

# TILDEN PARK – TI012

## FUELS MANAGEMENT PRESCRIPTION

### SITE DESCRIPTION AND LOCATION:

This 91 acre RTA (Recommended Treatment Area) within Tilden Park is a complex of several vegetation types with a wide range of wildland fuel loading and stand compositions. Vegetation includes brush, grass, eucalyptus, oak, bay, and scattered old stands of pines and other conifers. Slopes are generally north- and east-facing, with some southern exposures on the northwest side of Golf Course Road. The western boundary is along Summit Road where several Berkeley homes border District property. The southern boundary is Grizzly Peak Boulevard, a heavily used public road with weekday commuters and weekend park visitor traffic. Initial brush and eucalyptus removal has occurred on select parts of the site over the past 10 years. The Fire Department periodically re-treats the existing 23 acre fuel break with goat grazing, weed-eating, mowing, and eucalyptus stump herbicide treatment to sustain fire hazard at a lower level.

### VEGETATION MANAGEMENT GOAL:

*Thinned eucalyptus, redwood, oak-bay woodland, annual grassland, north coastal scrub.* (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 near homes, and along roads and trails.
- 2 - Reduce surface and ladder fuels and the potential for crown fires and ember dissemination.
- 3 - Continue to sustain lowered fire hazard in existing fuel breaks. Enhance and expand fuel break areas.

### FUELS TREATMENT PRESCRIPTION:

Initial Treatment: Throughout the site, reduce fuel volume and intensity of wildland fires by reducing ladder fuels, surface fuels, and dense understory. Focus on areas closest to homes, fire roads, and public roads. Specific fuels management includes the following:

- Remove surface fuels, such as: down logs/limbs, eucalyptus leaf litter, old jackpot piles of cut fire wood and branches.
- Reduce ladder fuels, such as: decadent brush, tree limbs up to 10 feet from ground level of all tree species (including oaks, bays, eucalyptus, pine, and fir), accumulated eucalyptus stringy bark, small trees, and blackberry.
- If visible from roads, trails, or developed areas, old stumps should be recut to 4" height.
- Remove eucalyptus trees that are multi-stemmed or contributing significantly to the forest litter.
- Remove young acacia, eucalyptus, and pine to help prevent stand regeneration.
- Thin eucalyptus, pine, and fir stands throughout the site to help minimize the potential for crown fires. Remove all trees less than 12" dbh to achieve residual tree spacing of 15-25 ft.
- Eucalyptus, pine, and fir crown fires along ridge tops are of highest concern because these trees are more exposed to wind and have a greater chance of casting embers and spotting fires long distances. Thin these smaller ridgetop stands by removing all trees less than 24" dbh to approximately 25 to 35 feet spacing between residual trees.
- Reduce brush stands by 50% to 70%.
- Continue to weed-eat or graze flashy fuels such as grass and thistle.

- 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" inch depth.
- All trees to be cut will have a maximum 4" stump height.
- Maintain sufficient health of retained trees by limbing up no more than the lower third of the crown.
- 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 maintenance schedule as needed to accommodate.)

YEAR	FUELS TREATMENT
01	Initial Treatment. As described above, reduce surface and ladder fuel loads, thin eucalyptus, acacia, pine, and fir stands, reduce brush, etc.
02-09	Use a combination of weedeating, hand pulling, grazing, and herbicides to sustain lowered fire hazard and fuel loading at acceptable levels throughout entire site. Repeat ladder fuels treatment as needed.
10	Perform second eucalyptus, acacia, pine, and fir stand thinning and remove heavy surface fuel loads. Use a combination of weedeating, hand pulling, grazing, and herbicides to sustain lowered fire hazard and fuel loading at acceptable levels throughout entire site. Repeat ladder fuels treatment as needed.
11-19	Use a combination of weedeating, hand pulling, grazing, and herbicides to sustain lowered fire hazard and fuel loading at acceptable levels throughout entire site. Repeat ladder fuels treatment as needed.
20	Use a combination of weedeating, hand pulling, grazing, and herbicides to sustain lowered fire hazard and fuel loading at acceptable levels throughout entire site. Repeat ladder fuels treatment as needed. Assess eucalyptus stands for accumulated heavy surface loads subsequent to Year 10.
21-30	Use a combination of weedeating, hand pulling, grazing, and herbicides to sustain lowered fire hazard and fuel loading at acceptable levels throughout entire site. Repeat ladder fuels treatment as needed.

## 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:

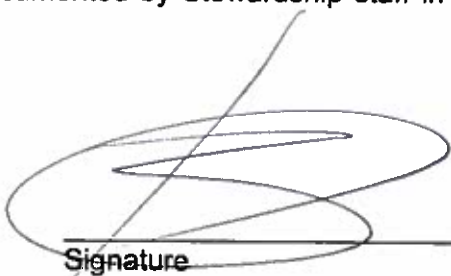
- o Pile burning would not occur within suitable Alameda whipsnake habitat during the hibernation season (November 1- March 31). Pile burning in unsuitable habitat is permitted year round.
- o Check for burrows before building piles. Avoid placing piles on large rodent burrows.
- o Light the pile from one end (generally the uphill side on slopes) to allow Alameda whipsnakes to escape, rather than lighting the whole pile at once.
- o 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

11/27/17  
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

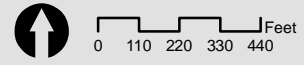
11/27/17  
Date

MATTHEW GRAUL  
Chief of Stewardship, EBRPD

  
Signature

11/27/17  
Date





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|----------------------------------|----------------------------------------|-------------------------------|
| RECOMMENDED TREATMENT AREA (RTA) | PCE 1- SCRUB/SHRUB HABITAT             | SPECIAL STATUS PLANTS (EBRPD) |
| EBRPD LAND                       | PCE 2- WOODLAND/GRASSLAND HABITAT      | ARCTOSTAPHYLOS PALLIDA        |
| STREAMS                          | PCE 3 POTENTIAL ROCKY OUTCROPS         | DIRCA OCCIDENTALIS            |
| COUNTY LINE                      | ALAMEDA WHIPSNAKE TRAPLINE- 2016       |                               |
|                                  | ALAMEDA WHIPSNAKE TRAPLINE- 15M BUFFER |                               |

