



Recommendations Concerning Caltrans D4 Vegetation Management Plan

We thank Caltrans for the opportunity to comment on the recently drafted Final D4 East Bay Vegetation Management Plan and the D4 Fuel Reduction Plan for Alameda and Contra Costa Counties. The Oakland Firesafe Council is a community-based nonprofit dedicated to education, outreach and advocacy for wildfire prevention in Oakland and Alameda County (www.oaklandfiresafecouncil.org). Our members include 1991 Firestorm survivors, former members of Oakland's Wildfire Prevention Assessment District Advisory Committee, stewards of open space within Oakland's wildland/urban interface, representatives of homeowners associations and other neighborhood associations, and individuals with an interest in wildfire prevention.

The City of Oakland is densely populated along the major transportation corridors of SR 13, 24 and 580. Caltrans is one of the largest property owners in Oakland. While for the most part, Caltrans right of way extends narrowly along these transportation routes, there are areas where Caltrans property extends up into the hills and abuts private properties (such as in Hiller Highlands). The worsening nature of today's wildfires is such that we can no longer only focus on transportation routes as ignition sources. Ever increasing high winds and extreme drought conditions cause fires to spread flaming embers one or more miles away from the fire front. Consequently, efforts to reduce the fuel in these vulnerable swaths of Caltrans land infiltrating housing in Oakland's wildland urban interface must also be addressed for all parties to have confidence in creating neighborhood firebreaks beyond just roadside clearance.

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FRMP SR 24 & SR13 Basemap

Legend:

- Postmile Tenths
- Caltrans D4 ROW
- Parcels (2018)
- Fire Hazard Severity Zones (FHSZ) within SRA**
 - Moderate
 - High
 - Very High

Map Labels:

- ALAMEDA COUNTY
- Oakland
- CONTRA COSTA COUNTY

Scale: 0 0.1 0.2 Miles

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The Final D4 Vegetation Management Plan is narrowly focused on high priority routes including Routes 13, 24 and 580 in Oakland. It states *that service contracts will extend the fuels reduction work in a wider band, in most cases to the edge of Caltrans R/W along priority Routes SR13, 24 and 84 through chemical applications, mechanical mowing and shrub reduction.* We agree that fuels reduction from a minimum of 10 feet to the R/W border is an appropriate start, but given the high fire danger on the slopes within the 13/24 corridor, Caltrans needs to take more aggressive approach to reducing the fuel load in this high density area. The City of Oakland's draft vegetation management plan still under review has expanded its roadside clearance from

Brush Removal Guidelines state:

September 1, 2021

1. *All dead and dying vegetation should be removed. Along the transportation routes, there are standing dead and dying trees, as well as dead trees on the ground that have not been addressed. This is particularly serious along SR 13, where Acacia, Bay laurel and eucalyptus have been hard hit by years of drought and fatal infections.*
2. *Any native tree species less than 12 inches DBH within the matrix of brush with good form and vigor should be retained for future shade canopy recruitment. These trees may be selected by sawyers. Spacing between these trees and shrubs is not addressed. CalFire's Defensible Space guidelines call for 10 feet of space between trees and shrubs on flat to mild slope (less than 20%), 20 feet on inclines between 20% and 40%, and 30 feet on moderate to steep slopes (greater than 40%). Spacing should be calculated based on the mature size of the tree. One approach to fuel breaks is to create islands of vegetation rather than spreading all the vegetation evenly across the property.*
3. *All invasive brush species should be removed as thoroughly as possible. A target application of herbicide may be used as a follow-up treatment. It is preferable to treat brush that is not overhead before it is removed. Caltrans maintenance crews should familiarize themselves with a list of flammable invasive species such as French broom, Spanish broom, pampas grass, ivy and others. Too many flammable invasives are being left on site, creating a fire hazard. <https://www.cal-ipc.org/plants/inventory/> Beyond the use of herbicides, Caltrans should plan for hand crews to deal with French and Spanish broom in the winter before it goes to seed, which removes the roots and avoids sprouting. Hand crews are also needed for Pampas grass, cotoneaster, coyote shrub and echium (Pride of Madera), which are highly invasive. Goat grazing is one of many means of reducing fire hazards but individual sites may need several different treatments timed properly to achieve desired fuel reduction goals. The current plan does not include guidelines for ongoing maintenance once invasives area removed. Many of these invasive shrubs cast thousands of seeds that perpetuate the situation, even after a one-time treatment. Caltrans' current practice of not removing living trees and shrubs results in "planting" more invasives, because each year the invasives that are not treated are allowed to spread more and more seeds.*
4. *All brush and ground fuels like grasses and forbs within 4' to 10' of the roadway (edge of pavement or EP) should be cut to ground level and removed. Elsewhere, ground fuels shall be trimmed to reduce its volume while providing essential ground cover. If manual hand crews are utilized with mechanical forestry equipment, ensure maximum worker protection per Caltrans Code of Safe Operating Practices to minimize any compromise to worker safety. The standards do not include spacing standards, as recommended by CalFire in its defensible space guidelines. On flat to mild slopes (less than 10%) shrubs should be spaced 2x the height of the shrub. On mild to moderate slopes (20% to 40%), shrubs should be spaced 4x the height of the shrubs. On moderate to steep slopes (greater than 40%) shrubs should be spaced 6 times the height of the shrub. Care should be taken to consider the width and height of a mature shrub when planning spacing. Once a year goat grazing does not adequately address this hazard. There is no mention*

of ivy, which can become a fire hazard as it becomes woody underneath the top green layer. The plan should address maintenance or replacement of ivy to reduce the fire risk.

5. *All brush and ground fuels like grasses and forbs within 4' of any improvements or infrastructure needing protection should be cut to ground level and removed. Manual hand crews shall be utilized with maximum worker protection per Caltrans Code of Safe Operating Practices to minimize any compromise to worker safety. Caltrans defensible space standards currently requires keeping grasses to less than 6" within 30 feet of a structure. As of 2023, new standards establish Zone 0, an ember resistant zone within 5 feet of a structure, where plants are limited to low growing, non woody, properly watered and maintained plants. This item is inconsistent with a similar standard under tree removal guidelines below.*
6. *Where duff and ground cover vegetation are less than 50 percent of the ground service, attempt to preserve approximately 30% native brush cover for slope protection and aesthetics. Preference shall be given to smaller specimens. The standards do not address spacing of native brush. On flat to mild slopes (less than 10%), shrubs should be spaced 2x the height of the shrub. On mild to moderate slopes (20% to 40%), shrubs should be spaced 4x the height of the shrubs. On moderate to steep slopes (greater than 40%) shrubs should be spaced 6 times the height of the shrub. Care should be taken to consider the width and height of a mature shrub when planning spacing.*
7. *With California now facing year-round fire risks, annual goat grazing and mechanical efforts to reduce grasses may not be sufficient. We recommend that the D4 Vegetation Management Plan address the real fire threats that occur year-round, and time their work appropriately, even if it means more than one treatment a year.*

Tree Removal Guidelines for Establishing Fuel Breaks

The purpose of a tree removal is to establish a fuel break. The concept of a fuel break is generally to develop a wide strip of land on which vegetation has been modified so that a fire burning into it can be more readily controlled. Shaded fuel breaks are not designed to stop fire spread, especially during periods of strong winds when fire brands can be blown across these linear features. However, fuel breaks can provide the following benefits when constructed appropriately:

- *Fuel breaks provide areas of lower fire line intensities, especially under less extreme fire weather conditions. The concept of a fuel break is simple, by providing areas of reduced fuel loading, reduced fire intensity can be created.*
- *Fuel breaks increase fire line construction rates.*
- *Fuel breaks reduce the fire-retardant coverage level required to effectively coat vegetation.*

- *Fuel breaks provide access and travel corridors for ground-based firefighters to engage a wildfire quickly and safely, especially during the initial attack phase.*
- *Lighter fuels, often grasses, associated with fuel breaks provide opportunities for indirect fire line construction through backfire or burn-out operations to consume fuel ahead of the spread of fire.*
- *Roadside fuel breaks provide safer egress for civilian evacuations.*
- *Fuel breaks have been proven effective to protect the communities, wildlife, water quality and other watershed values.*

A shaded fuel break can only occur where an overstory tree canopy exists, in second growth redwood forest and conifer/oak woodlands the following general treatment prescription shall be employed:

8. *All dead and dying trees that pose a threat to a roadway or fire spread, as determined by the appropriate professional workforce lead and confirmed by Caltrans Tree Crew Supervisor, shall be removed. Our review reveals that this isn't happening. There needs to be a system in place to ensure that this standard is met. This D4 Vegetation Management Plan document needs to be more than a paper plan.*
9. *Any other live hazard trees in the overstory shall be selected, marked and recorded by an arborist or registered professional forester. These trees should be removed where they pose a threat to a roadway or fire spread. Along the SR 13 route, there are a number of dead and dying trees, along with highly flammable species that pose a threat to neighboring homes and to those using SR 13 as an evacuation route. In particular, along SR13 from the end of the Warren Freeway into Berkeley, the median is chock full of French Broom and other flammable, invasive species that hang over the median and pose a threat to those using the route to evacuate from Hiller Highlands and Berkeley.*
10. *Where tree canopy is sparse, well-spaced trees less than 12 inches DBH with good form and vigor should be retained for future shade canopy recruitment. These trees will be selected by a contractor-supplied arborist, RPF, or the sawyers. Well-spaced is not defined. Spacing should be consistent with CalFire spacing requirements under defensible space zones and should be based on the mature size—height and width-of the tree.*
11. *Remaining trees will be pruned to a height of eight feet, or a prune height appropriate to the surrounding ground plan on variable terrain, to eliminate vertical continuity of fuels from the ground to canopy. CalFire defensible space standards call for a minimum 6-foot clearance, or 3x the height of a shrub if it is growing under a tree.*

12. *Dead vegetation on the ground should be removed unless significantly decayed. Too many examples of that not happening on Caltrans property. There should be a system in place for follow up to ensure compliance.*
13. *Ground fuels like grasses and forbs within 4'-10' of the roadway shall be cut to ground level and removed. Elsewhere it should be trimmed to reduce the volume while providing essential ground cover. The City of Oakland's standard is 30 feet, due to the immediate proximity of dense housing throughout the 24/13/58 corridor.*
14. *All brush and ground fuels like grasses and forbs within 5 feet of any improvements or infrastructure needing protection shall be cut to ground level and removed. Manual hand crews should be utilized with maximum worker protection per Caltrans Code of Safe Operation Practices to minimize any compromise to worker safety. This is consistent with the new recommendations of CalFire. Item 5 above is not.*
15. *Invasive species may be considered to receive a target application of herbicide. Caltrans maintenance crews should familiarize themselves with a list of flammable invasive species such as French broom, Spanish broom, pampas grass and others as too many are left behind when clearance is done. <https://www.cal-ipc.org/plants/inventory/> And the plan should include annual follow up because sometimes the herbicide doesn't always work. Alternatives to herbicides should also be considered.*
16. *Beyond shaded fuel breaks, there is no mention in the plan about ongoing maintenance. Calfire recommends that trees be limbed at least 6 feet from the ground, more if the tree is on a slope. This is particularly critical for flammable trees such as Monterey pine and eucalyptus. The slash from eucalyptus trees can create fire ladders if not removed on a regular schedule. We recommend that the D4 Vegetation Management Plan contain a section about regular tree maintenance, with the understanding that in some cases it might be more economical in the long run to remove the high maintenance, flammable invasive trees and replace them with native trees that require less maintenance.*

Specific Comments (see Attachment for accompanying photographs):

We are particularly concerned with Caltrans properties that extend beyond to 10'-30' of the roadway and are considered high risk properties to the adjacent neighbors. Focusing on the 13/24 corridor:

17. 15 acres of Caltrans property surrounding Kaiser School from just below Upper Hiller Drive down to Tunnel Road. The property contains grasses and a thick stand of eucalyptus with French broom, cotoneaster and other invasive species growing underneath. This property abuts property belonging to the Oakland Unified School District with the same conditions. The trees, shrubs and grasses are so closely packed that they form a serious fire ladder threat to the 9 private homes on upper Hiller and the surrounding neighborhoods. Furthermore, there is a seed bed of French broom that,

if not addressed each year, will continue to put the area at risk. French broom casts thousands of seeds that can live in the ground for 40 years before they sprout. Once sprouted, French broom can grow 15 feet or more in one year, growing into the trees, and can send a flame up to 40 feet, creating a flammable fire ladder. **The ground fuels need to be removed and the trees limbed and spaced at least 30 feet apart to avoid spreading a fire up to the residences above. While Caltrans has employed goat grazing to part of this area, it has not extended to the East Bay Municipal Utilities District property line to the north, to the northwest to the Oakland Unified School District property, nor to the 9 private homes to the east. Given the nature of today's fires where flying embers can be blown a mile or more, ongoing maintenance of this site will protect the 350 homes in Hiller Highlands property and beyond. Additionally, years of inattention has created a buildup of flammable duff, including eucalyptus slash that needs to be removed.**

18. Between the school property and Tunnel Road, Caltrans owns very steep property running for about ¼ mile that ranges from 10 feet up to 100 feet up to the first swale pathway that cuts along the hillside. The first swale is lined with flammable invasives such as French and Spanish broom and cotoneaster, surrounding a combination of living pine trees and acacias, with many dead pine trees, that Caltrans in the past has not addressed. **When service requests were made, Caltrans responded that the hill was too steep for their maintenance crews or contractors to work on. However, a similarly steep private hillside was cleared by a contractor with the appropriate tools and staff. We recommended that Caltrans include this site in maintenance contracts because once enflamed, embers could spread to the dead and dying trees along Highway 24 between the freeway and Tunnel Road and cross the freeway into Montclair, Rockridge and beyond. This section of Tunnel Road is a major evacuation route for residents of Parkwoods and those fleeing from the hills above.**
19. ¼ acre lot across from Gateway Exhibit Center contains high grass. It has not been covered by goat grazing or mechanical work. **We recommend that Caltrans include this area in its annual maintenance contracts as the location is at the foot of Upper Hiller, one of the two ways residents of Hiller Highlands can use for evacuation.**
20. Caltrans Caldecott Tunnel Area
 - a. Fire prone vegetation on the grounds of the large Caltrans facility, the entrance road and adjacent to the hillside property. **We recommend annual maintenance to remove the fire prone vegetation.**
 - b. North Side Highway 24 between the onramp and the Tunnel
 - i. Tall grass by the offramp next to the new berm area coming out of the Caldecott Tunnel in front of the Parkwoods complex. **We recommend annual treatment.**
 - ii. Concentration of fire prone Monterey pine trees, several of which are dead or dying. **We recommend removal of the dead trees and thinning**

according to CalFire spacing recommendations to protect the 300 townhomes at Parkwoods and to keep a fire from spreading beyond.

- c. Immediately East of the K crossing bridge intersecting with Caldecott Lane
 - i. Growing Monterey pine trees near a major evacuation route with inadequate spacing. **We recommend thinning these trees according to the CalFire spacing standards.**
- d. South Side of Highway 24, inside and outside the fence line
 - i. Large concentration of French broom near Tunnel on upper Broadway, by Tunnel entrance and at entrance road to Caldecott Tunnel. **We recommend removing the French broom and annual treatment to keep it from returning.**
 - ii. Dead limb under flammable Monterey pine tree and lack of limbing up trees to reduce fire risks. **We recommend removal of dead limbs and pruning tree up to 6 feet to avoid a fire ladder in this vulnerable area.**
- e. West of the on-off ramp along Caldecott Lane up to K Over pass
A half dozen or so Monterey pine trees on the Caldecott Lane fence line with limbs extending into the roadway and no spacing between them. **We recommend pruning back the limbs and removing pines according to CalFire spacing standards.**
- f. South of Tunnel running approximately 1/3 of a mile to the North Oakland Sports Field, there continues to be French broom growing on the steep hillside under the tall eucalyptus trees. **Goat grazing addresses reducing annual grasses, but does not adequately deal with the French broom. A hand crew is needed.**

21. Near the North Oakland Sports Field

- a. Area to the west of the North Oakland Sports Field along upper Broadway and adjacent to the PG&E power lines from the substation near the 13/24 interchange. There are a lot of fire prone French broom and aging fire prone Monterey pine trees on an elevated site. There has been a homeless encampment under the connector road connection SR13 with 24 west. **We recommend going beyond the 10 feet of road clearance to remove the pine trees and the other flammable fuels.**
- b. Area to the east contains large concentrations of French broom underneath flammable eucalyptus and aging Monterey pine. **Running goats once a year does not address the concentrations of French broom, which results on ongoing seeding of the French broom. The broom needs to be hand pulled and the area maintained annually to avoid having flammable invasives growing at the base of the fire prone eucalyptus and aging Monterey pine. The trees on the elevated need to be spaced according to CalFire standards to avoid spreading fire to the privately owned open space properties and the City's North Oakland Sports Field.**

22. East side of Caldecott Lane between K Overpass and Caldecott Tunnel

- a. A band of Caltrans property along the Tunnel Road frontage between SR 13 and the K overpass, some of which was landscaped as part of the 4th Bore Mitigation, has dead and dying trees. **We recommend removing these flammable fuels.**
- b. A band of Caltrans property on the East side of the K overpass has several large, dead Monterey pine trees. **These need to be removed in accordance with the D4 Vegetation Management Plan.**

23. Frontage Road areas South and North of Tunnel Road/Caldecott Lane

The frontage road extends from the K crossing to the 24/13 interchange contains a grouping of 250 Monterey pine and eucalyptus trees.

- There has been a notable lack of maintenance on the north side of Highway 24 between the bridge and the newly planted native trees and shrubs.
- There are growing concentrations of French and Spanish broom cotoneaster and pampas grass next to Highway 24 and the frontage road on the north side.
- There are growing numbers of fire prone trees, including hundreds of both aging and younger eucalyptus, which can lead to spreading crown fires if not thinned.
- Many of these hundreds of trees have not been limbed up. **The slash from the eucalyptus needs to be removed annually to reduce the spread of fire.**
- Remove ground fuels to avoid fire ladders. **There are grasses, weeds and buckwheat concentrations that need to be addressed annually.**
- Dead and dying trees on both sides of Tunnel Road—many failing due to the drought and spread of fatal disease. **These need to be removed.**
- Lack of Fire Breaks, appropriate spacing and needed tree removals Videos taken from the 1991 Tunnel Fire show this area in flames and sending embers to other locations beyond Highway 24.
- **Caltrans needs to address the lack of maintenance in this area to avoid a repeat of the destructive 1991 Tunnel Fire.**
- **We recommend that Caltrans more aggressively comply with the D4 Vegetation Management Plan's standard of removing flammable invasives. Additionally, there have been homeless encampments in this area in the midst of fire prone vegetation.**

24. Above and below the PG&E Substation

- a. To the west of the PG&E station extending from Broadway and Broadway Terrace (adjacent to the ½ mile walking trail at Lake Temescal), has been a site for homeless encampments and large concentrations of French broom, cotoneaster, and cut up logs and telephone poles. This connector road property is right on the Hayward Fault right next to a PG&E station and provides a direct route into Montclair, Piedmont and Upper Rockridge. This area has not been maintained, even though it is adjacent to SR 13.

- b. A strip of Caltrans property to the east of the PG&E substation and west of SR13 (the old connector road) contains a mix of vegetation including fire prone French broom that poses a risk to the substation and to the homes in Pinewoods and near Lake Temescal.
- c. To the east of the station on southeast of the 24/13 interchange there is a concentration of trees that are not adequately space. **We recommend limbing up the trees and thinning the trees according to CalFires' spacing standards, to create more of a fire break near the PG&E power lines.**
- d. **We recommend removing the French broom in both sites, treating with herbicide and returning for annual maintenance to keep the area more fire safe.**

25. The connector between 13 and 24 East interchange

- a. There has been a homeless encampment under the bridge where there is French broom on the hillside which is a fire hazard. **We recommend cleaning out the invasives and fencing off the area to dissuade homeless encampments**

26. The center median of SR13 from the Oakland/Berkeley line down towards Berkeley.

- This state route is a major transportation corridor and evacuation route for Hiller Highlands and Berkeley residents. There is a tall concentration of French broom growing in the middle of the center median that hangs over the roadway near Roble Road. It is certainly within the 10- foot roadside clearance zone.
- Trees growing in the median do not meet the CalFire spacing guidelines to eliminate fire ladders.
- **We recommend removing and treating the broom to avoid grow back, and thinning the trees to the CalFire standards. The area needs annual maintenance to deal with the extensive broom seed bed that has been allowed to accumulate.**

27. South of Lake Temescal along Upper Broadway and Highway 24

- a. A strip of Caltrans property from the north parking lot at Lake Temescal down to Brookside Avenue on the south side of 24 and in the center median of 24 contains a mix of 10-20 foot tall flammable shrubs (French broom and cotoneaster) over a layer of fire prone ivy and leaf litter that have not been maintained. This area is right next to College Preparatory High School, a concentration of homes on the hill above, and the Lake Temescal recreational facilities. It is also a location for homeless encampments. There are giant eucalyptus next to the school, which may belong to the school. **We recommend removal of the flammable shrubs and ground fuels, and thinning the eucalyptus trees to one every 35 feet because of the hillside behind. Caltrans needs to take into consideration the conditions on neighboring property, and take extra precautions to avoid the spread of fire from Caltrans properties to neighboring properties.**
- b. On both sides of Golden Gate Avenue there are large concentrations French broom and cotoneaster that are hanging into the upper Broadway area. **Need to**

clarify who owns the property and work to remove the vegetation to create a better fire break.

- c. The center median from Brookside up to the 24/13 interchange contains stressed or dead plants, French broom. Appears to be no irrigation and no maintenance. We recommend removal of the dead and dying plants and ongoing maintenance.

28. Area between Highway 24 and the Chabot Canyon Racquet Club, where Caltrans has large open space property north of Chabot Road.

- a. The hillside is covered with French broom under live eucalyptus and there is a dead eucalyptus tree on the ground
- b. According to the general manager of the Racquet Club, Caltrans grazed goats in the past, but not recently. As a result, the French broom has grown to 6 feet or more. The goats don't graze the French broom, and the area has not been maintained by hand crews. This is a vulnerable area because once on fire, it can spread fire to hundreds of homes located in the Claremont Elmwood neighborhood of Berkeley north of the freeway, or to Rockridge and Piedmont to the south. In accordance with the Caltrans D4 Vegetation Management Plan, remove the French broom and other invasives along with the dead eucalyptus trees. Plan on annual maintenance to keep invasives from returning.

29. Caltrans lot between the Broadway offramp and highway 24 heading east for 2 blocks.

- a. There is a large concentration of French broom and other vegetation that has not been addressed. At Keith, an area that is maintained by volunteers, no water has been provided. Consequently, there is ivy and high grass that is not being maintained.
- b. Provide some water to keep the area hydrated, remove French broom and other flammable invasives.

30. The Berkeley/Oakland line alongside SR 13 and the start of the Warren Freeway.

- a. This area contains a mix of cotoneaster, French broom, dead tree limbs, dead trees that have been cut and left under dense stand of mature eucalyptus trees on an elevated site that runs about 1/3 of a mile and hundreds of feet beyond the road. This area is located right on the Hayward Fault and has been a site for homeless encampments over the years.
- b. This site poses a serious fire risk because of tree density and leaf litter at a spot that exploded in the 1991 Firestorm.
- c. There is a seed bed of French broom and high grasses growing along the west side of Highway 13 near the 13/24 onramp. This area needs to be maintained because once on fire, it can spread fire in all directions—to Berkeley, Hiller Highlands, Rockridge, Piedmont and Montclair.
- d. We recommend thinning the trees, remove the ground fuels to fire prone shrubs, and dead trees and tree limbs to protect the evacuation routes and the homes surrounding the area.

It is our understanding that Caltrans maintenance crews operate under a practice of not removing a live tree or shrub—native or invasive, although we don't believe that is stated in the D4 Final Vegetation Management Plan. In the early 1900s, developers planted 2 million trees that are now at the end of their life span, many distressed due to years of drought and fatal infections. Caltrans built its roads in the middle of this heavily forested area. Caltrans needs to be dealing with the entirety of its property and not just roadside clearance. Given the new normal of more frequent high wind events leading to more devastating and hotter fires sending burning embers into nearby fuel, Caltrans should be following the CalFire guidance for limbing, thinning and removing trees and shrubs for fuel breaks. Spacing between trees and shrubs will remove much of the fuel load and will slow down the spread of fire. In these cases, we recommend spacing of eucalyptus and pines to one every 35 feet (removing those that don't meet that standard.) The brush and grasses underneath these flammable invasive trees should be removed to avoid fire ladders and to reduce the cost of ongoing maintenance. The D4 Vegetation Management Plan does not address the need for annual maintenance in these areas: Tree debris must be removed from the ground and 6 feet up on the trees that remain. Seedlings of French broom and other invasives will need to be cut, treated and removed, as broom is known for its extensive seed bed that can last up to 30 years. An annual maintenance plan should be developed for each treated area.

We also understand that Caltrans is currently limited to one contract a year. Given the need in the 13/24 corridor alone, \$400,000 and one contract is insufficient. More resources need to be allocated to Caltrans for staffing, and multiple contracts so that this Vegetation Management Plan is more than a paper wish list.

We highly recommend using the East Bay Regional Park District's Vegetation Management Plan polygon model, that looks at treating the fuel in a wider radius than just 10 feet from the roadway. This would provide the public a better understanding of how the D4 Vegetation Management Plan will be applied to Caltrans property in our community.

Our hills are crisscrossed by many different jurisdictions, each of which deals with wildfire prevention with different standards and a different timetable. Yet our neighborhoods are at the mercy of the one property that has not been maintained appropriately.

We encourage Caltrans take into account the fire risks on neighboring properties and to partner with the Oakland Firesafe Council, with neighborhood associations and the other entities in the area that have a mutual interest in ensuring that wildfire prevention in the Oakland Wildland Urban Interface is collaboratively addressed in a timely fashion.

Finally, given the changing nature of fire risk in the 13/24 corridor, Caltrans should develop a long-term vision for what kind of low fire risk plants would be appropriate to reduce maintenance costs as well as fire risks. The current plan does not discuss plans for restoring properties with less flammable and lower maintenance trees and plants.

We would be happy to meet with Caltrans Maintenance Staff and others to discuss ways to strengthen the D4 Vegetation Management Plan.

Prepared by
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17. 15 acres of Caltrans property surrounding Kaiser School from just below Upper Hiller Drive down to Tunnel Road.



Concentration of 12-ft high French broom where Caltrans refused to graze goats this year on an elevated hillside above Kaiser School.



This spring, Caltrans restricted maintenance behind 610-630 Hiller Drive and left flammable ground fuels near a dense eucalyptus grove on an elevated hillside, which is at risk for flying embers igniting crown fires right next to local residences.



Dead brush creating a fire ladder at the base of multiple conifers behind 610 and 620 Hiller, where earlier this year Caltrans refused to extend their maintenance to the property line.



Close proximity of flammable trees on a hillside not in compliance with CalFire recommendations for fire safe tree spacing.



Dead trees spread across the hill amid flammable French broom and pines.



Eucalyptus litter concentration next to row of eucalyptus trees creates a fire ladder on an elevated site. Ground fuels need to be raked up annually.



Concentration of eucalyptus, French broom and leaf litter not addressed. Trees need to be spaced and limbed according to CalFire spacing recommendations.



Caltrans property on upper Hiller (starting at two trees below the fence) not maintained near 620 Hiller Drive. Trees too close. Behind trees there is fire ladder of broom growing into tall trees. Grazed area to the right is EBMUD property.



Dead trees above invasives, next to pines and road equal fire risk. Dead trees and brush needs to be removed.



Flammable tree limbs, French broom and pampas grass next to Tunnel Road frontage between Hiller near traffic light at lower Hiller/Highway 13 intersection.



Flammable French broom can send flames 3 x its height. French broom next to Pampas grass and other dense foliage.



Twin flammable invasives by Tunnel Road-- French broom and pampas grass on an elevated site.

- 18. Between the school property and Tunnel Road, Caltrans owns very steep property running for about ¼ mile that ranges from 10 feet up to 100 feet up to the first swale pathway that cuts along the hillside.**



Very flammable pampas grass and French broom on hillside by Tunnel Road poses fire risk.



Multiple dead pines on steep hillside by Tunnel Road. Caltrans has refused to address the issue, despite multiple requests for service.



Dead tree and flammable invasive ground fuels along the swale.



French broom and other invasives growing under eucalyptus on a steep slope, none of which have been maintained.



Dead tree on steep slope next to flammable pines along elongated site creates fire ladder above Tunnel Road.



Lack of maintenance of tall row of invasives next to swale pathway allows seeds to spread and increases fire risk.

- 19. ¼ acre lot across from Gateway Exhibit Center contains high grass.
It has not been covered by goat grazing or mechanical work**



20. Caltrans Caldecott Tunnel Area



Bookends of pine trees below closely spaced trees in a eucalyptus grove that could send embers throughout the East Bay. Caltrans should thin the trees according to CalFire's tree spacing recommendations, limb the remaining trees, and remove the French broom. Area requires annual maintenance to keep invasives from returning.



Monterey Pines above Caltrans facility at Tunnel-- too closely spaced.



Dead trees just north of the Tunnel mouth.



Wall-to-wall flammable French broom at the mouth of the west end of the tunnel



Dense pine forest with pine needles on the ground on Caltrans property next to Parkwoods.

22. K Overpass



Tall flammable French broom at the intersection of the K overpass and Caldecott Lane next to roadways and grove of trees. Has not been maintained.



Three closely spaced Monterey pines by K overpass next to roadway not limbed up and growing into oak tree could burn in a crown fire.



13 closely spaced pine trees branches growing into 2 more trees just before onramp to 24 West beyond K Overpass.



Three pine trees growing into each other with limbs growing over the overpass railing toward traffic lines on K Overpass .



Row of 13 closely spaced pine trees East of K overpass on Caldecott lane have limbs growing into the roadway along the only evacuation route from Parkwoods.



Closely spaced pine and eucalyptus trees near the overpass on upper Broadway too close to the PG&E powerlines. Without maintenance, could spread fire from tree to tree through crown fires.



Concentration of closely spaced pines and eucalyptus on a huge elevated site along the hillside road southeast of the overpass could rapidly spread embers in a crown fire.



Flammable pine tree limbs projecting over traffic lanes east of the overpass along Upper Broadway.

23. Frontage Road areas South and North of Tunnel Road/Caldecott Lane



Massive concentrations of French broom growing below closely spaced pines and eucalyptus on north side of Tunnel Road overlooking Highway 24.



Dead trees on north side of Tunnel Road next to road.



More of same growing on downhill side of Tunnel Road.



French and Spanish broom, dead trees, cotoneaster growing below fire prone Monterey pines and eucalyptus.



Dead trees, invasive shrubs and debris on hillside between Tunnel Road and Highway 24.



Steep hillside with fire prone invasives on uphill side of Tunnel Road near end of Warren Freeway.



Flammable French and Spanish broom growing under pines on uphill side of Tunnel Road



Dead tree over arching close to
Tunnel Road.

24. Above and below the PG&E Substation



Caltrans property right at the base of PG&E high voltage power lines and next to freeway, with French broom and other brush run for a mile and could carry a fire to homes in upper Rockridge.



Wall of fire prone invasives that runs for almost a mile from upper Broadway near Lake Temescal to Broadway Terrace.



French broom growing 6-8 feet tall with large concentrations of cotoneaster right next to an area used by homeless in the past. Cut up logs and telephone poles in vegetation grove towards the back.



Flammable ground fuels, including pines and French broom to the east of Highway 13 leading up to the North Oakland Sports Field next to PG&E power lines.



Dumped telephone logs amidst flammable ground fuels.



Dumped logs amidst dried grass next to flammable invasives.

25. The connector between 13 and 24 East interchange



Unmaintained young pine trees close to Upper Broadway and ground fuels between 24 east and 13 south. Sometimes pine trees are allowed to grow into the guardrail area and onto the roadway.



Trees and shrubs growing in to each other in an area that frequently has been a homeless encampment in the past and a pine tree on the otherside near the PG&E power lines.



Flammable ground fuels growing near the connector and close to PG&E powerlines add to the fire risks in this area.

26. The center median of SR13 from the Oakland/Berkeley line down towards Berkeley.



West side of Tunnel Road-- French Broom hanging over the median wall at Roble Road in Berkeley..



Center median of Tunnel Road near Roble Road with fire ladders, along a major evacuation route .



Center median of major evacuation route-- no limbing or spacing under the trees which hang over the roadway.

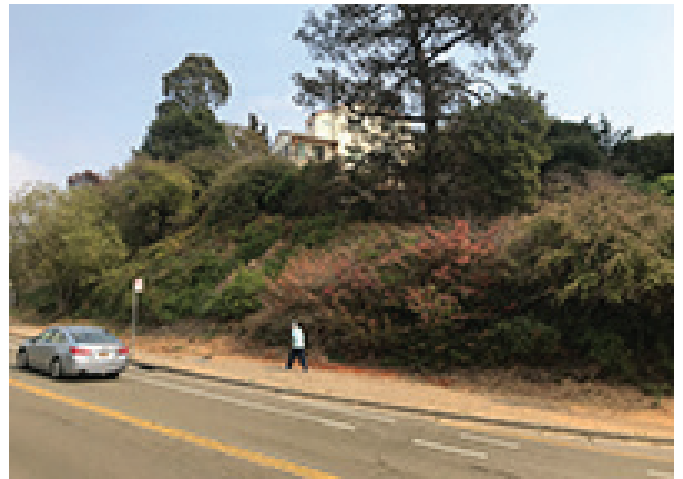


Center median along Tunnel Road evacuation route with no clearance between trees and shrubs, French broom.

27. South of Lake Temescal along Upper Broadway and Highway 24



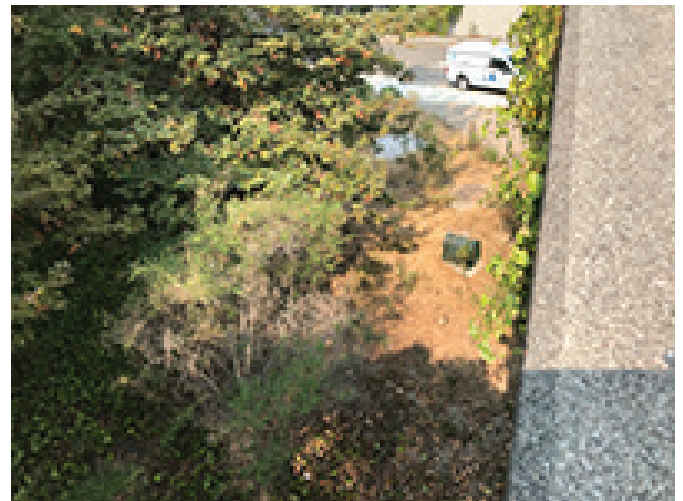
Band of fire-prone invasives like French broom and cotoneaster below pines next to homes north side of Golden Gate Avenue up to Lake Temescal.



Same site-- this is an evacuation route along upper Broadway.



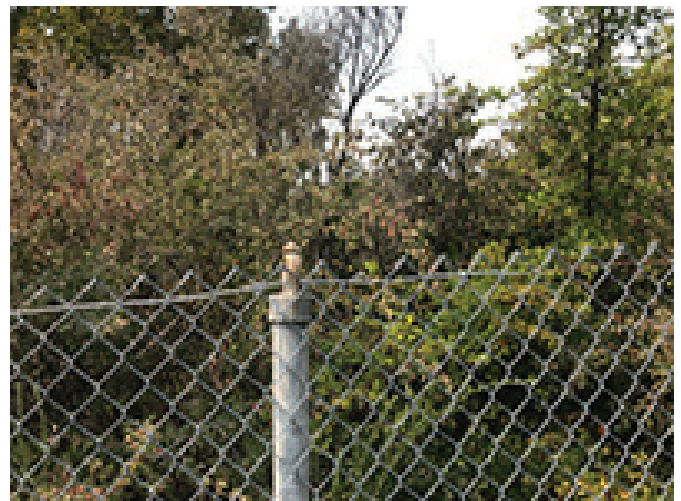
French broom and fire ladder between Broadway and Highway 24 at Golden Gate Avenue.



Looking down from west side of Golden Gate bridge with a 20 foot+ French broom.



French broom seed bed overgrown with cotoneaster. This area across from College Preparatory High School has been a homeless encampment in the past.



Dead tree surrounded by cotoneaster-- fire ladder.



Homeless encampment left overs in midst of cotoneaster and acacia trees with deep leaf litter. Located just north and across the street from College Preparatory High School.



Dense forest of cotoneaster and acacia-- previous site of homeless encampment (same area as photo to left). Areas runs a block long between Brookside and Golden Gate Avenue-- 50 to 150 feet between Broadway and Freeway.

28. Area between Highway 24 and the Chabot Canyon Racquet Club, where Caltrans has large open space prerpty north of Chabot Road.



Hillside below Highway 24 above the Chabot Canon Racquet Club contains large concentrations of flammable French broom, eucalyptus trees and ground fuels. Area runs 2 blocks long and poses threat to the facility and the homes across

Dead trees, inadequate spacing of trees and shrubs and unmaintained ground fuels in an area that has attracted homeless encampments in the past. Annual removal of ground fuels, trees need thinning and limbing and removal of dead trees and shrubs.



Dead tree on the ground among flammable grasses and brush on the hillside behind the Chabot Canyon Racquet Club-- about 2 blocks long. Picture taken August 19, 2021.



Caltrans and Bart both need better maintance to reduce the risk of spread of wildfire near the Bart tunnel from Contra Costa to Alameda. This area is next to Chabot Elementary School, west of the Racquet Club.

29. Caltans lot between the Broadway offramp and Highway 24 heading east for two blocks on Keith Avenue.



Dead brush stacked below overgrown ivy on fence next to Highway 24 at Broadway offramp.



Two block long former public garden at Keith and Broadway now a storage yard with dead shrubs and trees and stacked dead greenwaste.



More brush stacked next to fence at Highway 24 and Broadway offramp at Keith Avenue.



Lot filled with flammable weeds and grass. It has not been maintained in several years.

30. Berkeley/Oakland line alongside SR 13 and the start of the Warren



At Oakland Berkeley line, mixture of French broom, acacia and eucalyptus without adequate spacing next to traffic lanes. (North of storage yard). Site for homeless encampments.



Downed dead tree along Oakland/Berkeley line next to Highway 13, above huge grove of eucalyptus trees on an elevated site.



No 10-foot clearance: grass, shrubs, French Broom and site of homeless encampment earlier this year.



Mature eucalyptus surrounded by mix of leaf litter, fallen limbs, on the Oakland/Berkeley Line on an elevated site. Trees on top of trees.



After the stoplight, regrowing French broom and weeds. next to the roadway and tall eucalyptus trees on an elevated site.



Close up of grassy berm near the stoplight at start of Highway 13 near Highway 24.



Downed dead eucalyptus not removed. Located more east of Highway 24/13 interchange.



Trees not limbed, fallen limbs hanging off trees, The cross limb at left is the same cross limb at right below.



Ground fuels not cleared, fire ladders.



Small invasive trees and shrubs need to be removed for adequate spacing. Grasses and other ground fuels need to be removed annually.



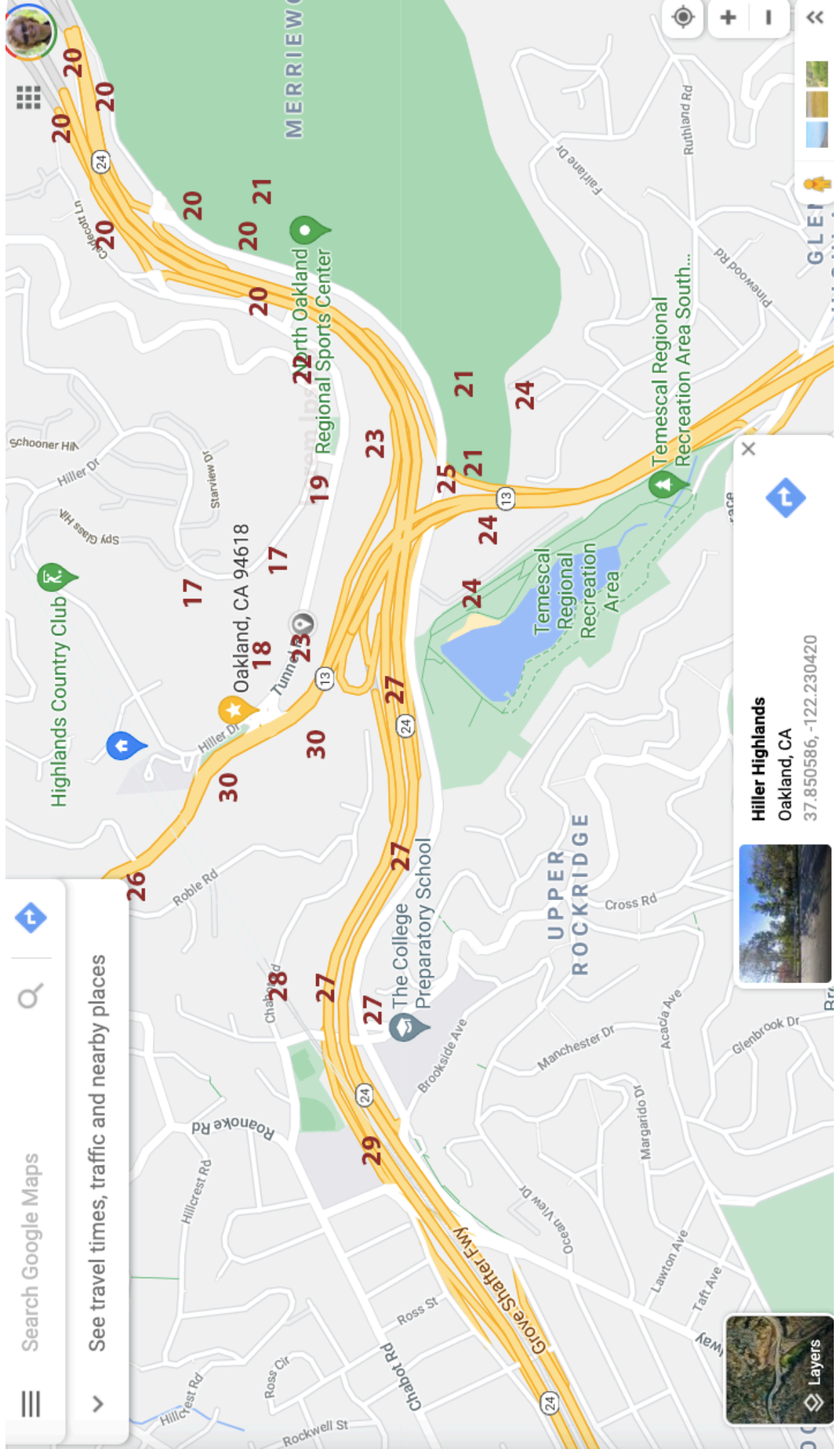
Grass and weeds right next to busy 24/13 offramp.



Dead trees and duff under eucalyptus.

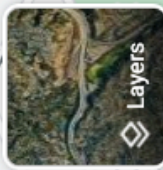


Closely spaced eucalyptus on an elevated site.



Search Google Maps

See travel times, traffic and nearby places



Layers



Hiller Highlands

Oakland, CA

37.850586, -122.230420