

CLAREMONT CANYON CC001 - STONEWALL FUELS MANAGEMENT PRESCRIPTION

SITE DESCRIPTION AND LOCATION:

This site is 19 acres of open and closed eucalyptus groves and brush on steep slopes above homes near Stonewall Drive in Berkeley. The best access is either from the gate near the bottom of Stonewall Road, through Clark Kerr campus on Sports Lane Drive, or from the upper gate on Stonewall Road. A small diameter thinning of the eucalyptus stand occurred in 2004, followed by a larger diameter eucalyptus thinning in 2006 and 2007 near the upper Stonewall Road gate behind the homes at the eastern end of Stonewall Road. Brush thinning, weed-eating, and French broom hand pulling are repeated periodically in these areas to help sustain fire hazard at a lower level.

VEGETATION MANAGEMENT GOALS:

Open eucalyptus stand with minimal understory, oak-bay woodland, patches of north coastal scrub away from structures. Create a fire safe buffer of grass without eucalyptus above homes. (from the Wildfire Hazard Reduction and Resource Management Plan).

FUELS MANAGEMENT OBJECTIVES:

- 1 - Reduce fuel volume and the intensity of wildland fires in the area above the homes and other structures, and along heavily-used trails.
- 2 - Thin the eucalyptus stands to reduce the potential for crown fires and ember dissemination. Keep the site as a shaded fuel break.
- 3 - Continue to sustain lowered fire hazard on previously treated areas to prevent regrowth of eucalyptus, brush, and exotics.

FUELS TREATMENT PRESCRIPTION:

Initial Treatment

Continue to sustain lowered fire hazard in existing fuel break areas and expand into previously untreated parts of the Recommended Treatment Area as follows:

- Remove surface fuels, such as: down logs/limbs, eucalyptus leaf litter, old jackpot piles of cut fire wood and branches. Grass and thistle can be treated by mowing or animal grazing.
- Reduce ladder fuels, such as: decadent brush, tree limbs up to 10 feet from ground level of all tree species (including oaks and bays), accumulated eucalyptus stringy bark, and small trees.
- Thin eucalyptus throughout the site according to these guidelines:
 - Emphasize the removal of unhealthy or leaning specimens or specimens with multiple stems.
 - Target eucalyptus specimens that are located close to large, healthy oaks and bays.
 - All eucalyptus trees, seedlings, and suckers up to 12" dbh may be removed.
 - Up to 50% of eucalyptus trees between 12" and 24" dbh may be removed.
 - Up to 30% of eucalyptus trees greater than 24" dbh may be removed. Target spacing of residual eucalyptus should be 20 to 30 feet.
- Remove pines throughout the site according to these guidelines:

- Focus on removing dead or dying pines, emphasizing the retention of larger, healthier specimens.
- All pine up to 12" dbh may be removed.
- Up to 50% of pine trees between 12" and 24" dbh may be removed.
- Up to 40% of pine trees greater than 24" dbh may be removed. Target spacing of residual pine should be 25 to 30 feet.
- Logs greater than 10" diameter will be retained onsite at a rate of 2 per acre averaged over the treatment site and must be 20 feet in length or longer. The logs must be limbed, topped, and positioned so that they are substantially in contact with the forest floor throughout their length. Remnants of dead and partially decomposing pines may be left for moisture retention and wildlife habitat.
- All traditional logging methods, masticators, and mowers may be used throughout the site, except where steepness of slopes may otherwise restrict their use.
- Reduce brush stands by 50% to 70%. Within 200 feet of homes, all brush may be removed.
- Treat all eucalyptus and acacia stumps with herbicide as recommended by the District's Integrated Pest Manager to reduce future sucker growth.
- Material may be removed, chipped/mulched, or burned. Material to be burned in piles must not exceed 4" in diameter. Chips and mulch layers should not exceed an average of 4" depth.
- All trees to be cut will have a maximum 4" stump height. Old stumps should be recut to a maximum 4" height.
- Remove dead and dying trees or trees structurally unsound. Though not necessarily posing a significant fuels problem, risk trees should be assessed by park staff and treated appropriately through the District's hazardous tree program.
- Areas where brush has been removed may be treated with herbicides to discourage regrowth as recommended by the District's Integrated Pest Manager.

Follow-up (Note: if initial treatment is spread over more than one year, adjust the follow-up schedule as needed to accommodate)

YEAR	FUELS TREATMENT
01	Initial Treatment.
02-04	Use a combination of weedeating, hand pulling, grazing, and herbicides to sustain lowered fire hazard and fuel loading at acceptable levels throughout entire site.
05	Repeat initial ladder fuels treatment as needed. Use a combination of weedeating, hand pulling, grazing, and herbicides to sustain lowered fire hazard and fuel loading at acceptable levels throughout entire site.
06-09	Use a combination of weedeating, hand pulling, grazing, and herbicides to sustain lowered fire hazard and fuel loading at acceptable levels throughout entire site.
10	Repeat initial ladder fuels treatment as needed. Use a combination of weedeating, hand pulling, grazing, and herbicides to sustain lowered fire hazard and fuel loading at acceptable levels throughout entire site.
11-14	Use a combination of weedeating, hand pulling, grazing, and herbicides to sustain lowered fire hazard and fuel loading at acceptable levels throughout entire site.
15	Repeat initial ladder fuels treatment as needed. Use a combination of weedeating, hand pulling, grazing, and herbicides to sustain lowered fire hazard and fuel loading at acceptable levels throughout entire site.
16-19	Use a combination of weedeating, hand pulling, grazing, and herbicides to sustain lowered fire hazard and fuel loading at acceptable levels throughout entire site.

20	Repeat initial ladder fuels treatment as needed. Use a combination of weedeating, hand pulling, grazing, and herbicides to sustain lowered fire hazard and fuel loading at acceptable levels throughout entire site.
21-24	Use a combination of weedeating, hand pulling, grazing, and herbicides to sustain lowered fire hazard and fuel loading at acceptable levels throughout entire site.
25	Repeat initial ladder fuels treatment as needed. Use a combination of weedeating, hand pulling, grazing, and herbicides to sustain lowered fire hazard and fuel loading at acceptable levels throughout entire site.
26-29	Use a combination of weedeating, hand pulling, grazing, and herbicides to sustain lowered fire hazard and fuel loading at acceptable levels throughout entire site.
30	Repeat initial ladder fuels treatment as needed. Use a combination of weedeating, hand pulling, grazing, and herbicides to sustain lowered fire hazard and fuel loading at acceptable levels throughout entire site.

RESOURCE OBJECTIVES AND CONSIDERATIONS:

General

- Avoid bird nests at all times during treatment. If treatment will occur during nesting season, February 1 – August 31, Stewardship will conduct a pre-work nesting survey within 15 days of start of work and flag any identified nests. Work conducted from September 1 to January 31 does not require a prework nesting survey.
- Identify and flag dusky-footed woodrat nests during pretreatment assessments and/or surveys. Any identified nests will have a buffer zone and will be avoided during treatment, as described by the current protocol developed by Stewardship.
- Remove target tree species in a manner that retains native oak and bay trees.
- Conduct all operations to avoid unacceptable damage to boles, roots, and crowns of residual trees and vegetation.
- Throughout fuel treatment area where steep slopes exist with specific soil types and/or near water ways where there will be erosion concerns:
 - Install erosion control measures if needed in areas where duff has been removed.
 - If more than one acre of disturbance will occur during the treatment, a SWPPP is required.
- Trees will be removed from the site or chipped and left onsite. If left onsite, the wood chips generated would be left at a depth of four to six inches, with an aerial cover of no more than 20 percent of the project site, and no more than 10 percent of the site if left on roadways and landings.
- Stewardship will conduct a record review of cultural resources via the GIS Cultural Resources Atlas and/or the Cultural Services Coordinator prior to treatment. Any cultural resources will be flagged for avoidance.

Alameda Striped Racer (Whipsnake) considerations

The following restrictions apply when working in Alameda whipsnake habitat, defined as core scrub (PCE1), woodland or annual grassland (PCE2), and rock outcrops and small mammal burrows within or adjacent to PCE1 or PCE2 (PCE3). *Treatments in unsuitable habitat (e.g. eucalyptus forest) are exempt from these conditions.*

- **Work Windows.** Treatment activities involving heavy equipment and/or significant ground disturbance within any areas determined to be suitable AWS habitat would not occur between

November 1 and March 31. Between April 1 – October 31, heavy equipment may be used with proper BMPs in place. Treatments involving hand crews, light mechanical equipment, or prescribed burning can be implemented throughout the year with proper BMPs in place. Work with chain saws is permitted without conditions at all times.

- **Biomonitoring.** A Designated Biologist would be onsite during implementation of activities that may result in take of State- and federally listed species, including mowing, weed eating, and heavy equipment use. Biomonitoring is required for all work EXCEPT for light work with hand crews between November 1 – March 31. If at any time a Covered Species is found within the Project Area, the Designated Biologist has the authority to stop work in the immediate vicinity until the Covered Species leaves the Project Area on its own, or if it can be safely captured it shall be relocated by the Designated Biologist to a suitable location outside of the Project Area.
- **Heavy Equipment.** Where heavy equipment is used in a manner that will impact core scrub whipsnake habitat (PCE1), a Designated Biologist must be present. See Directional Workplan bullet.
- **Directional Workplan.** In lieu of exclusion fencing, a directional workplan may be submitted for agency review and approval. In the case of an approved Directional Workplan, a Designated Biologist shall be present for all work involving heavy equipment. When earthmoving equipment is used, the Designated Biologist shall walk in front of equipment, where feasible and if it can be done in a safe manner. If a directional work plan is not approved, exclusion fencing will be required to protect core scrub habitat. Where fencing is feasible to install and within areas already proposed for temporary impacts, fencing would be installed around areas within or adjacent to AWS core scrub habitat where heavy equipment is operated, including landing areas, access roads, and staging areas.
- **Coverboards.** For all work overseen by a Designated Biologist, coverboards shall be installed in key areas, determined by the Designated Biologist or Permittee prior to initialing vegetation clearing activities for each area. The coverboards shall be placed to provide refuge for the Covered Species fleeing the area, including areas where a directional treatment methodology is used. Coverboards shall be inspected at the end of each work day and use by wildlife shall be recorded.
- **Rock Outcroppings.** Rock outcroppings and native shrubs surrounding outcroppings will be separated from the treatment area by orange construction fencing or other appropriate means.
- **Skid Trails.** Skid trails would be sited a minimum of 10 feet away from Alameda whipsnake core scrub habitat (PCE1) and rock outcrops (PCE3).
- **Wood Chips and Landings.** Wood chips and landings would not be placed within 50 feet of rock outcrops.
- **Ground Burrows.** Where possible during any treatment, ground burrows, holes, and tunnels shall be avoided. Spoils and burn piles shall be placed away from such features.
- **Shrublands.** When working in shrublands retain roughly 30% to 50% of shrub cover in islands through mosaic thinning or patch retention thinning. Islands are to be approximately 50' diameter, spaced 50 feet apart and should be natural in appearance and include specimens of variable age classes.

When conducting pile burning in Alameda whipsnake habitat the following restrictions apply:

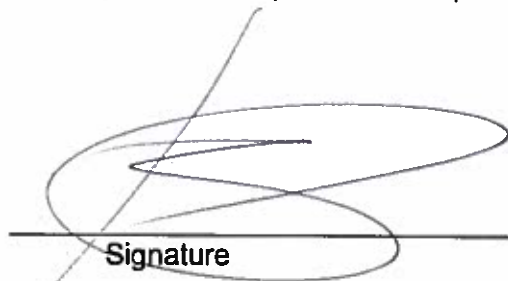
- Pile burning would not occur within suitable Alameda whipsnake habitat during the hibernation season (November 1- March 31). Pile burning in unsuitable habitat is permitted year round.
- Check for burrows before building piles. Avoid placing piles on large rodent burrows.
- Light the pile from one end (generally the uphill side on slopes) to allow Alameda whipsnakes to escape, rather than lighting the whole pile at once.
- Limit material in the pile to 4-inch diameter or less to limit heat penetration into the ground and provide short escape distance.

MONITORING:

Resource monitoring results will be documented by Stewardship staff in the post-work survey data sheet.

PRESCRIPTION PREPARED BY:

Bradford Gallup
Fire Representative, EBRPD


Signature

11/7/17
Date

REVIEW AND APPROVAL:

This prescription meets the District's standards for fuels management, natural resource protection and achievement of Best Management Practices according to the Wildfire Hazard Reduction and Resource Management Plan and is consistent with the mitigation measures contained in the EIR:

Richard Seal
Fire Chief, EBRPD


Signature

11/07/17
Date

MATTHEW GRAUL
Stewardship Manager, EBRPD


Signature

11/29/17
Date

- RECOMMENDED TREATMENT AREA (RTA)
- EBRPD LAND
- STREAMS
- PCE 1- SCRUB/SHRUB HABITAT
- PCE 2- WOODLAND/GRASSLAND HABITAT
- PCE 3 POTENTIAL ROCKY OUTCROPS
- ALAMEDA WHIPSNAKE TRAPLINE- 2016
- ALAMEDA WHIPSNAKE TRAPLINE- 15M BUFFER

