum of 10 weeks) within approximately 1.5 miles of the action area. The proposed project is within Unit 6 of California tiger salamander critical habitat; however as mentioned above, the project area lacks all of the primary constituent elements to support the tiger salamander. Therefore, unless new information reveals effects of the proposed project may result in adverse effects to federally listed species in a manner not identified to date, or if a new species is listed that may be affected by the proposed action, no further action pursuant to the Act is necessary for this proposed project.

If you have any questions regarding our response on the vegetation management project, you may contact Ryan Olah or Mike Thomas (916) 414-6625.

Sincerely,



Chris Nagano  
Deputy Assistant Field Supervisor

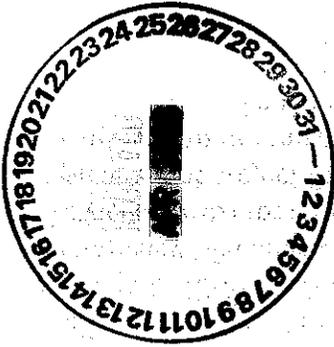
cc:

Stephen Willoughby, Pacific Gas and Electric, San Francisco, California  
Carl Wilcox, California Department of Fish and Game, Yountville, California

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**Appendix C – SHPO Concurrence Letter**



FEMA

FEMA

RF

March 29, 2006



Mr. Milford Wayne Donaldson  
State Historic Preservation Officer  
Office of Historic Preservation  
1416 9<sup>th</sup> Street, Room 1442-7  
Sacramento, California 95814

Re: Regents of the University of California, Lick Observatory Vegetation Management,  
PDMC-PJ-09-CA-2005-065

Dear Mr. Donaldson:

The purpose of this letter is to transmit the enclosed technical report and summarize the results of an archaeological field review of lands potentially affected by a project proposed in Santa Clara County, California. The Regents of the University of California (UC) have applied to the Federal Emergency Management Agency (FEMA) through the California Governor's Office of Emergency Services (OES) for a Pre-Disaster Mitigation (PDM) Program grant to implement a vegetation management project for lands surrounding Lick Observatory (LO). The proposed effort is designed to mitigate future impacts associated with wildfires by reducing the available fuel load through a combination of hand clearing and mechanized removal of potential fuels from the project area. The attached report presents the results of a literature and archival review and an archaeological field survey of lands potentially affected by the proposed project. This report was prepared by URS Corporation (URS), as a consultant to FEMA, to comply with the Programmatic Agreement (PA) among FEMA, the State Historic Preservation Officer, OES, and the Advisory Council on Historic Preservation.

In summary, a field review of the project area was supplemented by a cultural resources records review conducted at the Northwest Information Center of the California Historical Resources Information System. In addition to the literature review, the California Native American Heritage Commission (NAHC) was contacted for a review of its Sacred Lands File as well as a list of Native American groups and individuals it believes should be contacted. The Sacred Lands File search was negative. FEMA sent letters to those groups and individuals listed by the NAHC. To date no responses have been received. An archaeological survey of the area of potential effects (APE) was undertaken on November 16, 2005, by URS. The results of the survey were positive.

#### Project Description

The proposed action areas encompass approximately 27 acres that would be divided up into 37 treatment units and are analogous to the cultural resources APE (Figure 2). Treatment units would

consist of 100-foot-wide defensible spaces around structures and "area treatments." Treatment unit boundaries would be flagged on the ground.

Vegetation management techniques would consist of brush cutting and pruning canyon oaks, blue oaks, and foothill pines to a height of 8 feet, removing dead materials, and mowing brush along roadways. Flammable ornamental vegetation such as rosemary and juniper shrubs would be removed and replaced with lower-hazard shrubs as identified by the California Fire-Safe Council. Cut vegetation would be disposed of by chipping, piling in low-hazard locations, and pile burning.

#### **APE Determination**

The proposed APE consists of all areas (within the individual project boundaries) where vegetation will be removed and is depicted in Figure 2 of the attached technical report. Pursuant to Stipulation VII.A. of the PA, FEMA seeks your concurrence with its determination of the APE.

#### **Literature Review**

Pursuant to Stipulation VII.B. of the PA, the project area was subject to a cultural resources literature review. The enclosed report provides a complete description of the literature review.

#### **Natural Setting**

The enclosed report provides a complete description of the natural setting.

#### **Prehistory, Ethnohistory, and History**

The enclosed report provides a complete description of the prehistory, ethnohistory, and history of the project area.

#### **Cultural Resources Inventory Methods and Results**

Mr. Brian W. Hatoff, M.A., RPA, of URS, qualified as an archaeologist under the Secretary of the Interior's Professional Qualification Standards, served as Principal Investigator for the cultural resources survey conducted in November 2005. The enclosed report provides a complete description of survey methods and results. A tin can scatter, site LO-1, was identified and recorded during the survey. Site LO-1 does not appear to meet any of the applicable eligibility criteria for the National Register of Historic Places (NRHP) (Criteria A, B, and D). The site is downslope from site P-43-000678, the Copernicus Peak CDF fire lookout tower. While the tower itself has been recommended as eligible to the NRHP because of its association with the history of forestry and fire protection in California, the trash scatter does not evoke such a sense of association. It is not associated with known significant persons in our past. The tin can scatter provides basic chronological data and evidence for typical consumptive activities at a semi-remote location—beverages and foodstuffs. The site does not have the potential to yield further information important in history.

In a separate study of the buildings comprising LO, JRP Historical Consulting recommended that, as a Historic District, LO does not meet the eligibility requirements set forth for inclusion in the NRHP. When individually considering the buildings that make up LO, JRP recommended that four buildings are potentially eligible for the NRHP and the California Register of Historic Resources: Crossley Observatory (Building 7211), which was constructed between 1895-1896, LO's Main Building (Building 7240), which was constructed from 1881-1888, and the two buildings of Shane Observatory (Building 7276, which houses the 120-inch telescope, and Building 7277, which is home to the 120-inch

Coudé Auxiliary Telescope), both of which were constructed between 1950 and 1959. These structures are outside the APE for the current undertaking.

### Findings and Conclusions

The results of the archaeological survey resulted in the identification of a historic archaeological site LO-1. This letter and enclosed report provides a description of the undertaking, an APE determination, relevant maps, and a description of the steps FEMA has taken pursuant to Stipulation VII.C. of the PA to identify historic properties. As described above, no properties eligible for the NRHP were identified through a literature review or pedestrian survey of the project area. Therefore, the proposed project is not expected to have an effect on historic properties within the APE, nor an adverse effect on the potential historic properties which are part of the Lick Observatory complex or the Copernicus Peak fire tower.

There is always the possibility that previously recorded or previously unidentified archaeological resources could be discovered during project construction. In accordance with Stipulation X of the PA, FEMA will require UC to stop work in the event of an unexpected discovery and will comply with the steps outlined in Stipulation X.

In accordance with Stipulation VII of the PA, FEMA has conducted the Standard Project Review. FEMA made a determination of "no historic properties affected" within the survey area and "no adverse effect" to potential historic properties adjacent to the undertaking. In accordance with the PA, FEMA is submitting for review the enclosed report supporting that determination. In accordance with Stipulation VII, FEMA may authorize funding for the project unless you object to this determination within 21 days of your receipt of this documentation. If you have questions, you can contact me at (510) 627-7284 or Mr. Hatoff at (510) 874-3195.

Sincerely,



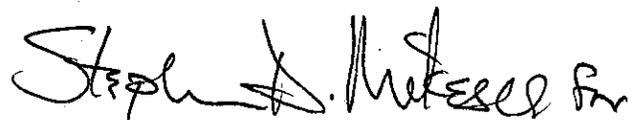
Alessandro Amaglio, AIA  
Environmental Officer

Enclosure

Cc:

Dennis Castrillo, Governor's Office of Emergency Services  
Marcia Rentschler, Governor's Office of Emergency Services  
Jeff Duncan, The Regents of the University of California

**CONCUR:**



**Milford Wayne Donaldson, FAIA  
State Historic Preservation Officer**

4/17/06