SIBLEY SR002 - TRIANGLE FUELS MANAGEMENT PRESCRIPTION

SITE DESCRIPTION AND LOCATION:

The site is 45 acres of north coastal scrub vegetation dominated by French broom, brush, and dense pockets of eucalyptus trees on steep slopes located to the south of Skyline Blvd. and to the west of Thorndale Dr. within the Sibley Volcanic Regional Preserve in Alameda County.

VEGETATION MANAGEMENT GOALS:

Oak-bay woodland, scattered north coastal scrub.

FUELS MANAGEMENT OBJECTIVES:

- 1 Reduce surface fuels by removing approximately 15 to 18 acres of invasive French broom, coyote brush, dead and downed fuel accumulations from within an area roughly 100 ft of Skyline Blvd or Thorndale Drive.
- 2 Remove all ladder fuels and selectively remove approximately 10 to 13 acres of eucalyptus thereby reducing the potential for crown fires spreading upslope into residential areas above Thorndale Drive or towards the ridgeline along Skyline Blvd.
- 3 Extend the existing strategic fuelbreak by meeting Fuels Management Objectives 1 and 2 above.

RESOURCE OBJECTIVES AND CONSIDERATIONS:

- Retain duff and up to 1" of forest litter to reduce soil displacement and invasive plant
 establishment within 100' of Skyline Blvd. or Thorndale Drive. Erosion control measures will
 be applied, if necessary, where duff and 1" of forest litter have been removed during fuels
 management operations and areas of exposed soil are greater than approximately 100
 square feet.
- Conduct all operations to avoid unnecessary and unacceptable damage to boles, roots, and crowns of residual trees and vegetation.
- Maintain sufficient health of the retained trees by pruning no more than the lower one-third of the crown.
- Conduct surveys and treatment activities in a manner that will minimize potential adverse effects to Alameda whipsnakes.
- Conduct all operations to avoid damage to Western Leatherwood shrubs flagged by Stewardship.
- Conduct all initial work during the period from July 31st to Jan. 31st to avoid disturbance to
 nesting raptors and song birds, as recommended by the District's biologist. If work will occur
 during nesting season, Stewardship will conduct a pre-work nesting survey within 15-days of
 work beginning and flag any buffer sites around identified nests.

FUELS TREATMENT PRESCRIPTION:

Initial Treatment

The site has been divided into two separate initial treatment parts based upon differing fuel types and associated timing considerations:

Part 1 - Brushing and surface fuels removal.

Part 2 - Eucalyptus tree thinning/removal and ladder fuels reduction.

In addition to areas in Part I, French broom and coyote brush follow-up/maintenance will expand to include all post initial treatment areas if necessary.

2011 - Part 1: Brushing and surface fuels removal. See map for treatment area delineation. Remove all dead and downed fuel accumulations over 2" in diameter and all French broom within roughly 100 feet of Skyline Blvd or Thorndale Drive. Cut grass and thistle and remove up to half of the coyote brush. Extend treatment farther than 100 feet from Skyline or Thorndale in areas where previous recent fuels management has occurred and maintenance is required or where extension to the eucalyptus tree line will improve access in Part 2. See map for treatment area delineation. Hand crews will cut French Broom and brush as close to ground level as possible (or pull out by the roots where feasible) and remove all dead and down fuels within the brushing treatment area. Herbicide applications will not be required during the initial treatment, but may be necessary during annual maintenance to treat resprouts. Material will either be removed off-site, chipped into the treated area to a depth not to exceed 3", or piled and burned in designated areas. Pack mules or similar animals may be employed to assist with moving cut vegetation in steep areas.

The dead and downed fuels located under eucalyptus canopies will be removed during Part 2. The initial Part 1 treatment is expected to take one full year to complete, starting in 2011.

Brushing and surface fuels removal follow-up/maintenance:

YEAR	FUELS TREATMENT
01	Initial treatment - Part 1
02	Remove French broom seedlings using the prescription above and treat all broom and coyote brush resprouts from year 1 with a foliar spot application of herbicide and carrier.
03 to 30	Repeat initial treatment and maintenance as needed, expanding treatment to cover Part 2 sites that are within 100 feet of Skyline Blvd or Thorndale Drive if French broom invasion has occurred. Use animal grazing to maintain fuel load, including grasses and low shrubs. Animal grazing should be late fall, winter, or early spring and must be avoided if French broom occurs and is in the green-pod stage.

2012 - Part 2: Eucalyptus tree thinning/removal and ladder fuels reduction. See map for treatment area delineation.

In Year 1 (Initial Treatment), remove small eucalyptus trees to achieve an approximate spacing of 15 feet, favoring retention of larger diameter trees. In year 7, repeat the thinning to achieve an approximate spacing of 25 feet between trees. In year 21, remove all remaining eucalyptus. The selection of eucalyptus trees to be removed at any stage depends on the natural existing spacing; denser stands may require larger diameter trees to be removed. Heavier thinning will be considered where a healthier well established understory of oaks and bays exists, to release the understory to grow more vigorously. All surface fuels and ladder fuels will be removed up to approximately 8 feet from the forest floor, including brush under the tree canopies, live tree branches, forest litter, down limbs/logs, and loose bark. Per the District's Integrated Pest Management pest control recommendation, eucalyptus stumps will be treated by a certified applicator with Garlon 4-ultra within 15 minutes to prevent re-sprouting. All trees to be removed will be cut to a stump height not to exceed twelve inches measured from the uphill side. Shorter stump heights may be required for designated trees to reduce foreground viewshed impacts. All cut/collected material will be removed from the site, except: Downed large logs, with a diameter greater than 10" on the small end which are 20 ft or longer, will be retained at a rate of 1 per acre, averaged over the treatment site. The logs

must be limbed, topped, and positioned so that they are substantially in contact with the forest floor throughout their length.

Eucalyptus tree thinning and ladder fuels reduction follow-up/maintenance:

YEAR	FUELS TREATMENT			
01	Initial Treatment - Part 2			
02	Remove eucalyptus seedlings and treat eucalyptus resprouts with herbicide.			
03	Remove eucalyptus seedlings and treat eucalyptus resprouts with herbicide.			
07	Conduct second thinning of eucalyptus to achieve 25 foot spacing. Reduce/remove ladder and surface fuels that have accumulated since year 1. Remove eucalyptus seedlings and treat eucalyptus resprouts with herbicide.			
08	Remove eucalyptus seedlings and treat eucalyptus resprouts with herbicide.			
09	Remove eucalyptus seedlings and treat eucalyptus resprouts with herbicide.			
10	Reduce/remove ladder and surface fuels that have accumulated since year 7.			
15	Reduce/remove ladder and surface fuels that have accumulated since year 10.			
21	Remove all residual eucalyptus and reduce/remove ladder and surface fuels that have accumulated since year 10. Remove eucalyptus seedlings, cut eucalyptus sprouts, and treat with herbicide.			
22	Remove eucalyptus seedlings and treat eucalyptus resprouts with herbicide.			
23	Remove eucalyptus seedlings and treat eucalyptus resprouts with herbicide.			

MONITORING:

Staff from the District's Fire Department, Planning/Stewardship, and Operations will evaluate and document the success/efficacy of the initial and follow-up fuels treatments.

PRESCRIPTION PREPARED BY: Brad Gallof Fire Captain, EBRPD	Signature	2/14/1 ₁ Date
and achievement of Best Managem	s standards for fuels management, natural resonant Practices according to the Wildfire Hazard consistent with the mitigation measures contain Signature	Reduction and

