

ATTACHMENT C

Coastal Vegetation Treatment Standards (VTS)

Rancho Rico Community Fuels Treatment Project

1. All projects shall comply with and carry out the requirements of the CalVTP PEIR, including use of approved treatment methods, treatment activities and all applicable standard project requirements (SPRs) and mitigation measures (MMs).
2. Project-Specific Analyses (PSAs) shall be submitted to the California Coastal Commission (CCC) for review and approval pursuant to the PWP prior to conducting projects. Coordination between the Resource on Conservation District of Monterey County (RCD) and CCC shall occur as early as feasible in the design process in order to avoid delays.
3. PSAs shall include clear problem and goal statements (i.e., overall project goals, fire prevention goals, ecological goals, etc.) associated with each project proposed pursuant to this Public Works Plan. These statements are intended to assist the RCD and CCC in developing mutual understanding of the potential impacts and benefits – both short and long term – for each project. It is expected that this information will be incorporated into item #6 of each PSA.

Problem Statement:

The Rancho Rico Community Fuels Treatment Project is necessitated by suboptimal forest conditions due to decades of buildup of unnatural vegetation densities, including dense, overstocked stands and an accumulation of dead and dying vegetation, exacerbated by historic fire suppression practices. Multiple large wildfires have impacted the Big Sur region over the past several decades, with the periodicity, intensity and scale of wildfires increasing on an annual basis. Enhanced community wildfire safety and restored forest health is needed through targeted fuel reduction around community infrastructure, as well as ecologically-appropriate vegetation management in Notholithocarpus densiflorus (tan oak) Forest Alliance, Umbellularia californica (California bay laurel) Forest & Woodland Alliance, Quercus agrifolia (coast live oak) Woodland Alliance and Sequoia sempervirens (coast redwood) Forest & Woodland Alliance habitats, including removal of invasive French broom and diseased trees.

Goal Statement:

Through adherence to the Coastal VTS, treatment activities will consider the unique ecological conditions of Big Sur while making this coastal landscape more resilient to future

climate change-induced wildfire. The project will improve forest health in the Coastal Zone within and/or in proximity to Environmentally Sensitive Habitat Area (ESHA). The objective of the Rancho Rico Community Fuels Treatment Project is to enhance forest stand health, create a heterogeneous vegetation mosaic structure, augment wildlife habitat, remove invasive French broom, reduce wildfire spread rate and intensity through increasing horizontal and vertical spacing in the understory, and to provide an area for fire personnel to defend the Rancho Rico Community in the event of a wildfire. The project will achieve these goals through the following methods:

- This project will use hand and mechanical treatments to mimic the effect of historic fire occurrences, by removing lower limbs on mature trees and minimizing ladder fuels (shrubs and trees less than 8-inch at diameter breast height (dbh)).
- Provide increased sunlight to the forest floor and maintain stand structure of *Notholithocarpus densiflorus* Forest Alliance, *Umbellularia californica* Forest & Woodland Alliance, *Quercus agrifolia* Woodland Alliance and *Sequoia sempervirens* Forest & Woodland Alliance habitats, promoting the growth of larger, more mature trees.
- Employ fire mimicry through selective vegetation reduction to achieve a condition of a less dense stand structure, reducing density in higher density stands to a lower relative density to obtain a more heterogeneous stand structure, open the tree canopy and reduce the risk of wildfire moving into the canopy.
- Decrease the risk of pathogens and disease affecting Rancho Rico's overstocked forest, including sudden oak death, by removing select dead and dying trees and slowing the spread of pathogen vectors.
- Control the invasive species French broom encroaching into the tanoak (*N. densiflorus*), California bay (*U. californica*) and coast live oak (*Q. agrifolia*) Alliances.

Treatment of understory vegetation, diseased trees, and invasive species through mechanical and manual removal and pile burning, will improve overall forest conditions and ecosystem health, slow the spread and intensity of wildfires, and help maintain the vegetation membership rules for *Avena* spp.- *Bromus* spp. Herbaceous Semi-Natural Alliance, *Notholithocarpus densiflorus* Forest Alliance, *Umbellularia californica* Forest & Woodland Alliance, *Sequoia sempervirens* Forest & Woodland Alliance and *Quercus agrifolia* Woodland Alliance habitats. Desired or target post-treatment conditions are based on the compositions in the California Manual of Vegetation (Keeler-Wolf et al. 2003a, Evens and San. 2004, Keeler-Wolf and Evens 2006). For redwood forest, coastal redwood (*Sequoia sempervirens*) stands will retain at least 50 percent relative cover in the tree canopy, or at least 30 percent relative cover with other conifers such as Douglas fir (*Pseudotsuga menziesii*) or with a lower tier of hardwood trees such as tanoak, *Notholithocarpus densiflorus*. For coast live oak woodland, coast live oak (*Quercus agrifolia*) will retain to at least 50 percent relative cover in the tree canopy. In areas where bay laurel (*Umbellularia californica*) trees are present within the coast live oak woodland, then coast live oak will be retained to less than 33 percent of the relative cover in the tree canopy. For tan oak, *Notholithocarpus densiflorus* will retain 60% or

*greater relative cover in the tree canopy or retain over 30% relative cover with *Arbutus menziesii* or *Umbellularia californica* with less cover (Buck-Diaz et al. 2021, Sikes et al. 2021). California bay laurel habitat will have conifers in less than 30% relative cover in the canopy and *Umbellularia californica* with over 30% relative cover in the tree canopy (Keeler-Wolf et al. 2003a, Evens and Kentner 2006).*

4. In the coastal zone, vegetation treatment projects fall into two categories: (1) Forest Health projects and (2) Fire Prevention projects. The purpose of Forest Health projects is to restore and enhance ecosystems, including to prevent fire behavior to which the ecosystem is not adapted. The ecosystems that can be treated under this category include forested ecosystems as well as other ecosystems such as woodlands, grasslands and scrub dominated systems. The purpose of Fire Prevention projects is to protect existing structures and infrastructure, including access roads. Fire Prevention projects shall be limited to the applicable defensible space requirement (which is typically 100 feet from habitable structures in the Wildland Urban Interface), unless accompanied by a clear rationale, provided by a qualified professional, as to why additional defensible space is required to protect existing structures and infrastructure.

The Rancho Rico Community Fuels treatment Project contains elements of both Forest Health and Fire Prevention categories from the Coastal VTS. Large portions of the Community Fuels treatment area, located on the northern slope of Rancho Rico, have Forest Health objectives, including increased fire resiliency of the overstory stands, providing more understory space for seedling recruitment and establishment of native plant species, providing a mosaic structure that enhances wildlife movement and habitat creation, removal of invasive plant species and slowing the spread of Sudden Oak Death through coast live oak and tanoak trees. Fire Prevention elements include increasing emergency egress capability for Rancho Rico residents as well as providing more space for wildfire responders to attack wildfires and stage equipment.

5. In the coastal zone, environmentally sensitive [habitat] area (or ESHA) is defined as *any area in which plant or animal life, or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and that could be easily disturbed or degraded by human activities and developments* (see Coastal Act Section 30107.5). Rarity determinations for habitats and species are made by CDFW, USFWS, and CNPS, and are used to support a CCC ESA determination.^[1] In addition, an ESHA determination may be made on the basis of an area constituting 'especially valuable habitat' where it is of a special nature and/or serves a special role in the ecosystem, such as providing a pristine example of a habitat type or supporting important ecological linkages. The Coastal Act requires that environmentally sensitive habitat areas be protected against any significant disruption of habitat values and only allows uses dependent on the ESHA resources within those areas (see Coastal Act

Section 30240). It is anticipated that many of the Forest Health and Fire Prevention activities pursued within the coastal zone of Monterey County will take place within natural communities that qualify as ESHA (e.g., redwood forest, Monterey pine forest, Monterey cypress, Gowen cypress, maritime chaparral, etc.). For habitats containing federally listed species such as Gowen cypress, USFWS will be consulted during the PSA to develop and identify appropriate treatments.

The redwood forest and woodland alliance, tanoak forest, California bay forest and woodland alliance, and coast live oak woodland alliances within the Rancho Rico Community Fuels Treatment Area are considered ESHA, per the California Coastal Commission and Monterey County Local Coastal Program definition. Proposed project activities aim to restore ecosystem health and improve forest stand conditions through selective treatment methods, specific project requirements (SPRs), such as SPR BIO-3 (Sensitive Natural Communities) and SPR BIO-8 (Identify and Minimize Impacts to Coastal Zone ESHA), and through additional avoidance and minimization measures outlined in the PSA. Section 30240(a) of the Coastal Act restricts development within ESHA to only those uses that are dependent on the resource, and requires that ESHA be protected against significant disruption of habitat values. It is anticipated that these treatment activities will have a net benefit to the redwood forest and woodland, tanoak forest, California bay forest and woodland, and coast live oak woodland habitats by reducing ladder fuels and selective removal of cumulated dead woody debris.

6. In the coastal zone, wetlands are defined as where lands *may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens* (see Coastal Act Section 30121). Administrative Regulations (Section 13577(b)) further elaborate on this definition as *where the water table is at, near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes*, and goes on to establish what is effectively a single-parameter rule, meaning that only one of the three parameters used by the US Army Corps of Engineers and various other agencies – hydric soils, hydrophytic vegetation, or hydrology – need be present to delineate a coastal wetland feature. Though it is not necessarily anticipated that Forest Health and Fire Prevention projects will occur around coastal wetlands, it is important to recognize that they can and do occur as part of the landscape mosaic. Wetlands as referenced in the CalVTP are more narrowly defined than would be recognized under the Coastal Act. The Coastal Act generally protects wetlands and allows for impacts in only specific situations (see Coastal Act Section 30233).

There are currently no known or delineated wetland features within the project area. If an inadvertent coastal wetland discovery is made prior to or during treatment, the wetland feature will be delineated, flagged and avoided with a 100-ft avoidance buffer. All work crews will be trained on the avoidance of wetlands.

7. In addition to the requirements of the CalVTP PEIR, the following standards shall also be met in the Monterey County coastal zone, not only in ESHA but in all habitats:
- a. **Protect Ecosystems.** Forest Health projects shall: (a) proactively restore and enhance ecosystems, protect watersheds, and promote long-term storage of carbon, including through the minimization of forest carbon loss from large and intense wildfires; (b) restore and maintain vegetation cover to a threshold that reflects appropriate fire frequencies (i.e., fire-return intervals) on the landscape, considering estimated pre-European settlement conditions as well as future climate change, and the maintenance or improvement of ecosystem health; (c) maintain vegetation cover and composition to comply with the standards (membership rules) set forth in the online edition of the Manual of California Vegetation (MCV) to avoid unintended habitat conversion; [\[2\]](#) and (d) provide for an appropriate mosaic of native plants by age, size, and class that support the specific habitat being treated. Fire Prevention projects shall meet all of the above requirements to the maximum extent feasible, while achieving overall project goals and necessary fire prevention goals, and any deviations shall be clearly explained and identified in the PSA.

The Rancho Rico Community Fuels Treatment Project is funded by a CAL FIRE Fire Prevention Program Grant for implementation of fuels reduction treatments that will reduce fire intensity and minimize carbon loss within redwood forest and woodland, tanoak forest, California bay forest and woodland, and coast live oak woodland alliances. Treatments will utilize vegetation management techniques that retain overstory tree species, partial shrub cover in the understory, and a desired condition of mosaic-style vegetation structure that mimics fire effects, providing natural gradients across the project area that will benefit ecosystem health. There are several conditions in the CalVTP PEIR and Coastal VTS that help to protect ecosystems including:

- *Conducting a biological records search and reconnaissance-level survey prior to all project activities to identify and protect rare flora and fauna.*
- *Flagging all sensitive areas for avoidance during treatment activities.*
- *Identifying vegetation type alliance and habitat type and establishing membership rules for major alliances to inform treatment activities, per the Manual of California Vegetation.*
- *Pre-treatment trainings with contractor to establish the treatment plans, avoidance and protection measures, sensitive resources, and work restrictions. All Rancho Rico community members responsible for maintenance treatments will also be required to attend trainings.*
- *Property owners and neighbors will be notified at least 10 days prior to the commencement of project activities.*
- *To prevent erosion, heavy equipment will not be used on slopes over 50 percent.*

- *No heavy equipment will be allowed in redwood habitat with slopes greater than 25 percent or soil K-factor greater than 0.4.*
 - *French broom will be removed within the project area in accordance with the PSA, invasive weed best management practices, and all pile burning requirements.*
- b. **Protect Gowen Cypress.** Gowen cypress habitat, as measured from the dripline of individual trees or the outermost periphery of a stand, whichever is greater, shall be delineated and protected from treatment activities with a 100-foot buffer. Treatment activities shall be limited to ecological restoration within the buffer and directly incorporate recommendations from a Registered Professional Forester and USFWS consultation.

Gowen cypress is only found in two isolated known locations in Monterey County, significantly more than 100 feet away from the project area, and therefore will not be impacted by the project activities.

- c. **Protect Wetlands.** Coastal wetlands shall be delineated and protected from treatment activities with a 100-foot buffer. Only treatment activities that would restore ecological benefits to the wetland may be allowed within the buffer. Projects shall adhere to CalVTP SPR BIO-1 identifying and documenting the location of wetlands during project surveys and planning, and SPR HYD-3 protecting wetland water quality from prescribed herbivory treatments. The Coastal Commission considers a wetland to be any area that is wet enough long enough to support a preponderance of hydrophytic vegetation or to result in soil that is predominantly hydric. In other words, only one of the three primary indicators of wetlands need be demonstrated for an area to be identified as a wetland (California Code of Regulations, Section 13577).

Although there is presence of Class II and Class III streams in the project area, the site lacks wetlands, including those defined by the Coastal Commission. In the occurrence that a coastal wetland feature is discovered, it would be flagged and avoided with a suitable avoidance buffer.

- d. **Protect Landmark Trees.** Landmark Trees shall be protected from removal and other impacts in all coastal areas, regardless of species or size, if occurring within a riparian corridor or wetland habitat, critical habitat, scenic easement, critical viewshed, or on a ridgeline. Projects shall adhere to CalVTP SPRs BIO-1 and BIO-12.

Landmark trees are 24-inches dbh or greater that are visually or historically significant (more than 100 years old) or are otherwise exemplary regardless of species or size. All landmark trees will be identified, flagged, and avoided. To ensure landmark trees have been fully accounted for, the RCD will consult with the Housing and Development

Department of Monterey County prior to implementing any project activity to determine if there are any historically significant or exemplary landmark trees within the project area.

- e. **Protect Areas of Special Biological Significance (ASBS).** All treatment activities within the watershed boundaries of the Del Monte Forest and Carmel Areas of Special Biological Significance shall avoid work during periods of soil saturation, consistent with CalVTP SPR GEO-1.

The project area is not within the watershed boundaries of the Del Monte Forest or Carmel Area.

- f. **Vegetation Removal Hierarchy.** Except for prescribed fire project components, a vegetation removal hierarchy shall be identified and implemented for each project to obtain the vegetation cover threshold identified by a Registered Professional Forester or qualified professional as necessary while ensuring that unintended habitat conversion does not occur, and that vegetation cover is sufficient to support the project's ecological goals. In order of priority and application, the hierarchy shall be as follows: (1) thinning and removal of dead, dying and diseased foliage, shrubs (except that some snags should be retained to provide wildlife shelter, dens, etc.); (2) removal of invasive species; and (3) removal of native species that are not listed as endangered, threatened, rare, or otherwise especially valuable, with the end goal of having appropriate species composition in the plant community with a mix of vegetation age, height and density.

In all cases, indicator species and diagnostic species appropriate to the vegetation community type shall be maintained in accordance with the standards (membership rules) set forth by the online edition of the Manual of California Vegetation (MCV), with the intention of maintaining cover and composition consistent with meeting project ecological goals. Additionally, almost all known Alliances mapped in the Rancho Rico project area- *N. densiflorus* Forest Alliance (CA Code 73.100.00), *U. californica* Forest & Woodland Alliance (CA Code 74.100.00, 74.100.01, 74.100.03), *S. sempervirens* Forest & Woodland Alliance (CA Code 86.100.00, 86.100.04, 86.100.21) and *Q. agrifolia* Woodland Alliances (CA Code 71.060.00, 71.060.26) - are defined as Sensitive Natural Communities by the California Dept. Of Fish and Wildlife¹. Sensitive Natural Communities are vegetation alliances that have a State and Global ranking of 1 to 3 on a scale of 1 (very rare and threatened) to 5 (demonstrably secure), indicating their relative rarity. For Fire Prevention projects, additional vegetation removal may be allowed if maintaining such vegetation consistent with project ecological goals would result in an unacceptable fire

¹ <https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities>

risk to existing structures and infrastructure, and the removal is the minimum necessary to protect existing structures and infrastructure. Any such additional removal shall be clearly explained and identified in the PSA. Lastly, if vegetation cover threshold goals, as articulated in the online edition of the MCV, cannot be met, then removal of endangered, threatened, rare or otherwise especially valuable species and habitats shall be prohibited unless: such removal is critical to reduce the area’s fire risk; removal is accompanied by restoration or enhancement such that the overall project provides net benefits to the habitat; and no other alternative exists that meets the project goals.

Treatment activities will adhere to the vegetation removal hierarchy. Dead, dying and diseased bay laurel and coast live oak will be cut, chipped or lopped in place, followed by invasive French broom. French broom plants will be piled near roadsides and either burned or covered with material to decompose in place. Next, ladder fuels and understory vegetation will be thinned to restore forest health of tan oak forests, California bay laurel forests and woodlands, redwood forests and woodlands, and coast live oak woodlands. Project design and vegetation treatments will be based on membership rules of the online edition of the Manual of California Vegetation to meet alliance level protocols.

In areas that are not chaparral habitat but contain important understory shrub species that may compose sensitive chaparral habitat, the project will institute a shrub treatment hierarchy based on ecological characteristics of the existing species, relative rarity of the shrub species, and/or relative rarity of a vegetation alliance. See Table 1 below for shrub treatment priority; shrub treatment priority decreases going down the table. Project treatment specifications will be communicated throughout the duration of implementation and maintenance activities through training and orientation meetings. RCD field staff will also oversee all project activities and host regular check-ins with landowners and contractors.

Table 1. Understory Shrub Treatment Hierarchy for Rancho Rico Community Fuels Treatment Project

Species	Common name	Treatment Hierarchy	Removal Priority	Note
<i>Genista monspessulana</i>	French broom	Full removal	High ¹	<u>Cal-IPC: highly invasive; high flammability</u>
<i>Adenostema fasciculatum</i>	chamise	Mechanical or manual	Moderate ²	<u>Locally aggressive</u>
<i>Baccharis pilularis</i>	coyotebrush	Mechanical or manual	Moderate ²	<u>Moderately invasive native shrub</u>
<i>Toxicodendron diversilobium</i>	poison oak	Mechanical or manual	Moderate ²	<u>Aggressive vegetative reproduction and wide dispersal over Central Coast region</u>

<i>Ceanothus spp.</i>	California lilac	Mechanical or manual	Moderate ²	<u>-several potential non-rare species see below for <i>C. rigidus</i></u>
<i>Eriodictyon californicum</i>	yerba santa	Mechanical or manual	Moderate ²	<u>Early seral species that thrives in disturbed areas</u>
<i>Frangula spp.</i>	coffeeberry	Mechanical or manual	Moderate ²	<u>Sprouts from root crown when disturbed, also a facultative seeding plant</u>
<i>Heteromeles arbutifolia</i>	toyon	Mechanical or manual	Moderate ²	<u>Sprouts from root crown when disturbed, facultative seeder</u>
<i>Lupinus spp. (albifrons)</i>	bush lupine	Mechanical or manual	Moderate ²	Bush lupine is fairly tolerant of pruning and other disturbance
<i>Rosa spp. (californica; gymnocarpa var. gymnocarpa; pinetorum)</i>	rose	Mechanical or manual	Moderate ²	Most rose species in the Central Coast region can be pruned to the root crown
<i>Salix spp.</i>	willow	Mechanical or manual	Moderate ²	<u>Larger, older-growth willow species will be classified as Low Priority</u>
<i>Sambucus spp. (nigra)</i>	elderberry	Mechanical or manual	Moderate ²	<u>Cutting to root crown should only be done in winter months, otherwise can only be pruned</u>
<i>Symphoricarpus spp.</i>	snowberry	Mechanical or manual	Moderate ²	<u>Facultative seeder</u>
<u><i>Salvia mellifera</i></u>	<u>black sage</u>	<u>Mechanical or manual</u>	<u>Moderate to low²</u>	<u>Facultative seeder, prefers disturbed areas and self-propagates</u>
<i>Arctostaphylos spp.</i>	manzanitas	Manual pruning only	Low ³	<u>Obligate seeder, slow-growing genus</u>

<i>Eriogonum spp.</i>	buckwheat	Manual pruning only	Low ⁴	
<i>Ribes spp.</i>	gooseberry/currant	Manual pruning only	Low ⁵	
<i>Ceanothus rigidus</i>	Monterey ceanothus	Manual pruning only	Low to none ⁶	<u>Locally rare;</u> <u>CRPR: 4.2</u>

1 Removal of entire plant, including root mass, to control invasive plant spread

2 May be mowed, masticated or cut down to just above root crown but will not violate vegetation community membership cover rules

3 Manzanitas may be pruned but will avoid sensitive species *A. hookeri ssp. hookeri* (CRPR: 1B.2) and *A. pumila* (CRPR: 1B.2) to maximum extent feasible

4 Host plants for Smith's blue butterfly will be treated only where necessary to meet project goals and after ensuring plants are not occupied

5 *Ribes* may be pruned but will avoid sensitive *Ribes sericeum* (CRPR: 4.3) to maximum extent feasible

6 May be pruned only if plants are acting as fuel ladders but will be avoided to maximum extent feasible

- g. **Limit Treatment within Chaparral.** Treatment activities (as defined under the CalVTP) shall not occur within chaparral habitat unless required to establish and/or maintain the minimum defensible space of a building or structure within the County's Wildland-Urban Interface. Such treatment shall be designed to protect chaparral habitat and its indicator species to the maximum extent feasible while meeting the minimum defensible space requirements pursuant to County Fire Code.

There will not be any chaparral habitat treated in the project area. Chaparral species found in other identified habitats Avena spp.- Bromus spp. Herbaceous Semi-Natural Alliance, Notholithocarpus densiflorus Forest Alliance, Umbellularia californica Forest & Woodland Alliance, Sequoia sempervirens Forest & Woodland Alliance and Quercus agrifolia Woodland Alliance habitats will be treated in accordance with the shrub treatment hierarchy. The Shrub Treatment Hierarchy is based on species ecology (obligate vs. facultative seeding, obligate vs. facultative sprouters), rarity of species, native vs. non-native status and vegetative reproductive capability. Priority starts with targeted removal of French broom, then to shrub species that can reproduce through vegetative sprouting and seeding. Lower treatment priority goes to species that are obligate seeders or longer-lived species, and the lowest priority for treatment are species that are either rare, serve as habitat for rare species or are longer-lived species.

- h. **Determine Suitable Use of Prescribed Fire.** Prescribed fire may be allowed if it is found to be the least environmentally damaging feasible alternative to achieving project goals, except in North County's Critical Erosion Areas, in redwood and chaparral habitats when slopes exceed 25% and/or a K-factor of 0.4, and in Carmel Area redwood and chaparral habitats when slopes exceed 30%.

Pile burning will be utilized for disposal of cut French broom in the Shaded Fuel Break Treatment Area.

- i. **Determine Suitable Use of Prescribed Herbivory.** Prescribed herbivory may be allowed if it is found to be the least environmentally damaging feasible alternative to achieving

project goals, except in North County's Critical Erosion Areas, in redwood and chaparral habitats when slopes exceed 25% and/or a K-factor of 0.4, and in Carmel Area redwood and chaparral habitats when slopes exceed 30%. Prescribed herbivory shall be conducted pursuant to an approved plan that ensures protection of habitat and other coastal resources, as documented in the PSA.

Project activities will not include prescribed herbivory as a treatment or for maintenance.

- j. **Control Invasive Species.** Treatment activities and treatment types shall limit the spread of invasive species and prevent the spread of plant pathogens in all habitats, including those habitats that are not determined to be sensitive natural communities, riparian habitats, or oak woodlands, subject to CalVTP SPRs BIO-4 and 9.

French broom (Genista monspessulana) is a highly invasive species present in the Rancho Rico Community, particularly in the Shaded Fuel Break Treatment Area, but it also in the broader Ecological Restoration Treatment area. The plant presents a fire hazard because it is very ignitable, acts as a ladder fuel that suppresses and replaces native plants, and spreads rapidly particularly in disturbed areas. Due to its large seed bank (it can produce over 8,000 seeds per year) and its ability to re-sprout from the root after cutting or fire, the plants will be entirely removed from the root before the blooming period in April to June or cut in place and piled in discrete piles separate from other cut vegetation.

Sudden Oak Death (SOD), caused by the pathogen Phytophthora ramorum, is widespread within both the Shaded Fuel Break and Ecological Restoration Treatment Areas. To prevent the spread of SOD within the project area, small to medium sized bay laurel trees will be removed around coast live oak and tanoak trees a minimum radial distance of 30 feet from oak trees with a diameter at breast height (DBH) of up to 32 inches. Larger bay trees may be difficult to remove, and, in those circumstances, there will be aggressive pruning of branches that come within 30 feet of oaks and tanoaks. For larger oak trees over 32 inches DBH, the buffer of bay laurel treatment will be increased to 50 to 60 feet.

To avoid the spread of SOD, all hand equipment, including boots, will be sanitized and heavy hosed off prior to project activities in areas where the pathogen is present. The California Oak Mortalist Task Force website (<http://www.suddenoakdeath.org/>) have been referenced for recommendations on appropriate treatments and disposal of plant material infected with SOD.

- k. **Limit Equipment Types.** All projects shall be carried out using the least invasive type of equipment feasible. Projects shall avoid the use of large masticators, track vehicles, and other heavy equipment, where feasible. When such heavy equipment is used, it shall

remain on existing roads to the extent feasible. In riparian habitat, the use of heavy equipment shall be prohibited, except when authorized through a valid Stream and Lakebed Alteration Agreement and/or, if applicable, Clean Water Act 401 Certification, and when reviewed and approved by CCC. In North County's Critical Erosion Areas, in redwood and chaparral habitats when slopes exceed 25% and/or a K-factor greater than 0.4, and in Carmel Area redwood and chaparral habitats when slopes exceed 30%, mechanical treatments shall be prohibited. Projects shall adhere to CalVTP SPR GEO-2 limiting heavy equipment use and SPR HYD-4 prohibiting heavy equipment use in WLPZ except on existing roads.

Machine treatments have been designed to be within 50 feet of the road. No equipment will be operated in riparian habitat areas. When treatments exceed the reach of the equipment from the road or trail, only smaller equipment, such as chippers or smaller skid steers will be allowed and only within the pre-designated machine treatment area. All other areas will be manually treated.

- i. **Limit Herbicide Use.** Herbicides shall be avoided to the maximum extent feasible and may be used only if such treatment activities are the least environmentally damaging feasible alternative and will not result in significant adverse impacts to sensitive ecological resources (e.g., when used to control of invasive species). Projects shall adhere to CalVTP SPRs HAZ-5, 6, 7, 8, and 9.

Herbicide application will not be used during any treatment activities, including French broom removal.

- m. **Protect Coastal Viewshed.** All treatment-related materials shall be stored outside of major public viewing areas and may rely on existing vegetation to screen visibility. Treatments shall be planned and implemented to avoid significant breaks in the coastal viewshed, relying on techniques such as feathering and gradients along treatment area peripheries to blend with the surrounding landscape.

Treatments will be utilize vegetation management techniques that retain the overstory tree species, retention of partial shrub cover in the understory (utilizing a shrub treatment hierarchy) and a desired condition of mosaic-style vegetation structure that mimics fire effects, providing natural gradients across the project area that will avoid any significant breaks in the viewshed.

- n. **Limit Fencing.** The use of wildlife-friendly fencing for prescribed herbivory activities subject to CalVTP SPR BIO-11 shall require adequate ground clearance for smaller species to avoid entrapment and/or entanglement.

Project activities will not include prescribed herbivory.

- o. **Limit Accelerants.** Accelerants shall only be allowed for use in prescribed fire applications. The use of accelerants that could significantly disrupt or degrade ESHA is prohibited.

Accelerants will be used in an extremely limited way to help ignite piled French broom during pile burning. Piles will be in previously disturbed, open areas away from surrounding live vegetation and riparian corridors. Burned piles will be burned with the goal of total consumption of piles.

- p. **Limit the Need for Soil Stabilization.** The use of riprap and/or chemical soil stabilizers that could significantly disrupt or degrade ESHA is prohibited.

Rip-rap and chemical soil stabilizers will not be used in the treatment activities.

- q. **Protect Coastal Public Access and Recreation.** Coastal public access and recreational opportunities shall be preserved during project operations to the maximum extent feasible, including by, but not limited to, minimizing trail closures, limiting the use of public parking spaces for staging operations, posting accessway signage and using flaggers, and designing construction access corridors in a manner that has the least impact on coastal public access. Following the completion of Forest Health projects and Fire Prevention projects, all impacted coastal public access and recreational amenities shall be restored to existing conditions, in a manner that maximizes coastal public access and recreation.

The project is located on private properties in the Rancho Rico Community and will not impact any coastal public access or recreational areas.

^[1] CDFW defines natural communities, animals, and plants with a global or state ranking of 1, 2, or 3 as rare and the CCC typically finds these to be ESHA. CCC also typically considers plant and animal species listed by the federal and state endangered species acts (ESA and CESA, respectively) and/or identified under other special status categories (e.g., California Species of Special Concern) and/or identified by the California Native Plant Society (CNPS) as '1B' and '2' plant species as constituting ESHA.

^[2] Membership rules are quantitative definitions used to assign field samples to vegetation types based on data analysis and can include species constancy, cover values, and the presence of indicator species (Klein et al. 2007).