# **DECISION MEMO**

# CRYSTAL LAKE FUELS AND VEGETATION MANAGEMENT ACTIVITIES ADMINISTRATIVE SITE DEFENSIBLE SPACE

# USDA FOREST SERVICE SAN GABRIEL RIVER RANGER DISTRICT ANGELES NATIONAL FOREST LOS ANGELES COUNTY, CALIFORNIA

#### BACKGROUND

Creation of defensible space around administrative sites is included under the Angeles National Forest's Fuels and Vegetation Management Activities. Defensible space around Crystal Lake Administrative Site will enhance strategic and tactical opportunities in case of a wildfire. Various treatments will be employed to reduce flammable fuel per acre on the project site.

Characteristics of the project site are summarized in Table 1 and the location of the project site is illustrated in Figure 1.

Project Name	Location	Acreage	Elevation Range
	Township 3N, Range 9W,	16.04	approximately
Crystal Lake Administrative Site Defensible Space	Section 29 of the <i>Crystal Lake</i> , <i>California</i> U.S. Geological Survey (USGS) 7.5 minute topographic quadrangle	acres	5,400 feet

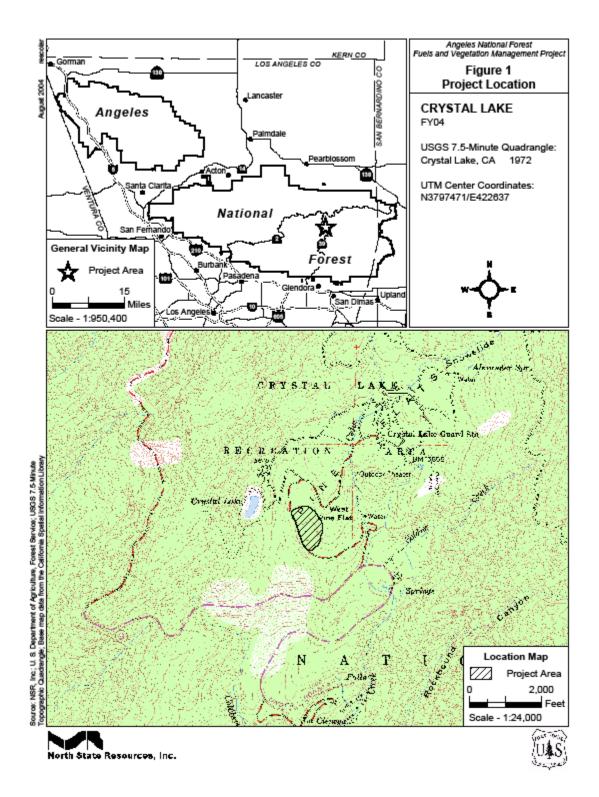
 Table 1. Characteristics of the Project Site

#### **DECISION**

It is my decision to proceed with the Crystal Lake Administrative Site Defensible Space Project. This project follows the direction of the National Fire Plan and would not result in adverse environmental effects.

#### **Project Description**

The purpose of the project is to provide for public, employee, and fire fighter safety by reducing the fuel loading and arrangement of fuels at the Crystal Lake project site. The project will follow the National Fire Plan (see http://www.fireplan.gov/) for defensible space.



The purpose of the project is to enhance strategic and tactical opportunities in case of a wildfire. The objective is to leave no more than five tons of flammable fuel per acre. A combination of treatments will be used which can include mechanical crushing, masticating, drum chopping,

chainsaws, and prescribed fire. The project will generate brush/slash piles that may be chipped or burned. The perimeter of these treatment areas may include handline constructed with tools and chainsaws.

The project will include primary and secondary buffers. The primary buffer is defined as an area up to 100 feet from all structures or improvements. Within the primary buffer, vegetation removal will reduce canopy cover and ladder fuels from structures. Chaparral vegetation will be removed to ground level. In areas where trees are present, canopy cover will be reduced to 40%. If tree removal is necessary, suppressed, intermediate, and co-dominate trees will be the first to be removed. All trees 20 inches in diameter or greater will remain unless canopy cover is compromised; however, no tree larger than 24 inches in diameter will be removed. A minimum of 70 trees per acre will be left, where possible to maintain the 40% canopy cover. Residual trees will be pruned to a height of 10 feet from ground level. Any snags within the primary buffer will be removed.

The width of the secondary buffer will be variable depending on terrain and vegetation type. The secondary buffer will begin at the edge of the primary buffer and may extend to the project site boundaries. Within the secondary buffer, canopy cover will be reduced to 50-70%. Oak and conifer stands will be thinned by taking suppressed, intermediate, and co-dominate trees first. Most of the understory will be removed. Dominant and large trees over 20 inches in diameter will remain. The amount of residual trees can vary from 90-100 trees per acre. No snags or downed dead logs will be left within 300 feet of improvements. Otherwise, no more than two snags per acre, and no more than two to three downed dead logs greater than 20 inches in diameter will be allowed. Chaparral vegetation will be thinned by reducing the volume of leaf area to at least 50%. Any dead woody material will be cut from the remaining chaparral vegetation.

Fomes annosus (*Heterobasidion annosum*) is a fungus that attacks a wide range of woody plants causing a decay of roots and butt and the death of sapwood and cambium. All conifer species in California are susceptible to the fungus. To reduce the risk of fomes annosus infestation, Sporax will be applied to freshly cut stumps. The active ingredient in Sporax is borax, a naturally occurring mineral made of sodium, boron, oxygen, and water. Sporax would be applied in localized treatments, has low toxicity, and would not be used near water or during rain events.

#### Avoidance and Minimization Measures

The avoidance and mitigation measures included in Appendix A are incorporated into my decision, and are mandatory conditions of the authorization of this project.

# REASONS FOR CATEGORICALLY EXCLUDING THE PROPOSED ACTION

The proposed action falls under the following category of actions that may be excluded from documentation in an environmental impact statement (EIS) or environmental assessment (EA)

and normally does not individually or cumulatively have a significant effect on the human environment:

**Categorical Exclusion(31.12 (#3)) (FSH 1909.15):** "Repair and maintenance of administrative sites" and (31.2 (#6)) (FSH 1909.15): "Timber stand and/or wildlife habitat improvement activities which do not include the use of herbicides or do not require more than one mile of low standards road construction."

The environmental analysis conducted for the proposed action determined that there were no extraordinary circumstances or conditions that would result in significant adverse effects. Extraordinary circumstances include, but are not limited to, the following:

#### 1. Threatened and Endangered Species or Their Critical Habitat

It is my determination that project activities will not affect any threatened, endangered, proposed, or candidate species. Project activities will not affect designated or proposed critical habitat for any listed species (Angeles National Forest, 2007).

#### 2. Forest Service Sensitive Species

It is my determination that project activities may affect individuals, but are not likely to result in a trend toward Federal listing or loss of viability for any Forest Service sensitive species (Angeles National Forest, 2007).

#### **3.** Flood Plains, Wetlands, or Municipal Watersheds

The proposed project is not anticipated to adversely affect flood plains, wetlands, or municipal watersheds.

# 4. Congressionally Designated Areas, Such as Wilderness, Wilderness Study Areas, or National Recreation Areas

There are no congressionally designated areas within the project area (U.S. Department of Agriculture, 2005).

#### **5. Inventoried Roadless Areas**

The project area is not located within an inventoried roadless area (Angeles National Forest, 2000).

#### 6. Research Natural Areas

There are no research natural areas within the project area (U.S. Department of Agriculture, 2005).

#### 7. American Indians and Alaska Native Religious or Cultural sites

Regularly scheduled meetings and correspondence with the Native Americans on general Forest issues and mutual concerns have not identified any American Indian or Alaska Native religious or cultural sites of concern located within the treatment areas.

## 8. Archaeological Sites or Historic Properties or Areas

The Forest Archaeologist has determined that the Area of Potential Effect (APE) was adequately covered by previous inventory (Stip. III(B)(5)). Compliance with Section 106 of the National Historic Preservation Act of 1966, as amended, has been completed for this project (04SGR41PI).

### 9. Clean Air Act General Conformity

The proposed action has been analyzed as required under section 176(c) of the federal Clean Air Act, as amended, and 40 CFR 93.156, and has been determined to conform to the applicable State Implementation Plan for the purpose of attaining and maintaining all National Ambient Air Quality Standards (Angeles National Forest, 2005). This project does not exceed threshold levels and therefore meets federal conformity guidelines. No additional air quality analysis is required.

Therefore, I find that there are no extraordinary circumstances or conditions that might cause the action to have significant effects.

# SCOPING & PUBLIC INVOLVEMENT

Internal scoping was conducted by the following resource specialists: Forest Biologist, Forest Botanist, Forest Archaeologist, and San Gabriel River Ranger District staff. No significant issues or extraordinary circumstances precluding the action were raised. A legal notice was published in the Los Angeles Daily News and Inland Valley Daily Bulletin on September 1, 2005. Letters requesting comments on the proposed action were mailed to interested or affected persons or organizations on September 2, 2005. This project was published in the forest Schedule of Proposed Actions (SOPA) on October 1, 2007.

# FINDINGS REQUIRED BY OTHER LAWS

This proposed action is consistent with management direction (Angeles National Forest Land and Resource Management Plan), as required by the National Forest Management Act (FSM 1926.41, and FSH 1909.12); National Environmental Policy Act; Endangered Species Act; National Historic Preservation Act; Clean Water Act; Clean Air Act; and all other applicable Acts.

This action will not require a Civil Rights Impact Statement because it will not have a significant impact on the social environment.

#### **IMPLEMENTATION DATE**

This decision may be implemented immediately.

# **ADMINISTRATIVE REVIEW OR APPEAL OPPORTUNITIES**

This action is not subject to notice, comment and appeal under the requirements of 36 CFR 215.

DATE ZJUNE ZOOB an APPROVED

L'Tanga Watson District Ranger San Gabriel River Ranger District

#### **REFERENCES**

- Angeles National Forest. 2000. Inventoried Roadless Areas Map. Roadless Area Conservation. September 15, 2000. Available: http://www.roadless.fs.fed.us/states/ca/ange.pdf.
- Angeles National Forest. 2005. Clean Air Act Air Quality General Conformity Report for Crystal Lake. Fuels and Vegetation Management Activities; Attachment 2 – Administrative Defensible Space. Prepared by Earth Matters, Inc., December 16, 2005.
- Angeles National Forest. 2007. Biological Evaluation/Biological Assessment for Crystal Lake. Fuels and Vegetation Management Activities; Attachment 2 – Administrative Defensible Space. Prepared by North State Resources, Inc., May 2007.
- U.S. Department of Agriculture 2005. Land Management Plan Part 2 Angeles National Forest Strategy. Pacific Southwest Region R5-MB-076. September 2005.

# Appendix A Avoidance and Minimization Measures

#### Avoidance and Minimization Measures

The following avoidance and minimization measures shall be implemented to avoid the potential for significant adverse effects to sensitive environmental resources. These measures are mandatory conditions of project authorization:

- 1. All materials, wastes, and equipment will be removed from the project site(s) at the completion of the project.
- 2. Vehicles will not be driven off of designated access roads and fuelbreaks during the course of project implementation.
- 3. Where feasible, safety zones and escape routes will consist of the existing roads and trails.
- 4. Where feasible, snags and down wood will be left in place.
- 5. To the extent feasible, rock outcrops should be excluded from hand treatments and mechanical equipment.
- 6. In order to minimize potential disturbance impacts, work crews should be trained about ANF special status species.
- 7. Work crews must immediately notify the ANF District Biologist of any sightings of TEPCS species and of any injured/sick/abandoned animals.
- 8. Where feasible, burning and removal of trees and other vegetation will be conducted outside of the general nesting season for migratory birds (approximately April 1st –September 1st).
- 9. For treatments within 500 feet of suitable southwestern willow flycatcher habitat, noise generating activities that require the use of large equipment or mechanized equipment such as chain saws will be scheduled to occur outside of April 1 to August 31. Beyond the 500 foot buffer, no seasonal restriction is recommended for the flycatcher. Noise generating activities can proceed during this timeframe if surveys during the current breeding season have determined that southwestern willow flycatchers are not present in the project area.
- 10. If suitable nesting habitat for the California spotted owl is present in the project site or within <sup>1</sup>/<sub>4</sub> mile of the project site, limited operating periods may apply. Limited Operating Period Guidelines from the June 2004 *Conservation Strategy for the California Spotted Owl (Strix occidentalis occidentalis) on the National Forests of Southern California* will be in place, unless surveys confirm that spotted owls are not nesting in the proximity of the project. If protocol surveys determine that spotted owls are nesting within 0.25 mile of the project area or nesting owls Protected Activity Center (PAC) is within 0.25 mile of the project area, project activities in this area may not occur from February 1st August 15th.
- 11. Fuel Management Guidelines prescribed in the June 2004 Conservation Strategy for the California Spotted Owl (Strix occidentalis occidentalis) on the National Forests of Southern California will also be in place to protect Nest Stands, PACs, and Home Range Cores (HRCs). This includes indirect fuel management, monitoring, vegetation treatments designed to improve spotted owl habitat, and the application of guidelines described in Table 2 of the June 2004 conservation strategy.
- 12. TEPCS plants observed within the project area will be flagged and treatments will be designed to minimize negative impacts.

#### 13. Riparian Areas:

- 13a) For riparian areas, the Riparian Conservation Area (RCA) guidelines from the 2005 Forest Plan will be used (Appendix E). All treatments will be consistent with FSH 2509.22- Soil and Water Conservation Practices Handbook and Best Management Practices. This will ensure that ground disturbing activities will not contribute additional sediment to any streams or lakes. Where prescribed burns are planned, no direct burning will occur in the RCA. Fire may enter those areas by "backing" downslope, burning the understory at low intensity. However, no effort will be made to apply fire directly to those areas or start a hot fire upwind that would intentionally move into the riparian buffer zones. To the extent possible, low creeping fires would be used near riparian areas, minimizing the burning/thinning of cottonwoods, alders, willows, and other riparian overstory.
- 13b) To prevent vehicle encroachment in riparian habitats, ensure that barriers to riparian areas are not removed as a result of treatments.
- 13c) Construction of firebreaks within riparian habitat will be avoided except where handlines have to cross riparian zones. Those short lines will be constructed and maintained with handcrews using handtools and chainsaws. The width will be kept to a minimum and the length of handlines in riparian will also be kept to a minimum.
- 13d) To the extent feasible, fuel reductions implemented in riparian areas will focus on the removal of non-native vegetation to achieve fuel hazard reduction objectives.
- 14. General Chaparral Habitat:
  - 14a) Through the use of waterbars and other erosion control techniques, minimize amount of erosion and reduce sedimentation flow into riparian areas.
  - 14b) Where prescribed burns are planned, the prescription objective for chaparral habitat will include creating a fire of sufficient intensity to ensure germination of cupleaf ceanothus, bigberry manzanita, and other obligate seeding species. These shrubs do not resprout from burls, but instead regenerate only from seed following fire. Seeds are apparently induced to germinate by heat. For purposes of obligate seeding species, fire intensity can be estimated by the burned-off diameters of stems: where burned stems are <sup>1</sup>/<sub>4</sub>-1" in diameter, the fire should be hot enough to induce germination.
- 15. To prevent the spread of noxious weeds:
  - 15a) Follow up noxious weed surveys will be conducted throughout the project site. For the first year following treatments weed surveys will be conducted. Ideally, surveys will be monthly between March and July.
  - 15b) Ideally, for years 2 to 5 following the treatments, weed surveys will be conducted bi-monthly between March and July.
  - 15c) If any new or expanding infestation of invasive species are discovered, the Forest Botanist will be notified and the plants will be removed using the most efficient and effective method.

- 16. FSM 2081.03, directs the Forest Service to require all equipment be cleaned when working in a site contaminated with noxious weeds. As a result of FSM 2081.03, the following will be required at all project sites:
  - 16a) WASH ALL EQUIPMENT AND VEHICLES: Vehicles and all equipment must be washed BEFORE AND AFTER entering all project sites. This includes wheels, undercarriages, bumpers and all parts of the vehicle. In addition, all tools such as chain-saws, hand clippers, pruners, etc must also be washed BEFORE AND AFTER entering all project sites. For example, vehicles traveling into contaminated areas are the main dispersal mechanism for yellow star-thistle. All washing must take place where rinse water is collected and disposed of in either a sanitary sewer or a landfill.
  - 16b) KEEP WRITTEN LOGS: When vehicles and equipment are washed, a daily log must be kept, stating:
    - A) Location
    - B) Date and time
    - C) Methods used
    - D) Staff present
    - E) Equipment washed
    - F) Signature of responsible crew member
  - 16c) TURN IN WRITTEN LOGS: These written logs will be turned in every week. Contractors should turn in written logs to the COR. Forest Service staff should turn in written logs to the project manager or to the Forest Botanist.