



Midpeninsula Regional  
Open Space District

R-13-23  
Meeting 13-08  
March 27, 2013

## AGENDA ITEM 6

### AGENDA ITEM

Adoption of an Addendum to the Mitigated Negative Declaration for the Site-Specific Weed and Pest Management Project

### GENERAL MANAGER'S RECOMMENDATIONS

1. Approve an Addendum to the Mitigated Negative Declaration and Mitigation Monitoring Program for the Site-Specific Weed and Pest Management Project in accordance with the California Environmental Quality Act (CEQA).
2. Adopt the CEQA findings set out in the attached Resolution (Attachment 1).

### SUMMARY

The Midpeninsula Regional Open Space District (District) Board of Directors is asked to consider approving an Addendum to the Mitigated Negative Declaration (MND) and Mitigation Monitoring Program (MMP) for the Site-Specific Weed and Pest Management Project in accordance with CEQA, to implement control of invasive weeds and pest species at three additional treatment sites (for a total of 45 treatment sites) in FY 2013-14 and 2014-15. If approved and adopted, the work described under the Addendum to the MND will be performed by a combination of District field staff, volunteers, and a contractor (see Agenda Item 7, on this meeting's Agenda).

### DISCUSSION

As part of its mission to protect and restore the natural environment of the Open Space Preserves (OSPs), and consistent with its Resource Management Policies, the District controls non-native and invasive plant species (also referred to as weeds) and pests that have a substantial impact on preserve resources. The District controls non-native invasive species because they are adapted to invade and subsequently dominate large areas, often leading to reduced native biodiversity.

On May 9, 2012, the Board of Directors approved a Resolution to adopt the Site-Specific Weed and Pest Management Project MND and MMP. These documents guide weed and pest treatment at 42 sites. After one year of such treatment, staff has identified three additional sites (Attachment 2), similar in location and character to the previously approved 42 sites, that should be treated in coordination with the original sites. This would be accomplished through an

Addendum to the Site-Specific Weed and Pest Management Project MND and consists of three additional activities:

1. Pulling with weed wrenches and glyphosate spraying by backpack of French broom along the western roads of Bear Creek Redwoods OSP;
2. Pulling with weed wrenches and glyphosate spraying by backpack of French broom at gate PC03 and along Upper Purisima Creek Road at Purisima Creek Redwoods OSP;
3. Pulling and cutting Cape ivy with hand tools and chainsaws at Purisima Creek Redwoods OSP.

The Addendum would not add any new preserves, treatment methods, or sensitive resources that have not already been evaluated in the original MND. One additional target pest, Cape ivy, would be included at an existing site where English ivy is already being treated. The two invasive vines are similar in character and their treatment methods are the same.

A subsequent Negative Declaration was not prepared because the minor additions did not cause any new significant environmental effects or substantially increase the severity of previously identified effects, and because no new significant information has been added to the MND.

Table 2-1 provides the original and revised treatment actions, annual gross work acres, and annual amount of herbicide to be used. Changes are indicated by the gray highlighting with new totals as a result of adding the three new sites shown in bold and prior totals shown with strike-through text. The total average annual number of gross work acres is estimated to increase from 1,958 to 2,413. The amount of gross work acres is defined as the total overall number of acres of work in one year. Within a treatment site, not every square inch is treated, only the actual target weeds are treated.

| Treatment Action                          | Gross Work Area (acres)      | Herbicide Amount Anticipated to be Used (gallons) |
|---|------------------------------|---|
| Brushcutting                              | 18                           | N/A   |
| Chainsaw cutting of trees                 | 16                           | N/A   |
| Digging                                   | 65                           | N/A   |
| Pulling                                   | <b>935</b> <del>708</del>    | N/A   |
| Green flaming                             | 7                            | N/A   |
| Agri-Fos and Pentrabark spraying (by ATV) | 27                           | 40  |
| Aminopyralid spraying                     | 140                          | 1   |
| Glyphosate spraying                       | <b>1,100</b> <del>873</del>  | <b>35</b> <del>29</del>                           |
| Glyphosate cut-stump application          | 91                           | <b>1.01</b> <del>±</del>                          |
| Glyphosate wipe application               | 14                           | 0.3   |
| <b>TOTAL Gross Work Acres</b>             | <b>2,413</b> <del>1958</del> |   |

<sup>1</sup> Treatment action descriptions are provided in Section 2.6.3 of the MND.  
Source: MROSD 2012

Table 2-2 lists the treatment sites and type of management that will occur at each site. New treatment sites and the existing site with the new target weed are highlighted in gray. Refer to the original MND for descriptions of the preserves and types of management.

| Table 2-2. Proposed Treatment Sites and Management Categories* |   |  |
|--|---|--|
| Preserve   | Site Name                                     | Management Category                                      |
| Bear Creek Redwoods OSP  | Alma College                                  | Broom control  |
|  | BC01  | Broom control  |
|  | Tree Farm                                     | Woodland weeds   |
|  | West Roads ( <i>new site</i> )                | Broom control  |
| Coal Creek OSP   | Page Mill & Highway 35                        | Broom control  |
| El Corte de Madera Creek OSP                                   | Lawrence Creek Trail                          | Sudden Oak Death   |
|  | Methuselah Trail                              | Broom control  |
|  | Future staging area between CM03 & CM04       | Broom control  |
|  | Virginia Mill Trail                           | Broom control  |
| El Sereno OSP  | Aquinas Trail                                 | Broom control  |
|  | Loma Vista Trail                              | Broom control  |
|  | Overlook Trail                                | Broom control<br>Satellite populations of priority weeds |
| Los Trancos OSP  | Event Meadow                                  | Grassland Weeds  |
|  | Fault Trail                                   | Sudden Oak Death   |
|  | Franciscan Loop Trail                         | Sudden Oak Death   |
|  | Greater Los Trancos                           | Sudden Oak Death<br>Grassland Weeds                      |
|  | Knoll   | Grassland Weeds  |
|  | LT02  | Grassland Weeds  |
|  | Norton  | Grassland Weeds  |
|  | Parking Lot                                   | Grassland Weeds  |
| Monte Bello OSP  | Montebello Road                               | Satellite populations of priority weeds                  |
|  | Water Wheel Creek                             | Satellite populations of priority weeds                  |
| Pulgas Ridge OSP   | Hassler Loop                                  | Habitat restoration                                      |
| Purisima Creek OSP   | Harkins Ridge Cutover                         | Broom control  |
|  | Harkins Ridge Trail                           | Broom control  |
|  | North Ridge                                   | Satellite populations of priority weeds                  |
|  | PC01( <i>new target species, Cape ivy</i> )   | Satellite populations of priority weeds                  |
|  | PC03 ( <i>new site</i> )                      | Broom control  |
|  | Upper Purisima Creek Road ( <i>new site</i> ) | Broom control  |
| Rancho San Antonio OSP   | Lower Meadow Trail                            | Sudden Oak Death   |
|  | Shop  | Satellite populations of priority weeds                  |
| St. Joseph's Hill OSP  | Vineyard                                      | Broom control  |
|  | Vista/Y Star/Hilltop                          | Broom control  |
| Saratoga Gap OSP   | Charcoal Residence                            | Broom control  |
|  | Lysons Property                               | Satellite populations of priority weeds                  |
| Sierra Azul OSP  | Air Base                                      | State-rated noxious weeds                                |
|  | Austrian Gulch (Moss Property)                | State-rated noxious weeds                                |
|  | Beatty  | Broom control<br>Satellite populations of priority weeds |
|  | Hicks Creek Ranch                             | Satellite populations of priority weeds                  |
|  | Pheasant                                      | State-rated noxious weeds                                |
|  | RDG   | Satellite populations of priority weeds                  |
|  | Reynolds                                      | State-rated noxious weeds                                |
|  | SA19  | Broom control  |
| Williams Property  | Broom control                                 |  |
| Skyline Ridge OSP  | Tree Farm Restoration                         | Habitat restoration                                      |

Source: Data provided by MROSD in 2012, adapted by Ascent in 2012

As part of this Addendum, all portions of the original MND were reviewed and the potential for new significant environmental effects was considered (Attachment 3). The review did not lead to any findings of additional potential significant effect (including cumulative effects), thus no new mitigation measures or best management practices are required. All text changes (additions and deletions) to the original MND are documented in the Addendum.

### **FISCAL IMPACT**

The additional work under the Addendum will be carried out by existing staff and volunteers; therefore there will not be any new incremental fiscal impact.

### **BOARD COMMITTEE REVIEW**

The Board of Directors has previously made findings on the Site-Specific Weed and Pest Management Project during the May 9, 2012 Board meeting. No additional Board Committee review is required.

### **PUBLIC NOTICE**

CEQA Addendums do not require additional circulation for public review. Public notice of this Agenda Item was provided per the Brown Act.

### **CEQA COMPLIANCE**

#### Revised CEQA Project Description with the Addendum

The project consists of weed and pest management on select sites on open space preserves in Santa Clara and San Mateo Counties, California. Weed and pest management activities under the project occur at 45 distinct treatment sites within thirteen of the District's 26 designated open space preserves areas during the years 2012 through 2014 (Attachment 3). The purpose of the project is to control noxious and invasive weeds and pest species in high priority natural areas of the District to halt or minimize the spread of those species in areas where substantial progress has been made towards eradication or site restoration to more natural conditions. The District is carrying out an Integrated Pest Management approach in the implementation of this project.

The Addendum consists of minor additions which will not involve new, significant environmental effects or a substantial increase in the severity of previously identified effects. The circumstances under which the project will be undertaken have not substantially changed, and no changes to mitigation measures are required.

The recommended CEQA action before the Board is adoption of the proposed Addendum to the MND and associated documents and findings for this project. The Board is not determining how or when to implement any work efforts under the guidance of the Site-Specific Weed and Pest Management Project. Rather, the Board is completing CEQA compliance with regard to implementation of the Addendum to the Site-Specific Weed and Pest Management Project. Subsequent to Board approval, staff will implement the project.

#### CEQA Determination

An initial study for the Site-Specific Weed and Pest Management Project was completed and a MND was adopted on May 9, 2012. Three mitigation measures were identified in the original

MND to mitigate potential negative effects to biological and cultural resources to a level of insignificance. The Addendum makes minor additions (three new sites of similar location and character) with no additional potential negative effects to biological and cultural resources. The previously-adopted mitigation measures will avoid any such effects. Therefore, the Addendum does not change the conclusion of no significant effect and no additional mitigation measures are required.

#### Mitigation Monitoring Program

In accordance with CEQA, the District has prepared a MMP, which describes project-specific mitigation measures and monitoring process. The MMP ensures that all adopted measures intended to mitigate potentially significant environmental impacts will be implemented. The project incorporates all of these mitigation measures. No changes to the MMP are required by the Addendum.

#### CEQA Findings

The Board Findings required by CEQA to adopt the Addendum to the MND are set out in the attached Resolution (Attachment 1).

### **NEXT STEPS**

Should the Board approve the Addendum to the MND, staff would proceed with working at the three additional sites under the Addendum to the Site-Specific Weed and Pest Management Project.

#### Attachments:

1. Resolution of the Board of Directors Adopting the Addendum to the Mitigated Negative Declaration and the CEQA Findings for Implementation of the Site-Specific Weed and Pest Management Project
2. Maps of Proposed Site Additions to the Site-Specific Weed and Pest Management Project
3. Addendum to the Mitigated Negative Declaration

#### Responsible Department Head:

Kirk Lenington, Natural Resources Manager

#### Prepared by:

Joel Silverman, Resource Management Specialist I

#### Contact person:

Joel Silverman, Resource Management Specialist I

#### Graphics prepared by:

Joel Silverman, Resource Management Specialist I

# ATTACHMENT 1

## RESOLUTION NO. 13-XX

### A RESOLUTION OF THE BOARD OF DIRECTORS OF THE MIDPENINSULA REGIONAL OPEN SPACE DISTRICT ADOPTING AN ADDENDUM TO A MITIGATED NEGATIVE DECLARATION IN CONNECTION WITH THE SITE-SPECIFIC WEED AND PEST MANAGEMENT PROJECT

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- I. An Initial Study (IS) was prepared for the Site-Specific Weed and Pest Management Project (Project) pursuant to the requirements of the California Environmental Quality Act (CEQA) Public Resources Code sections 21000 et seq.) and the CEQA Guidelines (14 Cal. Code. Regulations sections 15000 et seq.).
- II. The IS identified potentially significant adverse effects on the environment from the proposed project but found that mitigation measures for the proposed Project, which were made a part of the proposed Project, would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur.
- III. The IS and a notice of intent to adopt a Mitigated Negative Declaration (MND) and the Mitigated Monitoring Program (MMP) were circulated for public review from April 5, 2012 to May 4, 2012.
- IV. On May 9, 2012 the Board of Directors conducted a duly noticed public hearing on the adequacy of the MND (including the IS) at which oral and written comments and a staff recommendation for approval of the MND were presented to the Board of Directors. The Board of Directors reviewed and considered the information in the IS and MND as required by CEQA.
- V. On May 9, 2012 the Board of Directors adopted the proposed MND and MMP through Resolution 12-19 finding that all potentially significant effects identified in the MND would be avoided by the mitigation measures and changes made in the Project as described in the MND.
- VI. An Addendum to the MND was proposed by the District to address several sites and activities which were not addressed in the adopted MND. No additional mitigation measures are necessary in order to prevent potentially significant adverse effects on the environment.
- VII. On March 27, 2013 the Board of Directors conducted a duly noticed public hearing on the adequacy of the Addendum to the MND at which a staff recommendation for approval of the Addendum to the MND was presented to the Board of Directors. The changes proposed under the Addendum to the MND are minor additions only, with no significant impacts on the environment and requiring no new mitigation measures. The Board of Directors reviewed and considered the information in the Addendum to the MND as required by CEQA.

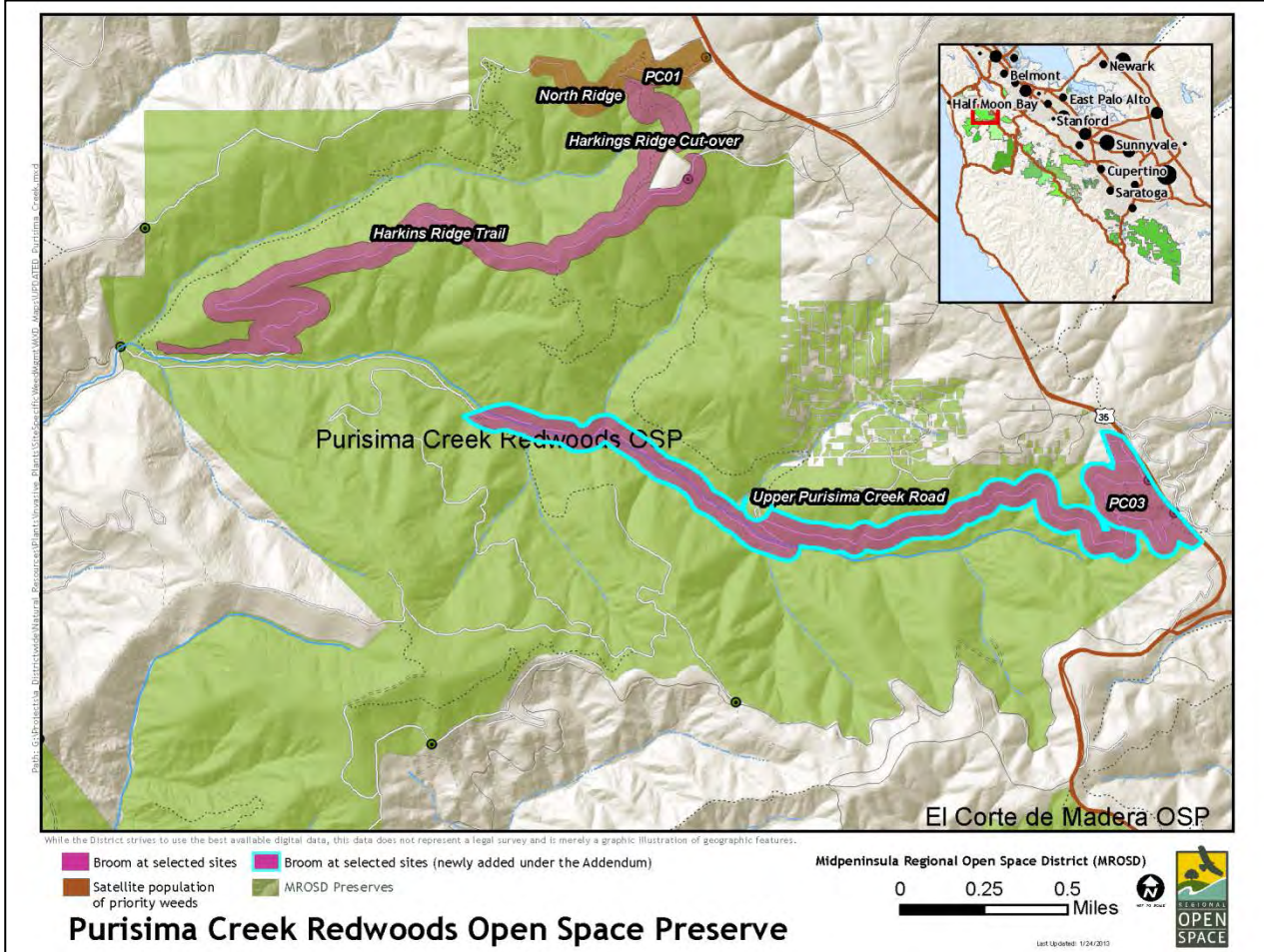
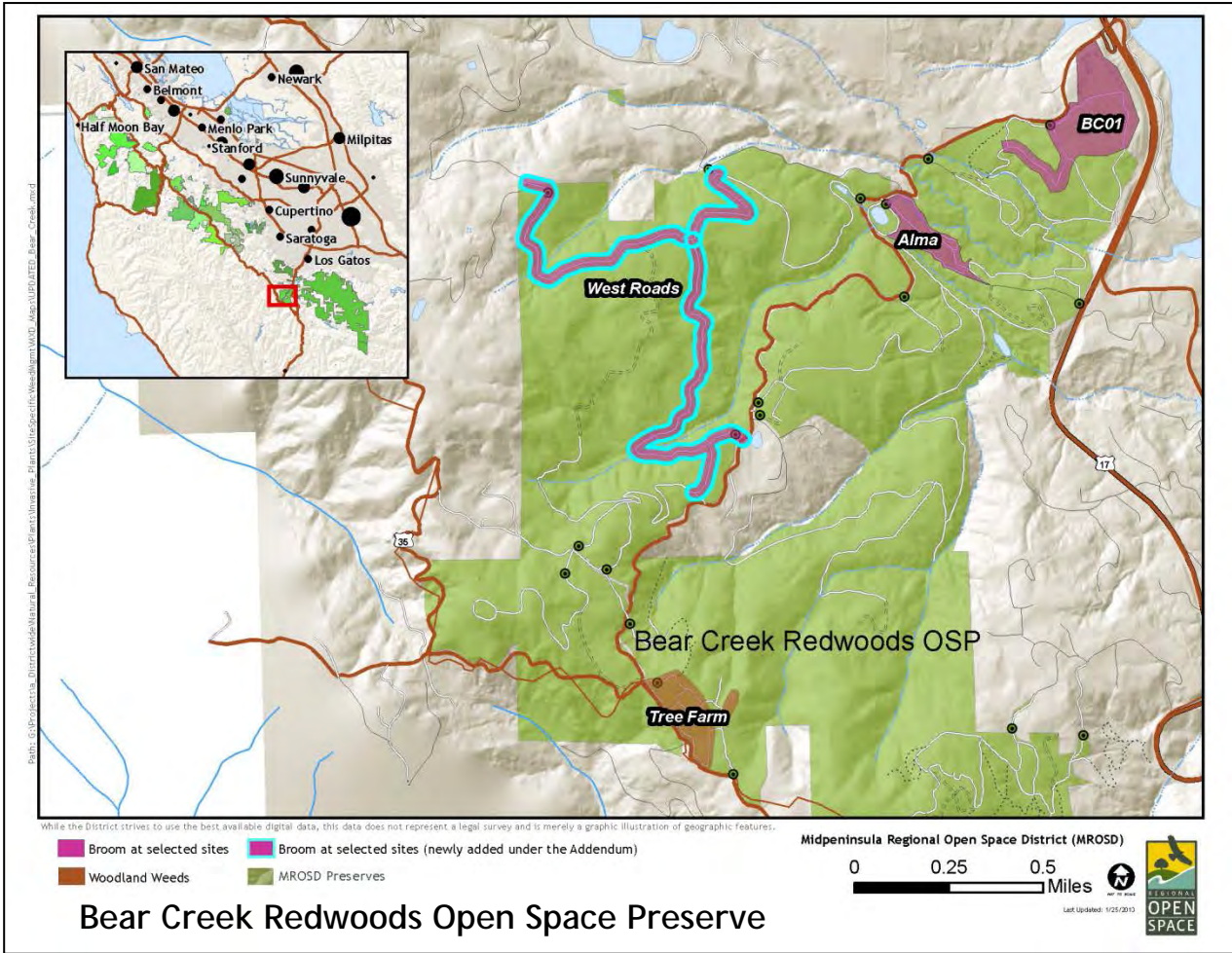
# ATTACHMENT 1

NOW, THEREFORE, BE IT RESOLVED by the District Board of Directors that, based upon the Initial Study, Mitigated Negative Declaration, Mitigation Monitoring Program, the Addendum to the Mitigated Negative Declaration, and all substantial evidence in light of the whole record presented, the Board of Directors finds that:

1. Notice of the hearing on the Addendum to the MND was given as required by law and the actions described herein were conducted pursuant to the California Environmental Quality Act (CEQA) and the CEQA Guidelines.
2. The Board finds that the Addendum to the MND does not (a) propose substantial changes to the Project requiring major revisions to the MND due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects, or (b) involve new information of substantial importance showing that the Project will have one or more significant effects not discussed in the MND or that mitigation measures previously found not to be feasible would in fact be feasible.
3. The Board further finds that there have been no substantial changes with respect to the circumstances under which the Project will be undertaken which will require major revisions to the MND. .
4. The Board finds that, on the basis of the whole record before it, including the Addendum to the MND, there is no substantial evidence that the Project will have a significant effect on the environment in that, adequate Mitigation Measures have been made a part of the Project to avoid any such effects.
5. The Board determines that the Addendum to the MND reflects the District's independent judgment and analysis and therefore adopts the Addendum to the MND.
8. The location and custodian of the documents or other material which constitute the record of proceedings upon which this decision is based are located at the offices of the District Clerk of the Midpeninsula Regional Open Space District, 330 Distel Circle, Los Altos, California 94022.

\* \* \* \* \*

# ATTACHMENT 2



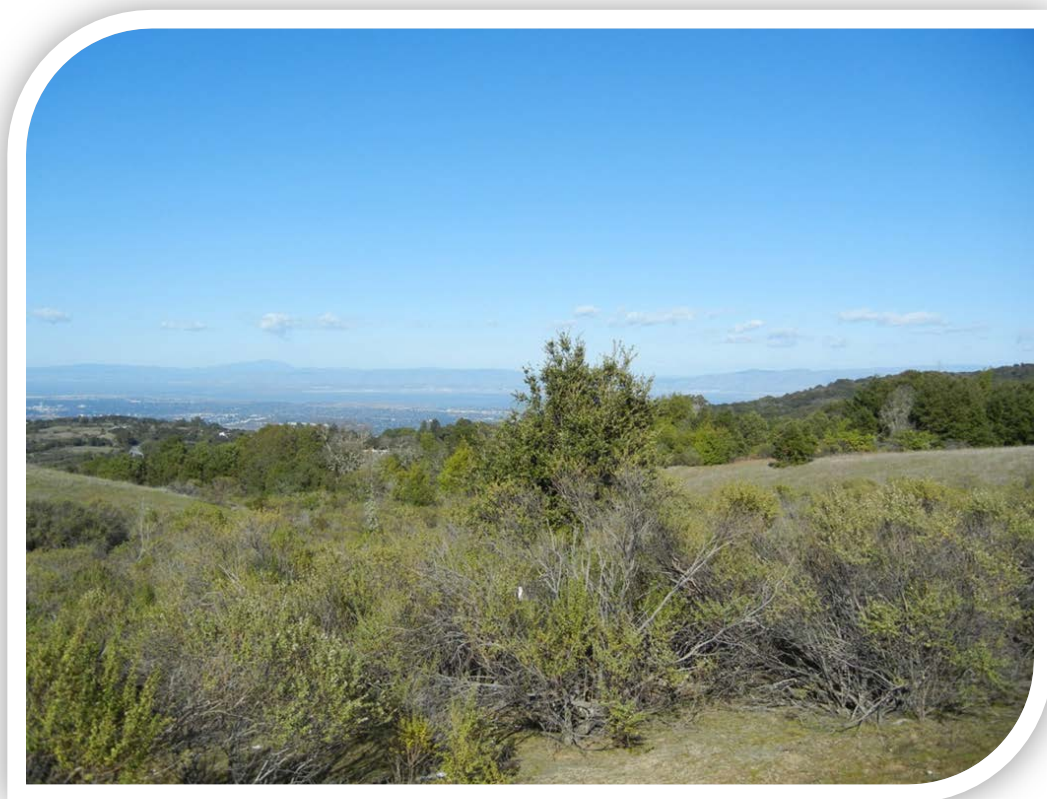


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# Site Specific Weed and Pest Management Project



## Addendum to the Mitigated Negative Declaration



PREPARED BY:  
Midpeninsula Regional Open Space District  
330 Distel Circle  
Los Altos, CA 94022



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# **ADDENDUM TO THE MITIGATED NEGATIVE DECLARATION**

In May of 2012 the Midpeninsula Regional Open Space District adopted the Site-specific Weed and Pest Management Project Mitigated Negative Declaration (MND). The following document is an Addendum to the MND, which contains minor changes to the project including the addition of 3 sites and 1 target plant species. The entire MND was re-evaluated for potentially significant effects to the environment. Because the added sites and species are similar to those reviewed previously and because they represent only a minor increase in scope, the original mitigation measures are adequate to prevent significant effects. Where changes were made to the original MND, the text was revised and is included below. For all unchanged sections of the original MND, see the original MND document. Since none of the mitigations changed and no additional significant effects were found, the following document is considered a minor technical change to the MND and no public recirculation of the Addendum is required. A Subsequent Negative Declaration was not prepared because the minor additions did not cause any new significant environmental effects or substantially increase the severity of previously identified effects.

**Project:** Site-Specific Weed and Pest Management Project

**Lead Agency:** Midpeninsula Regional Open Space District

## **PROJECT DESCRIPTION**

This Mitigated Negative Declaration (MND), supported by the attached Initial Study (IS), evaluates the environmental effects of the proposed Site-Specific Weed and Pest Management project, which would occur in Santa Clara and San Mateo Counties, California. The applicant, Midpeninsula Regional Open Space District (District), is proposing to implement weed and pest management activities at [4542](#) distinct treatment sites within 13 of its 26 designated open space preserve (OSP) areas in the years 2012 through 2014.

The District is the lead agency for this project and has prepared this MND.

## **FINDINGS**

An IS has been prepared to assess the project's potential effects on the environment and the significance of those effects. Based on the Initial Study, it has been determined that the proposed project would not have any significant effects on the environment once mitigation measures are implemented. This conclusion is supported by the following findings:

1. The proposed project would have no impact related to land use and planning, mineral resources, population and housing, public services, or transportation and traffic.
2. The proposed project would have a less-than-significant impact on aesthetics, agriculture and forestry resources, air quality, geology and soils, greenhouse gases, hazards and hazardous materials, hydrology and water quality, noise, recreation, or utilities and service systems.
3. Mitigation is required to reduce potentially significant impacts related to biological and cultural resources. Mitigation measures would reduce all significant impacts to a less-than-significant level. The District has agreed to implement all required mitigation.

4. Following are the mitigation measures that will be implemented by the applicant to avoid or minimize environmental impacts.

**BIO-1.** *Pretreatment surveys for bay checkerspot butterfly larval host plants (dwarf plantain( *Plantago erecta*) and purple owl's clover (*Castilleja exserta*)), will be conducted by a District biologist on treatment sites where serpentine soil is present. This applies to Air Base, Austrian Gulch (Moss Property), Pheasant, and Williams Property on Sierra Azul OSP and Vineyard on St. Joseph's Hill OSP. If no host plants are found on serpentine soils, then no further study is required. If host plants are determined to be present on serpentine soils, a 15-foot buffer will be established around the plants. No herbicides will be allowed within this buffer. Non-herbicide methods may be used within the 15-foot buffer but they will be designed to avoid damage to the host plant.*

**BIO-2.** *As directed by a qualified biologist, populations of special-status plants will be identified with high-visibility flagging at the time of treatment. Training will be conducted for all treatment field crews and contractors that may be performing manual treatments within 15 feet of special-status plants. Training will consist of a brief review of life history, field identification, habitat requirements for each species, known or potential locations in the vicinity of the treatment site, potential fines for violations, avoidance measures, and necessary actions if special-status species are encountered. A District botanist will monitor all work within 15-feet of a special-status plant. If no special-status plants are found during pretreatment surveys no further actions are required.*

**CUL-1.** *If human remains are encountered, all work within 100 feet of the remains shall cease immediately and the contractor shall contact the District. The District will contact the appropriate county coroner (San Mateo County or Santa Clara County) to evaluate the remains, and follow the procedures and protocols set forth in §15064.5(e) of the CEQA Guidelines. No further disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has made a determination of origin and disposition, which shall be made within two working days from the time the Coroner is notified of the discovery, pursuant to State Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98. If the remains are determined to be Native American, the Coroner will notify the Native American Heritage Commission (NAHC) within 24 hours, which will determine and notify the Most Likely Descendant (MLD). The MLD may recommend within 48 hours of their notification by the NAHC the means of treating or disposing of, with appropriate dignity, the human remains and grave goods. In the event of difficulty locating a MLD or failure of the MLD to make a timely recommendation, the human remains and grave goods shall be reburied with appropriate dignity on the property in a location not subject to further subsurface disturbance.*

Questions ~~or comments~~ regarding this ~~Addendum Mitigated Negative Declaration and Initial Study~~ may be addressed to:

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~~After comments are received from the public and reviewing agencies, the District may (1) adopt the MND and approve the proposed project; (2) undertake additional environmental studies; or (3) disapprove the project. If the project is approved, the District may proceed with implementation of the project.~~





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- D Air Quality and Greenhouse Gas Modeling [\(No changes; see IS/MND\)](#)
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## ACRONYMS AND ABBREVIATIONS

|                   |   |
|-------------------|---|
| a.e./A            | acid equivalent/acre                                  |
| ATV               | all-terrain vehicle                                   |
| AB                | Assembly Bill   |
| ARB               | California Air Resources Board                        |
| BAAQMD            | Bay Area Air Quality Management District              |
| BAEDN             | Bay Area Early Detection Network                      |
| BMPs              | best management practices                             |
| C/CAG             | City/County Association of Governments                |
| CAA               | federal Clean Air Act                                 |
| CAAA              | federal Clean Air Act Amendments of 1990              |
| Cal EPA           | California Environmental Protection Agency            |
| CAL FIRE          | California Department of Forestry and Fire Protection |
| CalEEMod          | California Emissions Estimator Model                  |
| Cal-IPC           | California Invasive Plant Council                     |
| CCAA              | California Clean Air Act                              |
| CDFA              | California Department of Food and Agriculture         |
| CEQA              | California Environmental Quality Act                  |
| CH <sub>4</sub>   | methane   |
| CMP               | Congestion Management Program                         |
| CNDDDB            | California Natural Diversity Database                 |
| CNPS              | California Native Plant Society                       |
| CO                | carbon monoxide                                       |
| CO <sub>2</sub>   | carbon dioxide  |
| CO <sub>2</sub> e | carbon dioxide equivalent                             |
| dBA               | decibel A-weighted                                    |
| DFG               | California Department of Fish and Game                |
| District          | Midpeninsula Regional Open Space District             |
| DOC               | California Department of Conservation                 |
| EIR               | Environmental Impact Report                           |
| EPA               | U.S. Environmental Protection Agency                  |
| FEMA              | Federal Emergency Management Agency                   |
| FMMP              | Farmland Mapping and Monitoring Program               |
| GHG               | greenhouse gas  |
| GHGs              | greenhouse gases                                      |
| GIS               | Geographic Information Systems                        |
| GWP               | global warming potential                              |
| HCP               | Habitat Conservation Plan                             |
| IPCC              | Intergovernmental Panel on Climate Change             |

---

|                  |   |
|------------------|---|
| IPM              | integrated pest management                  |
| IS               | Initial Study                               |
| LAFCo            | San Mateo Local Agency Formation Commission |
| LUST             | leaking underground storage tank            |
| MLD              | Most Likely Descendant                      |
| MND              | Mitigated Negative Declaration              |
| MPH              | miles per hour                              |
| MT/year          | metric tons per year                        |
| N <sub>2</sub> O | nitrous oxide                               |
| NAHC             | Native American Heritage Commission         |
| NO <sub>x</sub>  | nitrogen oxides                             |
| OSP              | open space preserve                         |
| PM               | particulate matter                          |
| RMPs             | Resource Management Policies                |
| ROG              | reactive organic gases                      |
| SamTrans         | San Mateo County Transit Authority          |
| SB               | Senate Bill                                 |
| SFBAAB           | San Francisco Bay Area Air Basin            |
| SOD              | Sudden Oak Death                            |
| SR 35            | State Route 35                              |
| TACs             | toxic air contaminants                      |
| USFWS            | U.S. Fish & Wildlife Service                |
| VMT              | vehicle miles traveled                      |
| VTA              | Valley Transit Authority                    |



# 1 INTRODUCTION

## 1.1 INTRODUCTION AND REGULATORY GUIDANCE

This Initial Study (IS) has been prepared by the Midpeninsula Regional Open Space District (District) to evaluate the potential environmental effects of implementing the Site-Specific Weed and Pest Management project within its open space preserve (OSP) system. The proposed project would implement weed and pest management activities at [4542](#) distinct treatment sites within 13 of its 26 designated OSPs in the years 2012 through 2014.

This document has been prepared in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et seq.) and the State CEQA Guidelines (Title 14 of the California Code of Regulations section 15000 et seq.). An IS is prepared by a lead agency to determine if a project may have a significant effect on the environment (CEQA Guidelines Section 15063[a]), and thus to determine the appropriate environmental document. In accordance with CEQA Guidelines Section 15070, a “public agency shall prepare...a proposed negative declaration or mitigated negative declaration...when: (a) The IS shows that there is no substantial evidence that the project may have a significant impact on the environment, or (b) The IS identifies potentially significant effects but revisions to the project plans or proposal are agreed to by the applicant and such revisions would reduce potentially significant effects to a less-than-significant level.” In this circumstance, the lead agency prepares a written statement describing its reasons for concluding that the proposed project would not have a significant effect on the environment and, therefore, does not require the preparation of an Environmental Impact Report (EIR). By contrast, an EIR is required when the project may have a significant environmental impact that cannot clearly be reduced to a less-than-significant effect by adoption of mitigation or by revisions in the project design.

## 1.2 PURPOSE OF THE INITIAL STUDY

See IS/MND.

## 1.3 SUMMARY OF FINDINGS

See IS/MND

## 1.4 ENVIRONMENTAL PERMITS

[See IS/MND](#)

## 1.5 DOCUMENT ORGANIZATION

[See IS/MND](#)

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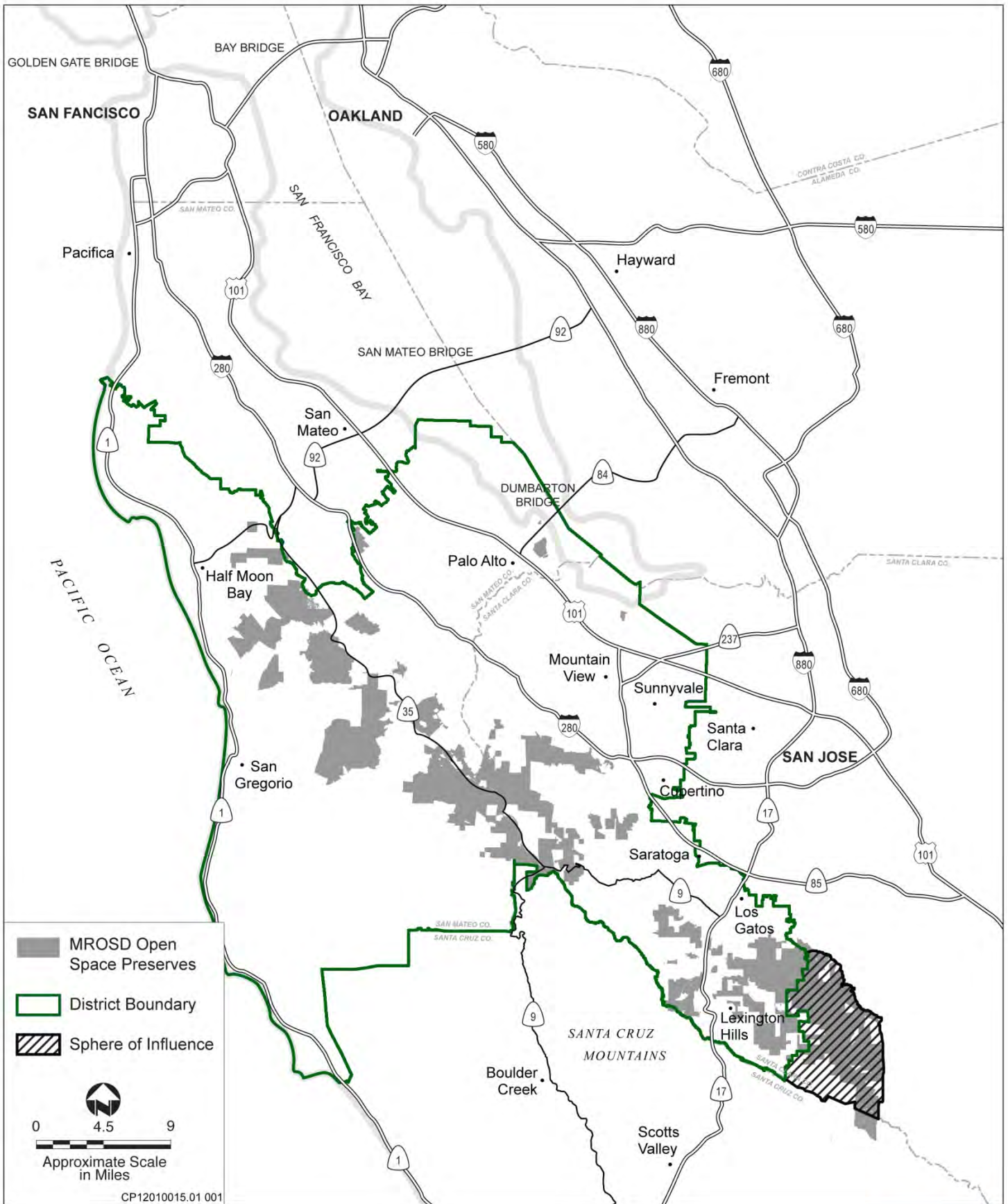
## 2 PROJECT DESCRIPTION

### 2.1 INTRODUCTION

The project would implement selected weed and pest management techniques in natural areas within the Midpeninsula Regional Open Space District's (District) preserve lands. The District has permanently preserved over 60,000 acres within its 550-square mile District boundaries on the San Francisco peninsula in Santa Clara, San Mateo, and Santa Cruz counties, California. The District has established 26 open space preserves (OSPs, preserves). Exhibit 2-1 presents a regional overview of the District boundaries and the OSPs. The proposed project would implement selected weed and pest management activities at [4542](#) distinct treatment sites within 13 of its 26 OSPs in the years 2012 through 2014. Exhibit 2-2 identifies the location of the 13 OSPs that would be subject to weed and pest management activities. Within each identified OSP, one to multiple distinct treatment sites have been selected for assessment under this project. Exhibits of each individual treatment site are presented in Appendix A. The purpose of the project is to control noxious and invasive weed and pest species in high priority natural areas of the District to halt or minimize the spread of those species in areas where substantial progress has been made towards eradication or site restoration to more natural conditions.

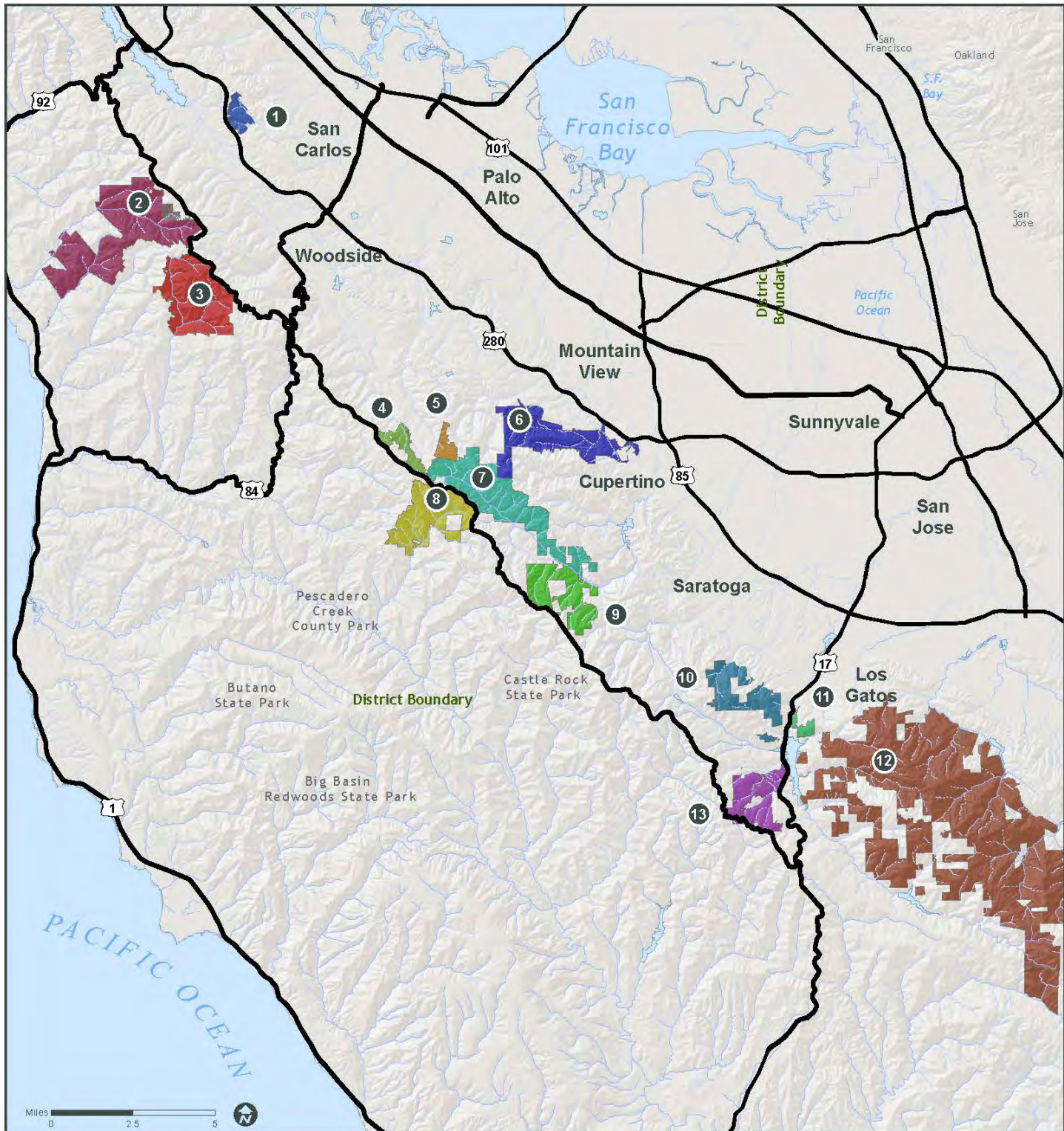
### 2.2 BACKGROUND

[See IS/MND](#)



Source: MROSD, Adapted by Ascent in 2012  
 Exhibit 2-1.





**Midpeninsula Regional Open Space District**



*Note: Only Open Space Preserves Pertaining to This Document are Displayed*

- |                           |                        |
|---------------------------|------------------------|
| 1 Pulgas Ridge            | 8 Skyline Ridge        |
| 2 Purisima Creek Redwoods | 9 Saratoga Gap         |
| 3 El Corte de Madera      | 10 El Sereno           |
| 4 Coal Creek              | 11 St. Joseph's Hill   |
| 5 Los Trancos             | 12 Sierra Azul         |
| 6 Rancho San Antonio      | 13 Bear Creek Redwoods |
| 7 Monte Bello             |                        |

**Exhibit 2-2. Open Space Preserves Proposed for Weed and Pest Management Activities**

## 2.2.1 SUDDEN OAK DEATH

See IS/MND.

## 2.2.2 INTEGRATED PEST MANAGEMENT

Currently, the District utilizes an integrated pest management (IPM) approach to control invasive species and target pests. The District defines IPM as a long-term strategy that specifically reviews alternatives and monitors conditions to effectively control a target pest with minimum impact to human health, the environment, and non-target organisms. An IPM approach can be used for many types of pests and situations (e.g. landscape weeds, ants in houses, thistles invading native grasslands). Chemical and non-chemical techniques are considered, and techniques vary according to site conditions or as conditions at a treatment site change over time. If pesticides are necessary to meet a pest control objective, the least toxic and most target-specific pesticide is chosen. Pesticide is a broad term that consist of any material (natural, organic, or synthetic) used to control or prevent pests, including herbicides (weed or plant killers), insecticides (insect killers), and fungicides (kills fungus), as a few examples.

IPM requires knowledge of the biology of pests, understanding of the available methods for controlling targeted species, and an understanding of the secondary effects associated with proposed treatment methods. Critical to the success of an IPM approach is the monitoring of site conditions before, during, and after treatment to determine if objectives are being met and if treatment methods need to be revised to respond to changed conditions.

As part of its annual planning, the District contracts with a licensed Pest Control Advisor to evaluate its invasive plant and pest control work. The Pest Control Advisor also develops Pest Control Recommendations for work that might require the use of pesticides. The Pest Control Recommendations provide important guidance on how to use pesticides to control the target pest and protect the environment, public, and pesticide applicators from potential hazards. Each year the Pest Control Recommendations are updated to reflect changes in product labeling or new information about their use. The District's existing Pest Control Recommendations are included in Appendix B of this document.

Concurrent with the evaluation of this project, the District is undertaking a comprehensive review and update of its IPM practices. This update will focus on district-wide pest management approaches for target pests and invasive plant species. The district-wide IPM program will address all management techniques for all lands and habitats within the District. This program is independent of the proposed project and will be subject to separate environmental review. The Site-Specific Weed and Pest Management Project reviewed herein consists of work at [4542](#) sites in 13 preserves for a three-year period. As a short term strategy, it allows the District to avoid losing substantial progress already made in protecting priority preserve resources by controlling invasive plants or pests while the longer term and broader strategy is developed under the future district-wide IPM program that will cover many sites in all 26 preserves for multiple years.

## 2.3 PROJECT OBJECTIVES

[See IS/MND](#)

## 2.4 MROSD RESOURCE MANAGEMENT POLICIES

[See IS/MND](#)

## 2.5 PROJECT SETTING

The proposed project would be implemented within 13 OSPs at [4542](#) distinct treatment sites in the years 2012 through 2014 (Exhibit 2-2). For the purposes of this document, each of the [4542](#) treatment sites has been identified by a preserve name and by a site name. The site name usually reflects the name of a nearby trail, gate, or former property name. Each treatment site for this project is listed in Table 2-1 and mapped in Appendix A. For example, treatment site BC01 is a 34-acre area located in Bear Creek Redwoods OSP near gate BC01. Native plant communities found on these preserves consist of: redwood forest, Douglas-fir forest, chaparral, mixed evergreen forest, riparian forest, native and annual grasslands, mixed coastal woodland, knobcone pine forest, and freshwater marsh. Many of the proposed treatment sites have been disturbed by previous land uses including logging, farming, and ranching operations; fire suppression; water development; transportation; and urban development. These previous land uses are partially responsible for the introduction of invasive plant species to these areas.

## 2.6 PROJECT CHARACTERISTICS

The project consists of activities to control weeds and other target pests in natural areas of the preserves. The project would occur over three years, 2012-2014, primarily during the spring and summer seasons. Project activities would be implemented during daylight hours; no nighttime activities would occur. As with current practice, the District would carry out an IPM approach in the implementation of this project. The District has selected a set of priority treatment sites and target weed species, where IPM activities are proposed to be implemented to control invasive and noxious weed and pest species. The purpose of the project is to halt or minimize the spread of those species in areas where substantial progress has been made towards eradication or site restoration.

Under the project, a total annual average of [2,4131,958](#) gross work acres and [12391,029](#) net land acres would be treated. The amount of gross work acres is defined as the total overall number of acres of work in one year. Under the IPM approach, the District returns to sites to evaluate the effectiveness of the first treatment and then, if necessary to prevent any remaining target plants from seeding, applies additional treatments in the same year. Some sites may be treated more than once in a year, thus their work acres are counted more than once. For example, target weeds at a given site may be initially sprayed with glyphosate in the spring, and then several weeks later, any remaining living target weeds at that same site may be pulled. In this example, the location's acres would be counted twice under the gross work acres. The amount of net land acres is defined as the actual land acres treated, and retreatment of a site in the same year does not add to the sum of net land acres. Furthermore, within a treatment site, not every square inch is treated, only the actual target weeds are treated. Thus, if the target weed population is dense, the actual treated area could be in the range of 50 to 100% of the site. If the target weed population is sparse, the actual treated area could be in the range of 1 to 10% of the site.

Table 2-1 provides estimated annual work activities focusing on gross work acres by various treatment types. The estimated annual amount of gallons applied by each herbicide type and method are also provided. The data provided in the following table was compiled based on the detailed and comprehensive records that are maintained by the District for past treatment activities at each of the sites. The District has reviewed the past treatment activities for each of the selected sites and determined that the activities proposed under the project would be substantially similar to past activities at these sites, particularly in area, type of activity, and type of

species to be controlled. Therefore, this data was used in assessing the project's potential environmental impacts at each site because it provides a reasonable and good-faith estimate of the work anticipated to occur under the project.

**Table 2-1. Revised Estimated Treatment Actions<sup>1</sup>, Gross Work Areas Treated, and Herbicide Amounts**

| Treatment Action                          | Gross Work Area (acres) | Herbicide Amount Anticipated to be Used (gallons) |
|---|-------------------------|---|
| Brushcutting                              | 18                      | N/A   |
| Chainsaw cutting of trees                 | 16                      | N/A   |
| Digging                                   | 65                      | N/A   |
| Pulling                                   | <u>935,708</u>          | N/A   |
| Green flaming                             | 7                       | N/A   |
| Agri-Fos and Pentrabark spraying (by ATV) | 27                      | 40  |
| Aminopyralid spraying                     | 140                     | 1   |
| Glyphosate spraying                       | <u>1100,873</u>         | <u>35,29</u>                                      |
| Glyphosate cut-stump application          | 91                      | <u>1.014</u>                                      |
| Glyphosate wipe application               | 14                      | 0.3   |
| TOTAL Gross Work Acres                    | <u>2,413,1,958</u>      |   |

<sup>1</sup> Treatment action descriptions are provided in Section 2.6.3.  
Source: MROSD 2012

The District selected the priority treatment sites based on a set of selection criteria (see Section 2.6.1). These sites contain weed and pest species that fall within one of seven management categories (see Section 2.6.2) and within these seven management categories, a selection of treatment actions (see Section 2.6.3) would be implemented in an integrated manner to control the weeds during the 3-year term of the project. The following sections describe specific treatment actions (e.g., pulling by hand, herbicide application) for a specific species (e.g., starthistle) at a specific treatment site (e.g., Virginia Mill Trail). Other treatment actions are identified for the same site for different species. The selected treatment action is described because it is the primary action that is intended to be implemented based on what is currently known and observed at the site. However, during the 3-year term of the project, site conditions could change such that an alternate or additional treatment action may be needed to control the species. For example, in Year 1 an herbicide is applied; however, in Year 2 it is determined that only pulling of a few plants is required. Therefore, in Year 2, the plants are pulled. Then in Year 3 some herbicide and pulling with a weed wrench may be required. The District uses an integrated set of treatment actions such as that described above when controlling weed species. This integrated approach will be taken for this project.

All treatment actions that are proposed under this project are described in Section 2.6.3. No other treatment actions would be implemented. The analysis includes assumptions for the quantities of herbicide use, areas where treatment actions would be implemented, equipment to be used, and number of person hours required to implement the project. These assumptions are based upon detailed accounts of past weed control activities at each of the treatment sites implemented consistent with the IPM approach described above and included in Appendix C.

## 2.6.1 TREATMENT SITE SELECTION CRITERIA

## 2.6.2 [SEE IS/MND](#) MANAGEMENT CATEGORIES

The District has identified seven categories for weed and pest management as described below. The categories described below identify the treatment actions for each site. A description of each treatment action is provided below in Section 2.6.3, Treatment Actions. Again, it is important to note that the District would implement the treatment actions in an integrated manner (IPM), so while a specific treatment action is identified for a species below, other treatment actions identified for the site may be implemented on a year-to-year basis according to the site conditions observed. Table 2-1 below identifies the OSPs, names for treatment sites, and management categories under review in this project.

1. **State-rated noxious weeds.** This category addresses the eradication of small populations of two species of weeds assigned by the State of California as A- or B-rated noxious weeds: spotted knapweed (*Centaurea stoebe*, A-rated) and eggleaf spurge (*Euphorbia oblongata*, B-rated). The spotted knapweed infestation is the only known location of this noxious weed in Santa Clara County. Eggleaf spurge is of particular concern because its sap can cause severe rashes to people.

The California Department of Food and Agriculture (CDFA) and county agriculture commissioners oversee regulations regarding the control of officially designated noxious weeds as defined in the California Code of Regulations. "A"-rated weeds are new invaders with limited distribution, determined to be eradicable, are prevented from shipment into the state if found during inspections, and their eradication, containment, rejection or other holding actions are determined jointly by the CDFA and the affected county agriculture commissioners. "B"-rated weeds are relatively new invaders, are firmly established in one or a few parts of the state but eradicable in most other parts of the state, are held and eradicated when found in nurseries, and their eradication, containment, control or other holding actions outside of nurseries are determined at the discretion of the affected county agriculture commissioners (CDFA 2005).

**Treatment Actions:** The following treatment actions would be implemented:

- a) Aminopyralid spraying by backpack of spotted knapweed in and along roads, parking lots, building perimeters, and other disturbed areas at the former Almaden Air Force Station at Mount Umunhum.
  - b) Glyphosate spraying by backpack of eggleaf spurge at the Austrian Gulch and Moss properties along Cathermole Road, along Pheasant Road and along Reynolds Road in Sierra Azul OSP.
2. **Grassland Weeds at Los Trancos OSP** – This category addresses the treatment of four species of invasive weeds in grasslands of Los Trancos OSP: yellow starthistle (*Centaurea solstitialis*), medusa head (*Elymus caput-medusae*), jointed goat grass (*Aegilops cylindrica*), and Harding grass (*Phalaris aquatica*).

District staff has identified a diverse collection of native grass species concentrated in the grasslands of Los Trancos OSP. Substantial progress has been made at the Los Trancos grasslands over many years to reduce the size and seed bank of these invasive weeds. Currently, minimal work is required to manage the invasive species at this location to maintain the populations at a low level and allow native grassland species to reoccupy treated areas. Further, the grassland areas within Los Trancos OSP are surrounded by barriers (forests or Page Mill Road) that minimize the potential spread of invasive species from offsite areas.

**Treatment Actions:** The following treatment actions would be implemented:

- a) Aminopyralid spraying by backpack and pulling of yellow starthistle.
- b) Mowing medusa head with brushcutters before annual ripening of seedheads.
- c) Pulling jointed goat grass and disposal in dumpsters.
- d) Glyphosate spraying by backpack of Harding grass.
- e) Small compost piles would be established onsite to allow for the disposal of hand-pulled yellow starthistle plants (equivalent to approximately 200 plants per year). The plants would be placed under black plastic and allowed to decay. The covered compost piles would be anchored to the ground with rocks and heavy branches and monitored several times a year to ensure they are secure and to treat any yellow starthistle plants that might germinate on their edges.

3. **Woodland Weeds at Bear Creek Redwoods OSP** – This category addresses the removal of up to 30 Christmas trees per year and the control of the following invasive weeds in the former Christmas tree farm at Bear Creek Redwoods OSP: French and Spanish broom (*Spartium junceum*), Klamathweed (*Hypericum perforatum* ssp. *perforatum*), eggleaf spurge, ornamental perennial sweet pea (*Lathyrus latifolius*), stinkwort (*Dittrichia graveolens*), and woolly mullein (*Verbascum thapsus*).

Former Christmas trees are removed to encourage natural regeneration of native plants and to allow access to control French and Spanish broom in the understory.

**Treatment Actions:** The following treatment actions would be implemented:

- a) Up to 30 established trees (used as stock for a former Christmas tree farm) per year (total of 90 trees) would be removed selectively and in a dispersed pattern from the site. The trees would be cut down with chainsaws at a point below the bottom whorl of branches to prevent re-sprouting. Stumps would remain in place to decay. Wood material would be processed through a gas powered chipper and the chips would be spread in selected areas of the site to control the seed bank of weeds onsite.
  - b) French and Spanish broom would be controlled at the Bear Creek Redwoods OSP. Mature plants would be removed with weed wrenches. Seedling broom plants would be controlled with green flaming, pulling, or glyphosate spraying by backpack.
  - c) Stinkwort would be controlled by glyphosate spraying by backpack and pulling.
  - d) Klamathweed, eggleaf spurge, and sweet pea and would be controlled by glyphosate spraying by backpack.
  - e) Mullein would be controlled by pulling.
4. **Sudden Oak Death Control.** This category prevents the spread of the plant pathogen *Phytophthora ramorum*, the cause of Sudden Oak Death. This strategy would be implemented at treatment sites in El Corte de Madera Creek, Los Trancos, and Rancho San Antonio OSPs. This strategy would address a pathogen that has been the subject of many years of research work, some conducted with funding from the U.S. Forest Service.

**Treatment Actions:** The following treatment actions would be implemented:

- a) Annual spraying of a fungicide (Agri-fos®) by a hand-operated wand attached by hose to a 14-gallon tank mounted on an all-terrain vehicle (ATV) on the lower trunks of 151 oak trees.
  - b) Removal of up to 10 California bay (*Umbellularia californica*) trees over the three-year period (no greater than 36 inches diameter at breast height) within 15-foot radius of the 151 protected oaks. Removal would occur via a gas-powered chainsaw. Bay tree trunks would be cut into large sections and branches would be sent through a chipper and disposed in the understory onsite to prevent spread of the disease.
  - c) Hand application of glyphosate to cut stumps of bay trees.
  - d) Backpack spraying of bay sprouts with glyphosate.
  - e) Pulling or weed wrench removal of bay seedlings.
5. **Habitat Restoration Site Maintenance.** This category addresses the control of the following invasive weeds at the Hassler Loop section of Pulgas Ridge OSP and the Skyline Ridge tree farm restoration site: eucalyptus trees (*Eucalyptus globulus*), thistles, French and Spanish broom, acacia (*Acacia* spp.), blue gum, stinkwort, Harding grass, and coyote brush (*Baccharis pilularis*). These treatment sites have undergone substantial site restoration and re-plantings and control of weeds at these locations is critical to ensuring site restoration success.

**Treatment Action:** The following treatment actions would be implemented:

- a) Removal of 12 non-native blue gum trees via a gas-powered chainsaw and application of glyphosate via backpack to cut blue gum stumps at the Hassler Loop section of Pulgas Ridge OSP.
  - b) Hand pulling, brushcutting, and glyphosate spraying of thistles, French and Spanish broom, acacia (*Acacia* spp.), blue gum, stinkwort and other miscellaneous weeds in restoration plantings areas at the Hassler Loop section of Pulgas Ridge OSP.
  - c) Pulling or glyphosate spraying by backpack of thistles, Harding grass, and French broom at the Skyline Ridge tree farm restoration site.
  - d) Weed wrench removal or stump cutting with chainsaws of young, native coyote brush plants and treating stumps with glyphosate herbicide via backpack in areas here they are forming dense colonies (Skyline Ridge tree farm) which crowd out the diverse native plants that have been installed to restore the site to a mixed oak and evergreen forest.
6. **Control of satellite populations of priority weeds.** This category addresses the control of [sixfive](#) species of priority weeds with limited distribution within the OSPs. The purpose is to prevent these weeds, which have exhibited the ability to reproduce widely and densely in other natural areas and cause destructive effects to native species and processes (Cal-IPC 2008), from spreading and becoming common weeds throughout District preserves. Selected locations each have a high potential for successful control of these invasive species based on results of past work and demonstrated ability to control the target weeds with current practices.

**Treatment Actions:** The following treatment actions would be implemented:

- a) Digging and aminopyralid spraying by backpack of purple starthistle (*Centaurea calcitrapa*) on and adjacent to Monte Bello Road and Waterwheel Creek Trail at Monte Bello OSP.
- b) Pulling and treating with glyphosate by spraying or wipe application of stinkwort along roads, trails, and in disturbed areas at the field office in Rancho San Antonio OSP, the Vista area of St. Joseph’s Hill OSP, the Overlook weed zone of El Sereno OSP, the Beatty property and Hicks Creek Ranch portion of Sierra Azul OSP, around the former Alma College buildings of Bear Creek Redwoods OSP, and the Lysons property of Saratoga Gap.
- ~~e)~~ Pulling and cutting with hand tools and chainsaws of English ivy (*Hedera helix*), [Cape Ivy \(\*Delawarea odorata\*\)](#), and English holly trees (*Ilex aquifolium*) at Purisima Creek Redwoods OSP. Stumps would be treated with glyphosate. [Cape ivy will be treated using the same techniques as English ivy and is located within an existing treatment site \(PC01\) in Purisima Creek Redwoods OSP.](#)
- ~~d)c)~~ Spraying by backpack of glyphosate on Harding grass and stinkwort at the RDG portion of Sierra Azul OSP.

7. **Broom Control.** This strategy addresses the control of French and Spanish broom at Vineyard and Vista weed zones of St. Joseph’s Hill OSP; Aquinas Trail and Overlook weed zones of El Sereno OSP; around the former Alma College Buildings, ~~and the BC01 weed zone of Bear Creek Redwoods OSP, and West Roads weed zones of Bear Creek Redwoods OSP~~; Beatty and Williams properties and SA19 weed zone of Sierra Azul OSP; near the intersection of Highway 35 and Page Mill Road of Coal Creek OSP; along the Methuselah and Virginia Mill Trails and the future staging area of El Corte de Madera Creek OSP; along the Harkins Ridge Trail ~~and~~, Harkins Ridge Cutover, [PC03, and Upper Purisima Creek Road areas](#) of Purisima Creek Redwoods OSP; and at the residence area of Saratoga Gap OSP.

**Treatment Actions:** The following treatment actions would be implemented:

- a) Pulling with weed wrenches, green flaming of seedlings, pulling, glyphosate spraying by backpack, and burning approximately ~~220200~~ cubic yards of French and Spanish broom in piles.

| Preserve                     | Site Name                               | Management Category                                      |
|------------------------------|---|--|
| Bear Creek Redwoods OSP      | Alma College                            | Broom control  |
|                              | BC01                                    | Broom control  |
|                              | Tree Farm                               | Woodland weeds   |
|                              | West Roads <a href="#">(new site)</a>   | Broom control  |
| Coal Creek OSP               | Page Mill & Highway 35                  | Broom control  |
| El Corte de Madera Creek OSP | Lawrence Creek Trail                    | Sudden Oak Death   |
|                              | Methuselah Trail                        | Broom control  |
|                              | Future staging area between CM03 & CM04 | Broom control  |
|                              | Virginia Mill Trail                     | Broom control  |
| El Sereno OSP                | Aquinas Trail                           | Broom control  |
|                              | Loma Vista Trail                        | Broom control  |
|                              | Overlook Trail                          | Broom control<br>Satellite populations of priority weeds |
| Los Trancos OSP              | Event Meadow                            | Grassland Weeds  |
|                              | Fault Trail                             | Sudden Oak Death   |
|                              | Franciscan Loop Trail                   | Sudden Oak Death   |
|                              | Greater Los Trancos                     | Sudden Oak Death   |



|   |   |  |
|---|---|--|
|   |   | Grassland Weeds  |
|   | Knoll   | Grassland Weeds  |
|   | LT02  | Grassland Weeds  |
|   | Norton  | Grassland Weeds  |
|   | Parking Lot                                   | Grassland Weeds  |
| Monte Bello OSP   | Montebello Road                               | Satellite populations of priority weeds                  |
|   | Water Wheel Creek                             | Satellite populations of priority weeds                  |
| Pulgas Ridge OSP  | Hassler Loop                                  | Habitat restoration                                      |
| Purisima Creek OSP  | Harkins Ridge Cutover                         | Broom control  |
|   | Harkins Ridge Trail                           | Broom control  |
|   | North Ridge                                   | Satellite populations of priority weeds                  |
|   | PC01 ( <i>new target species</i> )            | Satellite populations of priority weeds                  |
|   | PC03 ( <i>new site</i> )                      | Broom control  |
|   | Upper Purisima Creek Road ( <i>new site</i> ) | Broom control  |
| Rancho San Antonio OSP  | Lower Meadow Trail                            | Sudden Oak Death   |
|   | Shop  | Satellite populations of priority weeds                  |
| St. Joseph's Hill OSP   | Vineyard                                      | Broom control  |
|   | Vista/Y Star/Hilltop                          | Broom control  |
| Saratoga Gap OSP  | Charcoal Residence                            | Broom control  |
|   | Lysons Property                               | Satellite populations of priority weeds                  |
| Sierra Azul OSP   | Air Base                                      | State-rated noxious weeds                                |
|   | Austrian Gulch (Moss Property)                | State-rated noxious weeds                                |
|   | Beatty  | Broom control<br>Satellite populations of priority weeds |
|   | Hicks Creek Ranch                             | Satellite populations of priority weeds                  |
|   | Pheasant                                      | State-rated noxious weeds                                |
|   | RDG   | Satellite populations of priority weeds                  |
|   | Reynolds                                      | State-rated noxious weeds                                |
|   | SA19  | Broom control  |
|   | Williams Property                             | Broom control  |
| Skyline Ridge OSP   | Tree Farm Restoration                         | Habitat restoration                                      |
| <i>*In this Addendum, new sites and an existing site with a new target species are all highlighted in gray.</i> |   |  |
| Source: Data provided by MROSD in 2012, adapted by Ascent in 2012   |   |  |

## 2.6.3 TREATMENT ACTIONS

For each work item, the treatment action (manual control or herbicide) and treatment timing will be site-specific and based on the infestation size (small versus large), infestation density, the type and sensitivity of the site to be treated (upland or aquatic habitat, slope stability, etc.), the maturation of plants to be treated, the potential for the presence of special-status species habitat to occur in proximity to the treatment site, and the availability of labor. Typical conditions for implementing each treatment method are described below.

### MANUAL CONTROL TREATMENTS

Manual control treatments consist of pulling, digging, and mowing. Manual control methods are effective for the removal of small weed populations, individual occurrences, and populations near special-status species and their habitat or sensitive natural communities. Additionally, they are often used as a follow-up treatment in areas where larger populations have been sprayed with an herbicide.

- ▲ *Pull*: Depending on the size of the plants, the stem of the target plant would be grasped by hand or with the assistance of a weed wrench and the entire plant including the roots would be pulled out of the ground. A

weed wrench is a lever-type tool that is used to pull up invasive plants that are between one and six feet tall with roots that penetrate more than a few inches into the soil; usually shrubs such as French broom (*Genista monspessulana*) are ideal candidates for a weed wrench. Pulling is not suitable in areas where there is steep terrain, where the operator cannot gain a firm stance, or where the activity may lead to disruptive erosion.

- ▲ *Burning of Brush Piles:* After large stands of broom are pulled, the green plants are stacked in piles no greater than six feet by six feet to dry out. The piles would be located on mineral soils with a 4-inch by 12-foot wide trench to catch debris. No piles are located under the drip line of trees. Brush piles would be burned during the wet season on days that the BAAQMD designates as “open burn status” and the piles would be monitored to ensure that all combustible material is consumed before leaving the site. Approximately 200 to 500 gallons of water would be trucked to the site on burn pile days. Notification Form C for Hazard Reduction Fires would be filed with the BAAQMD, and all conditions of Hazard Reduction Fires per BAAQMD regulations would be followed.
- ▲ *Dig:* For small infestations, this would be completed by using a shovel, Pulaski, or similar hand-operated digging tool to loosen the soil around the roots of a plant several inches below the surface and then lifting out the entire plant. The amount of root that must be removed varies by species.
- ▲ *Mow/Cut:* A brushcutter or other motorized cutting machine would be selected for mowing of weeds based on the size of the infestation. Most species would require repeated cutting throughout the growing season (generally late spring through mid-summer) or they could re-sprout from their base and continue to grow, flower, and produce seed. Mowing would need to be carefully timed according to the phenology of each plant species to minimize the amount of re-sprouting and to avoid spreading ripe seed. Mowing is a temporary measure that controls reproductive spread and can eventually reduce populations of annual plants, but other subsequent treatments (e.g., pulling, herbicide) would be necessary to eradicate perennial plants. Mowing cannot be used on steep slopes or in locations with desirable native plants unless the timing of the mowing can be selected to affect only target plants.

## GREEN FLAMING TREATMENTS

- ▲ *Green Flaming:* Specially designed small, hand-held propane torches would be used in small areas to kill dense and newly emerged green seedlings. Green flaming would usually be conducted during light rains, or on wet days when forest litter or grassland thatch is not likely to catch fire and additional precautions are implemented at the time of use including bringing truck-mounted or backpack water tanks, and operating with more than one person onsite. This method works well on newly emerged broom seedlings.

## HERBICIDE TREATMENT

- ▲ *Cut-stump application:* Under this treatment, the woody plant would be cut close to the ground at a 90-degree or 45-degree angle with a chainsaw or pole saw. Debris is removed from the cut stump and herbicide is immediately applied to the circle of living cells.
- ▲ *Spray:* Depending on the size of the infestation, herbicide is applied with a 5-gallon backpack sprayer or, for larger areas, a 14-gallon tank mounted on an all-terrain vehicle (ATV) or 150-gallon truck with a hose that is directly controlled by an operator. All methods of spraying under this project would be selective, that is, the operator (who is trained in identifying invasive plants) is in direct control of the sprayer, points the spray tip directly at the target weed or pest, and turns the spray equipment on and off to control the amount and direction of spray.
- ▲ *Wipe application:* Under this treatment, herbicide is applied to the target plant using a sponge or rope wick applicator for selective treatment. This method results in less potential for herbicide drift than spraying, although care must be taken that the applicator does not drip or overlap onto non-target plants. This method works best on plants that form a basal rosette of leaves.

## 2.6.4 HERBICIDES

[See IS/MND](#)

## 2.7 BEST MANAGEMENT PRACTICES INCORPORATED INTO THE PROJECT

The District has developed standard practices in conducting weed and pest management activities that protect both human health and the environment. These practices are referred to as Best Management Practices (BMPs). The District will implement the following BMPs as an element of the project. Many of these BMPs have been adapted from publications of the California Invasive Plant Council (Cal-IPC) and were originally developed by a technical advisory team made up of experts in California with experience in invasive plant control and land management (California Invasive Plant Council 2011).

| BMP ID# | BMP Description  |
|---------|--|
| 1       | All herbicide spraying shall be implemented consistent with Pest Control Recommendations prepared annually by a licensed Pest Control Advisor.   |
| 2       | Surfactants and other adjuvants shall be used and applied consistent with the District's Pest Control Recommendations.   |
| 3       | Applicators shall follow all herbicide label requirements and refer to all other BMPs regarding mandatory measures to protect sensitive resources and employee and public health during herbicide application.   |
| 4       | Herbicide applicators shall have or work under the direction of a person with a Qualified Applicator License or Qualified Applicator Certificate.  |
| 5       | All storage, loading and mixing of herbicides shall be set back at least 300 feet from any aquatic feature or special-status species or their habitat or sensitive natural communities. All mixing and transferring shall occur within a contained area. Any transfer or mixing on the ground shall be within containment pans or over protective tarps.   |
| 6       | Appropriate non-toxic colorants or dyes shall be added to the herbicide mixture where needed to determine treated areas and prevent over-spraying.   |
| 7       | <p>Application Requirements - The following general application parameters shall be employed during treatment application:</p> <ul style="list-style-type: none"> <li>› Application shall cease when weather parameters exceed label specifications, when wind at site of application exceeds 7 miles per hour (MPH), or when precipitation (rain) occurs or is forecasted with greater than a <del>40</del>70 percent probability in the next 24-hour period to prevent sediment and herbicides from entering the water via surface runoff;</li> <li>› Spray nozzles shall be configured to produce a relatively large droplet size;</li> <li>› Low nozzle pressures (30-70 pounds per square inch [PSI]) shall be observed;</li> <li>› Spray nozzles shall be kept within 24 inches of vegetation during spraying;</li> <li>› Drift avoidance measures shall be used to prevent drift in locations where target weeds and pests are in proximity to special-status species or their habitat. Such measures can consist of, but would not be limited to the use of plastic shields around target weeds and pests and adjusting the spray nozzles of application equipment to limit the spray area.</li> </ul> |
| 8       | Herbicide application in public areas – Consistent with the District's guidelines regarding Public Notification of Pesticide Use, signs shall be posted at each end of herbicide treatment areas and any intersecting trails notifying the public, employees, and contractors of the District's use of herbicides. The signs shall consist of the following information: signal word, product name, and manufacturer; active ingredient; EPA registration number; target pest; preserve name; treatment location in preserve; date and time of application; date which notification sign may be removed; and contact person with telephone number. Signs shall be posted at the start of treatment and notification shall remain in place for 72 hours after treatment ceases. In preserves with   |

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|    | high public use (Rancho San Antonio, Fremont Older, Picchetti, St. Joseph's Hill, Pulgas Ridge and Windy Hill OSPs), signs shall be posted 48 hours prior to the start of treatment and 72 hours after the end of treatment. In areas normally closed to the public, treatment areas shall be posted for 24 hours after treatment.   |
| 9  | Cleanup of Containers - All herbicide and adjuvant containers shall be triple rinsed with clean water at an approved site, and the rinsate shall be disposed of by placing it in the batch tank for application. Used containers shall be punctured on the top and bottom to render them unusable, unless said containers are part of a manufacturer's container recycling program, in which case the manufacturer's instructions shall be followed. Disposal of non-recyclable containers shall be at legal dumpsites. Equipment shall not be cleaned and personnel shall not bathe in a manner that allows contaminated water to directly enter any body of water within the treatment areas or adjacent watersheds.   |
| 10 | All appropriate laws and regulations pertaining to the use of herbicides and safety standards for employees and the public, as governed by the U.S. Environmental Protection Agency, the California Department of Pesticide Regulation, and local jurisdictions shall be followed. All applications shall adhere to label directions for application rates and methods, storage, transportation, mixing, and container disposal. All contracted applicators shall be appropriately licensed by the state. District staff shall coordinate with the County Agricultural Commissioners, and all required licenses and permits shall be obtained prior to herbicide application.  |
| 11 | Sanitation and Prevention of Contamination - All personnel working in infested areas shall take appropriate precautions to not carry or spread weed seed or SOD-associated spores outside of the infested area. Such precautions will consist of, as necessary based on site conditions, cleaning of soil and plant materials from tools, equipment, shoes, clothing, or vehicles prior to entering or leaving the site.   |
| 12 | All staff, contractors, and volunteer crew leaders shall be properly trained to prevent spreading weeds and pests to other sites.  |
| 13 | District staff shall appropriately maintain facilities where tools, equipment, and vehicles are stored free from invasive plants.  |
| 14 | District staff shall ensure that rental equipment and project materials (especially soil, rock, erosion control material and seed) are free of invasive plant material prior to their use at a worksite.   |
| 15 | Suitable onsite disposal areas shall be identified to prevent the spread of weed seeds.  |
| 16 | Invasive plant material shall be rendered nonviable when being retained onsite. Staff shall desiccate or decompose plant material until it is nonviable (partially decomposed, very slimy, or brittle). Depending on the type of plant, disposed plant material can be left out in the open as long as roots are not in contact with moist soil, or can be covered with a tarp to prevent material from blowing or washing away.   |
| 17 | Monitor all sites where invasive plant material is disposed on-site and treat any newly emerged invasive plants.   |
| 18 | When transporting invasive plant material off-site for disposal, the plant material shall be contained in enclosed bins, heavy-duty bags, or a securely covered truck bed. All vehicles used to transport invasive plant material shall be cleaned after each use.   |
| 19 | Special-Status Aquatic Wildlife Species –A District biologist shall survey all treatment sites in the field every year prior to work to determine whether any aquatic features are located onsite. No herbicide treatments shall occur within 15 feet of aquatic features. Aquatic features are defined as any natural or manmade lake, pond, river, creek, drainageway, ditch, spring, saturated soils, or similar feature that holds water at the time of treatment or typically becomes inundated during winter rains. If during the survey it is found that aquatic features are present within 15 feet of the proposed treatment area, the District shall either eliminate all areas within 15 feet of the aquatic feature from the project (i.e., do not implement treatment actions in those areas) or if the District wishes to continue treatment actions in these areas, it shall survey the work area prior to treatment to determine presence of suitable habitat or critical habitat for California red-legged frog, central-coast steelhead trout ( <i>Onchorhynchus mykiss</i> ), western pond turtle ( <i>Clemmys marmorata</i> ), and San Francisco garter snake ( <i>Thamnophis sirtalis tetrataenia</i> ). If suitable habitat for these species is found, and if nonherbicide treatment methods have the potential for affecting the potential species, coordination with the California Department of Fish and Game, the U.S. Fish and Wildlife Service, and/or National Marine Fisheries shall occur before weed treatment activities may be conducted within this buffer or activities shall be canceled in this area. If the District biologist determines no suitable habitat is present, treatment activities may occur. |
| 20 | Application of herbicides shall be conducted in accordance with the California Red-Legged Frog Injunction ("Court Issues Stipulated Injunction Regarding Pesticides and the California Red-Legged Frog", <a href="http://www.epa.gov/espp/litstatus/redleg-frog/rlf.htm">http://www.epa.gov/espp/litstatus/redleg-frog/rlf.htm</a> , retrieved on 1/23/2009) in known or potential   |

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|    | California red-legged frog habitat specifically by: not applying glyphosate within 15 feet of aquatic features (including areas that are wet at time of spraying or areas that are dry at time of spraying but subsequently might be wet during the next winter season); utilizing only spot-spraying techniques and equipment by a certified applicator or person working under the direct supervision of a certified applicator; and not spraying during precipitation or if precipitation is forecast within 24 hours. Preserves in which these precautions must be undertaken are: Purisima Creek Redwoods, El Corte de Madera, Skyline Ridge, Rancho San Antonio, Monte Bello and Coal Creek.   |
| 21 | <p>A District biologist shall survey all treatment sites in the field every year prior to work to determine site conditions and develop any necessary site-specific measures. Site inspections shall evaluate existing conditions at a given treatment site including the presence, population size, growth stage, and percent cover of target weeds and pests relative to native plant cover and the presence of special-status species and their habitat, or sensitive natural communities.</p> <p>In addition, worker environmental awareness training shall be conducted for all treatment field crews and contractors for special-status species and sensitive natural communities determined to have the potential to occur on the treatment site by a District biologist. The education training shall be conducted prior to starting work at the treatment site and upon the arrival of any new worker onto sites with the potential for special-status species or sensitive natural communities. The training shall consist of a brief review of life history, field identification, and habitat requirements for each special-status species, their known or probable locations in the vicinity of the treatment site, potential fines for violations, avoidance measures, and necessary actions if special-status species or sensitive natural communities are encountered.</p> |
| 22 | Nesting Birds - All treatment sites shall be reviewed to evaluate the potential for nesting birds. Tree removal will be limited to the non-breeding season. For all other treatments, if birds exhibiting nesting behavior are found within the treatment sites during the bird nesting season (February 15 through August 31), impacts on nesting birds will be avoided by the establishment of appropriate buffers around the nests. A 500-foot buffer around raptor nests and 50-foot buffer around songbird nests are generally adequate to protect them from disturbance, but the size of the buffer may be adjusted by a District biologist in consultation with USFWS depending on site specific conditions. Monitoring of the nest by a District biologist during and after treatment activities will be required if the activity has potential to adversely affect the nest. These areas can be subsequently treated after a District biologist confirms that any young have fledged or the nest is no longer active.   |
| 23 | San Francisco Dusky-footed Woodrat – All District staff or contractors who will implement treatment actions shall receive training from a qualified biologist on the identification of dusky-footed woodrat nests. All San Francisco dusky-footed woodrat nests shall be avoided and left undisturbed by proposed work activities.   |
| 24 | Where appropriate, equipment modifications, mowing patterns, and buffer strips shall be incorporated into manual treatment methods to avoid disturbance of grassland wildlife.   |
| 25 | Rare Plants – All treatment sites shall be surveyed in the field every year prior to work to determine the potential presence of special-status plants. A 15-foot buffer shall be established from special-status plants. No application of herbicides shall be allowed within this buffer. Non-herbicide methods can be used within 15 feet of rare plants but they shall be designed to avoid damage to the rare plants (e.g., pulling).   |
| 26 | Cultural Resources – District staff, volunteer crew leaders, and contractors implementing treatment activities shall receive training on the protection of sensitive archaeological, paleontological, or historic resources (e.g., projectile points, bowls, baskets, historic bottles, cans, trash deposits, or structures). In the event volunteers would be working in locations with potential cultural resources, staff shall provide instruction to protect and report any previously undiscovered cultural artifacts that might be uncovered during hand-digging activities. If archaeological or paleontological resources are encountered on a treatment site and the treatment method consists of physical disturbance of land surfaces (e.g., mowing, brushcutting, pulling, or digging), work shall avoid these areas or shall not commence until the significance of the find can be evaluated by a qualified archeologist. This measure is consistent with federal guidelines 36 CFR 800.13(a), which protects such resources in the event of unanticipated discovery.   |
| 27 | Post-Treatment Monitoring – District staff shall monitor sites within 2 months after treatment to determine if the target pest or weeds were effectively controlled with minimum effect to the environment and non-target organisms. Future treatment methods in the same season or future years shall be designed to respond to changes in site conditions.   |
| 28 | Erosion Control and Revegetation - For sites with loose or unstable soils, steep slopes (greater than 30   |

|    |  |
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|    | percent), where a large percentage of the groundcover will be removed, or near aquatic features that could be adversely affected by an influx of sediment, erosion control measures shall be implemented after treatment. These measures could consist of the application of forest duff or mulches, seeding, or planting of appropriate native plant species to control erosion, restore natural areas, and prevent the spread or reestablishment of weeds. Prior to the start of the winter storm season, these sites shall be inspected to confirm that erosion control techniques are still effective.   |
| 29 | Operation of noise-generating equipment (e.g., chainsaws, wood chippers, brush-cutters, pick-up trucks) shall abide by the time-of-day restrictions established by the applicable local jurisdiction (i.e., City and/or County) if such noise activities would be audible to receptors (e.g., residential land uses, schools, hospitals, places of worship) located in the applicable local jurisdiction. If the local, applicable jurisdiction does not have a noise ordinance or policy restricting the time-of-day when noise-generating activity can occur, then the noise-generating activity shall be limited to the hours of 7:00 AM to 5:00 PM Monday through Friday. Additionally, if noise-generating activity would take place on a site that spans over multiple jurisdictions, then the most stringent noise restriction, as described in this BMP or in a local noise regulation, would apply. |
| 30 | All motorized equipment shall be shut down when not in use. Idling of equipment and off-highway vehicles will be limited to 5 minutes.   |

### 3 ENVIRONMENTAL CHECKLIST

**PROJECT INFORMATION**

- 1. **Project Title:** Midpeninsula Regional Open Space District Site-Specific Weed and Pest Management Project ([Addendum](#))
- 2. **Lead Agency Name and Address:** Midpeninsula Regional Open Space District, 330 Distel Circle  
Los Altos, CA 94022
- 3. **Contact Person and Phone Number:** ~~Cindy Roessler~~ [Joel Silverman](#) (650) 691-1200
- 4. **Project Location:** Western Santa Clara and San Mateo counties
- 5. **Project Sponsor's Name and Address:** Midpeninsula Regional Open Space District, 330 Distel Circle  
Los Altos, CA 94022
- 6. **General Plan Designation:** Santa Clara County: Other Public Lands, Hillside; San Mateo County: Open Space, Public Recreation
- 7. **Zoning:** N/A
- 8. **Description of Project:**  
See attached
- 9. **Surrounding Land Uses and Setting:** See attached
- 10. **Other public agencies whose approval is required:** None

**ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:**

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> <b>Aesthetics</b>               | <input type="checkbox"/> <b>Agriculture and Forest Resources</b>  | <input type="checkbox"/> <b>Air Quality</b>                        |
| <input type="checkbox"/> <b>Biological Resources</b>     | <input type="checkbox"/> <b>Cultural Resources</b>                | <input type="checkbox"/> <b>Geology / Soils</b>                    |
| <input type="checkbox"/> <b>Greenhouse Gas Emissions</b> | <input type="checkbox"/> <b>Hazards &amp; Hazardous Materials</b> | <input type="checkbox"/> <b>Hydrology / Water Quality</b>          |
| <input type="checkbox"/> <b>Land Use / Planning</b>      | <input type="checkbox"/> <b>Mineral Resources</b>                 | <input type="checkbox"/> <b>Noise</b>                              |
| <input type="checkbox"/> <b>Population / Housing</b>     | <input type="checkbox"/> <b>Public Services</b>                   | <input type="checkbox"/> <b>Recreation</b>                         |
| <input type="checkbox"/> <b>Transportation / Traffic</b> | <input type="checkbox"/> <b>Utilities / Service Systems</b>       | <input type="checkbox"/> <b>Mandatory Findings of Significance</b> |
|  |   | <input checked="" type="checkbox"/> <b>None With Mitigation</b>    |

**DETERMINATION (To be completed by the Lead Agency)**

On the basis of this initial evaluation:

- I find that the proposed project could not have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.
- I find that although the proposed project **COULD** have a significant effect on the environment, there **WILL NOT** be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.
- I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.
- I find that the proposed project **MAY** have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier **EIR** or **NEGATIVE DECLARATION** pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier **EIR** or **NEGATIVE DECLARATION**, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

\_\_\_\_\_  
**Signature**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Printed Name**

\_\_\_\_\_  
**Title**

\_\_\_\_\_  
**Agency**



**EVALUATION OF ENVIRONMENTAL IMPACTS**

1. A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
4. “Negative Declaration: Less Than Significant With Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from “Earlier Analyses,” as described in (5) below, may be cross-referenced).
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
  - a) Earlier Analysis Used. Identify and state where they are available for review.
  - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - c) Mitigation Measures. For effects that are “Less than Significant with Mitigation Measures Incorporated,” describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project’s environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
  - a) the significance criteria or threshold, if any, used to evaluate each question; and
  - b) the mitigation measure identified, if any, to reduce the impact to less than significance.

### 3.1 AESTHETICS

| ENVIRONMENTAL ISSUES   | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact        | No Impact                           |
|--|--------------------------------|--|-------------------------------------|-------------------------------------|
| <b>I. Aesthetics. Would the project:</b>   |                                |  |                                     |                                     |
| a) Have a substantial adverse effect on a scenic vista?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| c) Substantially degrade the existing visual character or quality of the site and its surroundings?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?                                    | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

#### 3.1.1 ENVIRONMENTAL SETTING

The visual character in the OSPs that contain the project site is largely composed of natural elements with limited built elements, such as roadways, parking lots, directional signs, trails, fences, kiosks, and restrooms. Typical views found in District preserves are shown in Exhibit 3-1a and Exhibit 3-1b. None of the treatment sites or adjacent areas support any defining human-made structures. However, many of the treatment sites and surrounding areas are largely in an intact natural state with visually distinctive natural features and, therefore, possess a high level of scenic integrity. The high level of scenic integrity, combined with public access to recreation trails and open space that provide striking vistas of forested areas, grasslands, oak woodlands, and the Bay Area, create a high quality scenic resource. The treatment sites are located on 13 OSPs within the District. While only a small portion of each of the 13 OSPs would be affected by the project as described above in the Project Description, the overall visual characteristics of these OSPs are summarized below.

#### BEAR CREEK OPEN SPACE PRESERVE

Bear Creek Redwoods Preserve consists of approximately 1,400 acres of mixed evergreen forest with Douglas-fir, oak, and madrone as well as coast redwoods in ravines and oak woodlands on ridges with pockets of grasslands. The ridges within the preserve provide views of Lexington Reservoir to the east. There are also five ponds and three perennial creeks within the preserve. This preserve is the site of the former Alma College and once contained the first mainland radio tower to receive the news of the attack on Pearl Harbor. Currently, hiking and equestrian uses are allowed by permit only. The ~~four~~three sites proposed for on-going vegetation management on this preserve are BC01, Alma College, [West Roads](#), and the Tree Farm (see Table 2-1). Exhibit 3-2a provides a view of the Bear Creek Redwoods Tree Farm site showing cultivated trees in foreground with natural vegetation above. Exhibit 3-2b shows a restored area at Bear Creek Redwoods tree farm with preserved Douglas-fir forest behind new growth of native shrubs in a previously treated area.



**Exhibit 3-1a. Typical Views Found in District Preserves**



**Exhibit 3-1b. Typical Views Found in District Preserves**



**Exhibit 3-2a.**

**Bear Creek Redwoods Tree Farm site**



**Exhibit 3-2b.**

**Restored Area at Bear Creek Redwoods Tree Farm**

One of the treatment sites with a more distinct visual appearance within the Bear Creek OSP is the Bear Creek Redwoods Tree Farm. The former tree farm is located on the east side of Summit Road where it intersects with Bear Creek Road. The site is on a hillside with terrain that slopes down to the roadway intersection. The site is visible for drivers approaching the site from the south on Summit Road but is screened by terrain and vegetation along the road side for drivers approaching from the north on Bear Creek Road. Vegetation on the site is a mix of young closely-spaced conifers, which were planted as part of the tree farming operation. Interspersed in open areas created by previous tree removal activities are coyote brush, madrone, and other native shrubs, along with invasive French broom. The taller, more mature mixed evergreen forest that grows on the undisturbed portion of the preserve to the east is visible on the hilltop behind the young tree farm conifer stand. At the present time this site is closed to public use. [The West Roads treatment site is contains a mix of invasive French broom, coyote brush, and mixed evergreen forest as is found in the other treatment sites in Bear Creek OSP. The West Roads site is in a portion of the preserve that is closed to the public and is mostly not visible to passersby.](#)

## **COAL CREEK OPEN SPACE PRESERVE**

Coal Creek Preserve consists of rolling meadows, oaks, grasslands, large madrone trees, and is the forested headwaters of two creeks. The preserve is visible from Skyline Boulevard and Page Mill Road, and the preserve's five miles of trails provide important trail connections between Skyline Boulevard and Alpine Road for hikers, bicyclists, and equestrians. Mountain bicyclists take advantage of this connection to complete loops through Russian Ridge OSP back to Portola Valley. Views of the San Francisco Bay Area can be seen from the open grassland ridges below the Caltrans vista point parking area. The only treatment site located within the Coal Creek Preserve is the Page Mill and Highway 35 treatment site.

## **EL CORTE DE MADERA CREEK OPEN SPACE PRESERVE**

El Corte de Madera Creek OSP consists of steep, heavily forested terrain with mixed evergreen forests and redwoods. Rare and fragile sandstone formations and creek headwaters are among the scenic resources at the preserve. The site has 36 miles of multi-use trail that are popular with bicyclists, and also has hiking and horseback riding opportunities. Scenic vistas consist of coastal and forest views, and special features, such as the rare sandstone formations. Treatment sites located within the El Corte de Madera Creek preserve consist of the Methuselah Trail, Virginia Mill Trail, Lawrence Creek Trail, and a future staging area. Vegetation surrounding the trails consists of mixed evergreen forest with an understory of ferns, thimbleberry, and tan oaks in some locations.

## **EL SERENO OPEN SPACE PRESERVE**

El Sereno OSP is named for the 2,249-foot Mt. El Sereno, part of a prominent ridge located south of the town of Saratoga and west of the town of Los Gatos. The 1,415-acre preserve provides a distinctive scenic backdrop to these cities, and primarily consists of a chaparral community with some wooded areas near the creeks. The preserve has nearly 7.4 miles of wide, gradual trails that provide numerous opportunities for recreation. At the north end, the Overlook Trail accommodates hikers, bicyclists, and dogs on leash. At the south end, trails are open to hikers, bicyclists, and equestrians. Along the ridge, a three-mile trek offers panoramic views of Sierra Azul and St. Joseph's Hill OSPs, as well as Lexington Reservoir and the South Bay. Treatment sites located within El Sereno Preserve consist of the Aquinas Trail sites (west and east), Loma Vista Trail, and the Overlook Trail. All trails are wide fire roads that traverse through chaparral and provide varying views of the surrounding landscape.

## LOS TRANCOS OPEN SPACE PRESERVE

Los Trancos OSP is a 274-acre area located in the Santa Cruz Mountains above Palo Alto. The preserve is characterized by rolling grassland knolls alternating with oak woodland and shaded forest. On a clear day, Mt. Diablo and skyscrapers of San Francisco are visible across the bay. A five-mile trail system is available for visitor enjoyment. Treatment sites located within the Los Trancos Open Space Preserve consist of the Greater Los Trancos, Norton, LT02, and Knoll sites; Fault Trail and Franciscan Loop Trail; Event Meadow; and the parking lot. Exhibit 3-3a shows previously treated grassland at Lost Trancos OSP with views of the South Bay Area.

## MONTE BELLO OPEN SPACE PRESERVE

This preserve encompasses the upper Stevens Creek watershed from Monte Bello Ridge to Skyline Ridge. The Stevens Creek riparian corridor is considered by some to be one of the finest in the Santa Cruz Mountains. Views from the top of Black Mountain, within the preserve, consist of the Santa Clara Valley and the Mt. Hamilton range. The 3,177-acre preserve is one of the District's richest in wildlife and ecosystem diversity. The preserve offers approximately 15 miles of trails including the Stevens Creek Nature Trail, with a self-guided 3 mile loop with interpretation. Treatment sites within this preserve consist of the Montebello Road and Water Wheel Creek sites.

## PULGAS RIDGE OPEN SPACE PRESERVE

This preserve consists of canyons and ridge top with views of watersheds to the west. The preserve also features an easy-access trail and an off-leash dog area. The Cordilleras Trail, which is designed to accommodate wheelchairs, strollers, or visitors desiring a less strenuous open space experience, adjoins the parking lot and travels through a meadow to a bench located in a quiet, wooded area by Cordilleras Creek. Across the creek, the one-mile Polly Geraci Trail ascends an oak-covered hillside to the top of the preserve, where vegetation changes to chaparral. Visitors may let their dogs roam off-leash in the 17.5-acre area in the center of the preserve. The Hassler Loop treatment site is located within this preserve. This site consists of eucalyptus trees that line the ridge top. The ridge is visible from residences (multi-story condominiums) to the north east located off of Crestview Drive. Views from these residences consist of foreground views of the ridge and more distant higher forested ridges to the west. Exhibit 3-3b provides a view of Pulgas Ridge showing eucalyptus trees and conifers prominent on the ridge top with preserved forested hillside below the ridge.

## PURISIMA CREEK REDWOODS OPEN SPACE PRESERVE

The Purisima Creek Redwoods OSP is located on the western slopes of the Santa Cruz Mountains overlooking Half Moon Bay. The centerpiece of this 4,412-acre preserve is Purisima Creek Canyon, with its towering redwoods, rushing creek, and understory of ferns, berries, and wildflowers. Coastal scrub and hardwood forests of tanoak, madrone, and Douglas-fir border the cool moist canyon. Striking views of the coast and Half Moon Bay are visible from the northern part of the preserve. Twenty-one miles of developed trails and historical logging roads provide opportunities for easy walks or long, strenuous hikes or rides. The specially surfaced Redwood Trail, which is suitable for visitors of all physical abilities, winds through tall redwoods just off Skyline Boulevard. Treatment sites in this preserve consist of PC01, [PC03, Upper Purisima Creek Road](#), Harkins Ridge Trail, Harkins Cutover, and North Ridge.

## RANCHO SAN ANTONIO OPEN SPACE PRESERVE

The 3,988-acre preserve, combined with the adjoining 165-acre County Park, offers visitors a unique experience of diverse environments, interesting cultural history, and a variety of activities. This preserve is characterized by oak woodlands, shaded creeks, and meadows. The preserve supports Deer Hollow Farm and provides views of south bay, Monte Bello Ridge, and Black Mountain. Treatment sites within this preserve consist of the Shop area

and the Lower Meadow Trail. The Shop area consists of the staff workshop, the Foothills Field Office, vehicle sheds, storage sheds, parking areas, and a fuel pump station. The 7-acre Shop area primarily has a gravel surface, with pavement along the driveway and encircling the center structures. None of the Shop area is visible from the public trails or private residences in the area. The Lower Meadow Trail consists of large oaks, riparian forest, and open grassland.



**Exhibit 3-3a.**

**Previously Treated Grassland at Lost Trancos OSP**



Exhibit 3-3b.

View of Pulgas Ridge

## ST. JOSEPH'S HILL OPEN SPACE PRESERVE

St. Joseph's Hill provides a scenic backdrop to the Town of Los Gatos. The preserve is 270 acres in area. At the eastern edge of the preserve, the top of the 1,250-foot St. Joseph's Hill features panoramic views of Santa Clara Valley, Lexington Reservoir, and the Sierra Azul mountain range. There are a number of regional trails that provide access to St. Joseph's Hill and other nearby open space areas. The Los Gatos Creek Trail provides a connection from the City of San Jose directly into Los Gatos. St. Joseph's Hill is a popular destination, offering trails for hikers, bicyclists, and equestrians. Treatment sites within this preserve consist of the Vista/YStar/Hilltop (referred to hereafter as Vista site), and Vineyard sites.

## SARATOGA GAP OPEN SPACE PRESERVE

Saratoga Gap Preserve is a 1,540-acre preserve. The Saratoga Gap Trail parallels Skyline Boulevard passing under the spreading branches of weathered oaks before dropping into a cool, wooded Douglas-fir forest. The trail ends across from the Hickory Oaks trailhead to Long Ridge Open Space Preserve and Highway 35. Attractive lichen-covered boulders and sandstone rock outcrops add to the scenic value of this area. The preserve also includes chaparral, some of which recently burned in a wildfire. Treatment sites within this preserve consist of the Charcoal Residence and Lysons property.

## SIERRA AZUL OPEN SPACE PRESERVE

Sierra Azul encompasses more than 18,400 acres. Because of its size, the Preserve is divided into four areas: the Kennedy-Limekiln area adjacent to Lexington Reservoir County Park; the Cathedral Oaks area, which is almost entirely surrounded by private property and is therefore currently closed to the public; the RDG area, which is also currently closed to the public pending the planning and development of public access facilities; and the Mt.



Umunhum area, a former radar tracking facility (formerly the Almaden Air Force Station) named for the 3,486-foot mountain that is its most dominant feature and also closed to the public (a project-specific EIR is in progress, examining options for public use) and with dramatic 360-degree views of the Bay Area and coast. Although known for its chaparral-covered slopes, Sierra Azul has pockets of serpentine grasslands, bay and blue oak woodlands, knobcone pine, and lush riparian corridors, including the headwaters of Guadalupe Creek. It has the beauty and ruggedness of an unspoiled wilderness and attracts visitors seeking a more vigorous hiking, biking, or equestrian experience. Treatment sites within this preserve consist of SA19, Williams Property, Beatty, Reynolds, Pheasant, Austrian Gulch (Moss), Air Base, Hicks Creek Ranch, and RDG sites.

## SKYLINE RIDGE OPEN SPACE PRESERVE

This 2,143-acre preserve offers 10 miles of trail for exploration. The preserve offers a varied landscape that consist of ridge top vistas, expansive meadows, a pond for nature study, and a quiet lake frequented by migrating birds. Two quarter-mile trails are accessible to wheelchairs and baby strollers: one encircling Alpine Pond and another hugging the shores of Horseshoe Lake. Scenic vistas of the Lambert Creek watershed, Butano Ridge, and Portola State Park are visible from the preserve. The preserve contains a 3-mile segment of the Bay Area Ridge Trail. The Skyline Ridge Tree Farm Restoration treatment site is located within this preserve. This site provides a visually distinctive setting because it is the site of a former tree farm that has been undergoing restoration. The site is characterized by open areas where native grasses have been restored along with caged oak trees and other native shrubs. Erosion control measures are visible in the drainage areas where native vegetation is developing to provide natural drainage protection. The treatment sites are visible from nearby trails and parking lot. Exhibit 3-4a shows the restoration treatment site at Skyline Ridge OSP with view of the active tree farm on the left and mature mixed evergreen forest on the right in the background. Exhibit 3-4b shows drainage restoration at Skyline Ridge with erosion control features and young willow plantings in cages.

Additionally, a segment of Skyline Boulevard (State Route 35) is an officially designated State Scenic Highway from the Santa Cruz County Line to State Route 92 in San Mateo County. OSPs located along the officially designated section of Skyline Boulevard consist of Skyline Ridge, Monte Bello, Coal Creek, El Corte de Madera Creek, and Purisima Creek Redwoods. An additional segment of Skyline Boulevard is an Eligible State Scenic Highway (Caltrans 2009) from the SR 17 to the Santa Cruz County Line. OSPs located along this section of Skyline Boulevard consist of Bear Creek Redwoods, and Saratoga Gap. The goal of the California Scenic Highway Program is to preserve and enhance the natural beauty of California and to protect scenic highway corridors from changes that would affect the aesthetic value of the land adjacent to designated highways. The Program consists of a process for the designation of official State or County Scenic Highways whereby cities and/or counties develop and implement a Corridor Protection Program containing five legislatively required elements, generally accepted as land use planning standards.

### 3.1.2 DISCUSSION

#### a) Have a substantial adverse effect on a scenic vista?

**Less-than-significant Impact.** For the most part, the treatment sites are in areas that are not part of a scenic vista. Additionally, vegetation management on most of the sites would consist of spraying and/or pulling of selected invasive plants. These procedures would not result in substantial visual changes or result in vegetation changes to large areas at one time. Herbicide application would be specific to targeted broadleaf vegetation and conducted with spot-spraying. In most areas, residual grasses and other non-targeted vegetation would remain, which would provide for a similar visual appearance to the existing condition. In heavily infested areas, treatment may result in patches of dying or dead vegetation. However, this would be a temporary condition, which would be reduced or eliminated because most treatment sites are dominated by annual grasses that naturally dry out and die back in the summer of each year. Once the drying season begins, any patches of dying

or dead vegetation would be visually consistent with the overall appearance of the project area. Because dead plant material would remain in place, and non-targeted vegetation would be minimally affected, large patches of exposed soils are not expected. Nonetheless, as described in BMP 27, after herbicide application, an annual inspection would be conducted to determine if re-seeding of any disturbed areas with native plants and grasses would be needed prior to the rainy season each year to promote uniform vegetation cover. Re-seeding of disturbed areas would further reduce the potential for visual impacts from patchy vegetation.

Management activities at the Pulgas Ridge treatment site could potentially affect a scenic vista. Treatment actions at this site would consist of the gradual removal of existing 12 eucalyptus trees on the ridge. The ridge is visible from condominium residences located in the area off of Crestview Drive to the northeast of the site, approximately 1,100 feet away. Four of the trees screen views of a water tank on the ridge. However, the water tank is scheduled for removal and the trees immediately surrounding it would remain until in the tank would be removed sometime in 2013 or 2014. Removal of the eucalyptus trees over time would not result in a substantial degradation of views of the ridge from private homes off of Crestview Drive because the natural vegetation would remain undisturbed and views of the vegetated ridgeline and the ridgelines in distant views would remain uninterrupted.



**Exhibit 3-4a.**

**Restoration Treatment Site at Skyline Ridge OSP**



Exhibit 3-4b.

## Drainage Restoration at Skyline Ridge

- b) **Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?**

**Less-than-Significant Impact.** ~~Two~~The only treatment sites are located near or adjacent to a state scenic highway. The first, is the Page Mill and 35 treatment site in Coal Creek OSP located adjacent to Skyline Boulevard and Page Mill Road. This section of Skyline Boulevard is an officially designated State Scenic Highway (SR 35). The site has not been previously treated and the understory is overgrown with relatively large Spanish broom and French broom plants. Removal of these invasive plants by herbicide treatment and pulling on roadside sites would create a temporary noticeable visual change. However, this vegetation change would not substantially degrade scenic resources because the surrounding native vegetation would remain and the overall natural state of the site would remain intact. Removal of the broom plants would allow native plants to regenerate, and would open up the understory so that native trees would be more visible. This could be considered a visual improvement for this site. Although some change to the visual appearance would occur, it would not be substantial, therefore, this impact is considered to be less than significant. The second site is also adjacent to an officially designated portion of Skyline Boulevard, just north of the intersection with Kings Mountain Road. The same temporary changes and lack of long-term change in the overall natural state apply to this site as well. In addition, only small amounts of broom currently exist within view of Skyline Boulevard at PC03.

- c) **Substantially degrade the existing visual character or quality of the site and its surroundings?**

**Less-than-significant Impact.** Although some dieback of vegetation would occur at treatment sites, as described under Item a, above, procedures would not create substantial visual changes or result in vegetation changes to large areas at one time. Herbicide application would be specific to targeted broadleaf vegetation and conducted with spot-spraying. Therefore, this is a temporary condition that would not significantly degrade the overall

visual character of the area. Herbicide application and hand removal of non-native species would provide the opportunity for native grasses, pasture grasses, and wildflower species to establish at the sites. This could be considered a visual improvement. While some change to the visual appearance would occur, it would not be substantial, and this impact would be less than significant.

For areas such as Bear Creek Redwoods Tree Farm, which consists of more than 1,000 planted trees, visual changes would be gradual because tree removal would occur in increments (i.e., no more than 30 trees per year dispersed through the site) over a 3-year period. Additionally, trees would be removed in a dispersed pattern, and would not result in large open blocks of land. Native vegetation would then be allowed to fill in open areas. Once removed, taller native trees growing in undisturbed portions of the preserve would be more visible to visitors of the site.

Bay tree removal would occur at treatment sites at Los Trancos, Fault Line Trail; El Corte de Madera, Creek Lawrence Creek Trail; and Rancho San Antonio, Lower Meadow Trail as part of the effort to control spread of Sudden Oak Death. No more than 10 trees with diameters at breast height of 36 inches or less would be removed at the three sites. While the cut trunks would be visible and would be interspersed among other trees onsite, views of the forest environment would not substantially change compared to existing conditions. This impact would be less than significant.

**d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?**

**No Impact.** The proposed project would not result in the construction or installation of new buildings, lighting facilities, or other potential sources of light and glare. No work would take place at night time requiring lighting. No impacts related to light and glare would occur with implementation of the project.

### 3.2 AGRICULTURE AND FOREST RESOURCES

| ENVIRONMENTAL ISSUES | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|----------------------|--------------------------------|--|------------------------------|-----------|
|----------------------|--------------------------------|--|------------------------------|-----------|

**II. Agriculture and Forest Resources.**

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997, as updated) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state’s inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest

Protocols adopted by the California Air Resources Board.

Would the project:

- |  |                          |                          |                                     |                          |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Conflict with existing zoning for agricultural use or a Williamson Act contract?  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) Result in the loss of forest land or conversion of forest land to non-forest use?   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

### 3.2.1 ENVIRONMENTAL SETTING

[See IS/NMD](#)

### 3.2.2 DISCUSSION

[With the additional sites, the project’s environmental impacts related to agriculture and forest resources will be the same as those analyzed in the IS/MNDMND.](#)

### 3.3 AIR QUALITY

| ENVIRONMENTAL ISSUES  | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact        | No Impact                |
|---|--------------------------------|--|-------------------------------------|--------------------------|
| <b>III. Air Quality.</b>  |                                |  |                                     |                          |
| Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied on to make the following determinations.  |                                |  |                                     |                          |
| Would the project:  |                                |  |                                     |                          |
| a) Conflict with or obstruct implementation of the applicable air quality plan?   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) Expose sensitive receptors to substantial pollutant concentrations?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e) Create objectionable odors affecting a substantial number of people?   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

#### 3.3.1 ENVIRONMENTAL SETTING

[See IS/MND](#)

#### 3.3.2 DISCUSSION

**a) Conflict with or obstruct implementation of the applicable air quality plan?**

**Less-than-significant Impact.** The emissions inventories used to develop a region’s air quality attainment plans are based primarily on projected population growth and vehicle miles traveled (VMT) for the region, which are based, in part, on the planned growth identified in regional and community plans. Therefore, projects that would result in increases in population or employment growth beyond that projected in regional or community plans could result in increases in VMT above that planned in the attainment plan, further resulting in increases in mobile source emissions that could conflict with a region’s air quality planning efforts. Increases in VMT beyond that projected in area plans generally would be considered to have a significant adverse incremental effect on the region’s ability to attain or maintain state and federal ambient air quality standards.

The weed and pest control activities associated with operation of the proposed project would utilize existing District staff. In addition, contractors would be employed to perform treatment activities. The District currently

utilizes contractors to perform weed and pest management services. The project is not anticipated to result in a substantial increase in the frequency or numbers of contract or volunteer work required compared to existing conditions. Therefore, this is not the type of project that would lead to regional population growth beyond what is planned. Consequently, project implementation would not conflict with or obstruct implementation of BAAQMD’s air quality planning efforts. Furthermore, the project is not anticipated to result in the operation of any major stationary emission sources or extensive use of heavy-duty off-road equipment. Finally, because the proposed project would not change the amount of development projected in the Santa Clara or San Mateo County General Plans, it would be consistent with the population growth and VMT projections for the San Francisco Bay Area Air Basin (SFBAAB) contained in the BAAQMD’s Clean Air Plan, which is based on general plan projections of all counties within the SFBAAB, and thus would not interfere with the region’s ability to attain or maintain state and national ambient air quality standards. Implementation of the proposed project would not conflict with or obstruct implementation of any air quality planning efforts. As a result, this impact would be less than significant.

**b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?**

**Less-than-significant Impact.** The proposed project consists of operation and maintenance activities (e.g., brush-cutting, herbicide application) associated with weed and pest removal and management at 452 treatment sites in San Mateo and Santa Clara counties from 2012 to 2014. No new construction activities are proposed. Therefore, the project would not result in any short-term construction-related emissions of criteria air pollutants and precursors. The project would not consist of any new area or stationary sources of air pollutant emissions.

Weed and pest control activities may consist of removal of weed species by hand (e.g., chainsaw, herbicide application, pulling, digging), the use of brushcutters, tank herbicide sprayers (transported and applied with off-highway vehicles [all-terrain vehicles, ATVs]), occasional green flaming with propane torches, and burning of brush piles. Activities that would result in criteria air pollutants (and precursor) emissions consist of vehicle trips by District staff, contractor and volunteer workers, and emissions associated with onsite weed control activities from the use of off-road equipment (e.g., ATVs). The use of ATVs would be limited to the few treatment sites requiring a tank sprayer for herbicide application. The ATVs would be used to carry the tank of herbicide throughout the treatment site using established roads and trails as a worker applies the herbicide with a hand-held sprayer attached by hose to the tank. No heavy-duty equipment such as a loader, dozer, or excavator would be used, because all other weed removal activities would be conducted by hand and/or small hand held power tools (e.g., chainsaw, brushcutter, handsaw, shovels).

Emissions of criteria air pollutants and precursors associated with operation of the proposed project were calculated using applicable portions of the California Emissions Estimator Model (CalEEMod), as recommended by BAAQMD. Modeling was based on past and anticipated future weed control activities for each site. The modeling conducted is considered conservative because it assumed simultaneous use of motorized equipment and conservatively high worker commute trip lengths. Table 3.5-1 below summarizes the modeled operational emissions of criteria air pollutants and precursors for the proposed project. See Appendix D for model input and output parameters and detailed assumptions. The model was not recalculated for the three sites added under the Addendum to the NMD, but the additional sites would add only a small fractional increase in the number of activities which create emission of criteria air pollutants and precursors. Even if the three additional sites doubled the emissions categories listed below, the project would fall below the BAAQMD thresholds of significance.

| Table 3.5-1. Summary of Modeled Emissions of Criteria Air Pollutants and Precursors Associated with Operational Onsite Weed Control Activities |     |                 |                          |                           |
|--|-----|-----------------|--------------------------|---------------------------|
| Operational Activities   | ROG | NO <sub>x</sub> | PM <sub>10</sub> Exhaust | PM <sub>2.5</sub> Exhaust |

|  | (lb/day)  | (lb/day)  | (lb/day)  | (lb/day)  |
|--|-----------|-----------|-----------|-----------|
| Onsite Activities (Tractor mower, ATVs)  | 3.6       | 20.6      | 1.0       | 1.0       |
| Mobile Source (worker commute)   | <0.1      | <0.1      | <1.0      | <0.1      |
| Total  | 3.6       | 20.6      | 1.0       | 1.0       |
| <b>BAAQMD Thresholds of Significance</b>   | <b>54</b> | <b>54</b> | <b>82</b> | <b>54</b> |
| Notes:<br>Onsite activities would occur on an annual basis from 2012 through 2014. Modeled emissions represent a daily maximum level of activity with simultaneous use of ATVs for tank spraying application and motorized brushcutters.<br>Source: Modeling Conducted by Ascent Environmental 2012. |           |           |           |           |

As indicated by the modeling, implementation of the project would not result in long-term operational emissions of ROG, NO<sub>x</sub>, PM<sub>10</sub>, or PM<sub>2.5</sub> that exceed BAAQMD’s thresholds of significance (54 lb/day for ROG, NO<sub>x</sub>, PM<sub>10</sub>, and 82 lb/day for PM<sub>2.5</sub>) or substantially contribute to concentrations that exceed the National Ambient Air Quality Standards (NAAQS) or California Ambient Air Quality Standards (CAAQS). Although the use of green flaming or brush pile burning was not accounted for in the modeling, these methods of weed control are used occasionally by the District. Green flaming could potentially be used for infestations of new seedlings, but based on past use by the District it is not anticipated to take place for more than three days a year. Additionally, the BAAQMD has established Regulation 5: Open Burning, which generally prohibits open burning within the SFBAAB, with exemptions of certain types of fires. Included in these exemptions, under Section 5-110 Exemptions, the use of flame cultivation when the burning is performed with liquefied petroleum gas (i.e., propane gas) or natural gas-fired burners designed and used to kill seedling grass and weeds and the growth is such that the combustion would not continue without the burner, is exempt from Regulation 5. Brush piles would be burned only during the wet season on days that the BAAQMD designates as “open burn status” and all conditions of Hazard Reduction Fires per BAAQMD regulations would be followed. Thus, these methods would not violate any air quality standards. Further, all weed control activities would be relatively short in duration (e.g., one to two weeks) at each treatment site. For these reasons, operation of the proposed project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. This impact is considered less than significant.

**Local CO**

Carbon Monoxide (CO) concentration is a direct function of vehicle idling time and, thus, traffic flow conditions. Under specific meteorological conditions, CO concentrations near congested roadways and/or intersections may reach unhealthy levels with respect to local sensitive land uses such as residential areas, schools, and hospitals. As a result, it is recommended that CO not be analyzed at the regional level, but at the local level.

BAAQMD provides a screening methodology to determine project impacts from localized CO emissions. This screening methodology was utilized to analyze local CO emissions from the operation of this project (BAAQMD 2010b). It states that the following criteria must be met:

- ▲ Project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans.
- ▲ The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.
- ▲ The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).



The proposed project would not increase the population or bring new employees to the area. All work would be performed by existing District staff, volunteers or contractors. It is anticipated that projects will require an average of 1 trip per day when considering the total work of staff, volunteers and contractors. [The 3 additional sites are expected to add no more than an additional 9 trips per year added to the anticipated 365 trips per year estimate under the IS/MND. Even with the three sites added under this Addendum to the MND, the average number of trips per day would not increase more than 3 percent \(Since  \$9 \div 365 = 0.025\$ \).](#) Therefore, the proposed project would not be expected to substantially increase traffic on the surrounding streets or intersections. As a result, this impact would be less than significant.

- c) **Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?**

**Less-than-significant Impact.** The SFBAAB is currently designated as a nonattainment area for state and national ozone standards and nonattainment for the state  $PM_{10}$  standards and state and national  $PM_{2.5}$  standards. SFBAAB's nonattainment status is attributed to the region's development history. Past, present and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. As explained in BAAQMD's CEQA Guidelines, and consistent with CEQA, if a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant (BAAQMD 2010b).

In developing thresholds of significance for air pollutants, BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. Because the project would not exceed identified significance thresholds as discussed in the analysis under item b) above, no, additional analysis to assess cumulative impacts is necessary.

Because project-generated emissions would not exceed applicable thresholds, the project would not violate or contribute substantially to an existing or projected air quality violation. As a result, project-generated emissions of criteria air pollutants and precursors would not be cumulatively considerable. This impact would be less than significant.

- d) **Expose sensitive receptors to substantial pollutant concentrations?**

**Less-than-significant Impact.** Exposure of sensitive receptors to substantial pollutant concentrations of criteria air pollutants were addressed above in Items a through c, above. This section is focused on exposure of sensitive receptors to emissions of toxic air contaminants (TACs) (i.e., diesel particulate matter; asbestos).

None of the District's equipment is powered by diesel and gasoline-powered hand-held equipment is not a major source of TACs. Further, power equipment would not be used in any single location for an extended period of time. Therefore, nearby sensitive receptors would not be exposed to substantial concentrations of TACs.

The proposed project consists of weed control activities on multiple treatment sites throughout San Mateo and Santa Clara counties. Both counties have areas that are known to contain naturally occurring asbestos (DOC 2000) and, therefore, it is possible that project activities could take place on or near sites containing asbestos. However, the proposed project would not consist of implement activities that raise substantial dust in soils

containing asbestos; weed pulling would be done by hand. Therefore, it is not anticipated that emissions of asbestos would occur associated with project operation. This impact would be less than significant.

**e) Create objectionable odors affecting a substantial number of people?**

**Less-than-significant Impact.** The occurrence and severity of odor impacts depend on numerous factors, including the nature, frequency, and intensity of the source; wind speed and direction; and the presence of sensitive receptors. Although offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress and often generating citizen complaints to local governments and regulatory agencies.

BAAQMD has established Regulation 7 (Odorous Emissions) to address odor issues. Regulation 7 places general limitations on odorous substances and specific emission limitations on certain odorous compounds. Project implementation would not result in any major sources of odor and the project type is not one of the common types of facilities or activities that are known to produce odors (e.g., landfill, coffee roaster, wastewater treatment facility). In addition, the exhaust from the use of onsite equipment during weed and pest management activities would be intermittent and temporary, and would dissipate rapidly from the source with an increase in distance. Thus, project implementation would not create objectionable odors affecting a substantial number of people. As a result, this impact would be less than significant.

### 3.4 BIOLOGICAL RESOURCES

| ENVIRONMENTAL ISSUES   | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact        | No Impact                           |
|--|--------------------------------|--|-------------------------------------|-------------------------------------|
| <b>IV. Biological Resources. Would the project:</b>  |                                |  |                                     |                                     |
| a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service? | <input type="checkbox"/>       | <input checked="" type="checkbox"/>                | <input type="checkbox"/>            | <input type="checkbox"/>            |
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

preservation policy or ordinance?

- f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

### 3.4.1 ENVIRONMENTAL SETTING

The proposed project would be implemented within 13 OSPs at 42 distinct sites within the District. The OSPs are located along the San Francisco peninsula between the Pacific Ocean and the San Francisco Bay. The unique location is dominated by the Santa Cruz Mountains which are influenced by a Mediterranean climate comprised of mild wet winters and long hot and dry summers cooled by coastal fog. The eastern edge of the District is heavily influenced by the urban areas of San Francisco, San Jose, and other San Francisco Peninsula cities.

### VEGETATION AND WILDLIFE

The project area largely consists of natural elements with intermittent built elements, such as roadways, parking lots, and restrooms. District vegetation geographic information systems (GIS) data and treatment site locations were used to determine vegetation and ground cover types. Table 3.6-1 identifies the vegetation and ground cover types found within each of the specific treatment sites and descriptions are provided below.

**Table 3.6-1. Vegetation and Ground Cover Types in the Project Area**

| Preserve                     | Site Name                               | Aquatic Habitat | Chaparral | Grassland | Freshwater marsh | Mixed-Conifer Forest | Knobcone pine forest | Redwood forest | Riparian forest | Mixed coastal woodland | Landslides, Cliffs, Rock Outcrops | Other* |
|------------------------------|---|-----------------|-----------|-----------|------------------|----------------------|----------------------|----------------|-----------------|------------------------|-----------------------------------|--------|
| Bear Creek Redwoods OSP      | Alma College                            |                 |           |           |                  | X                    |                      |                |                 | X                      |                                   | X      |
|                              | BC01                                    |                 |           | X         | X                |                      |                      |                |                 | X                      |                                   | X      |
|                              | Tree Farm                               |                 | X         |           |                  | X                    |                      |                |                 | X                      |                                   | X      |
|                              | West Roads                              |                 |           | X         | X                | X                    |                      | X              | X               | X                      |                                   | X      |
| Coal Creek OSP               | Page Mill & Highway 35                  |                 | X         |           |                  |                      |                      |                | X               |                        | X                                 |        |
| El Corte de Madera Creek OSP | Lawrence Creek Trail                    |                 |           |           |                  | X                    |                      |                |                 |                        |                                   | X      |
|                              | Methuselah Trail                        |                 |           |           |                  | X                    |                      | X              |                 |                        |                                   |        |
|                              | Future staging area between CM03 & CM04 |                 | X         |           |                  | X                    |                      | X              |                 |                        |                                   | X      |
|                              | Virginia Mill Trail                     |                 |           |           |                  | X                    |                      | X              |                 |                        |                                   |        |
| El Sereno OSP                | Aquinas Trail                           |                 | X         | X         |                  |                      |                      |                |                 | X                      |                                   |        |
|                              | Loma Vista Trail                        |                 | X         |           |                  |                      |                      |                |                 | X                      |                                   |        |
|                              | Overlook Trail                          |                 | X         |           |                  |                      |                      |                |                 | X                      |                                   |        |
| Los Trancos OSP              | Event Meadow                            |                 | X         | X         |                  |                      |                      |                |                 | X                      |                                   | X      |
|                              | Fault Trail                             |                 |           | X         |                  |                      |                      |                |                 | X                      |                                   |        |
|                              | Franciscan Loop Trail                   |                 |           |           |                  |                      |                      |                |                 | X                      |                                   |        |
|                              | Greater Los Trancos                     |                 | X         | X         |                  |                      |                      |                | X               | X                      |                                   |        |
|                              | Knoll                                   |                 | X         | X         |                  |                      |                      |                |                 | X                      |                                   | X      |
|                              | LT02                                    |                 | X         | X         |                  |                      |                      |                | X               | X                      |                                   | X      |
|                              | Norton                                  |                 | X         | X         |                  | X                    |                      |                |                 | X                      |                                   |        |
| Parking Lot                  |   | X               | X         |           |                  |                      |                      |                | X               |                        | X                                 |        |
| Monte Bello OSP              | Montebello Road                         |                 |           | X         |                  |                      |                      |                |                 | X                      |                                   |        |
|                              | Water Wheel Creek                       |                 | X         | X         |                  |                      |                      |                |                 | X                      |                                   | X      |
| Pulgas Ridge OSP             | Hassler Loop                            |                 | X         | X         |                  |                      |                      |                |                 | X                      |                                   | X      |

Table 3.6-1. Vegetation and Ground Cover Types in the Project Area

| Preserve               | Site Name                      | Aquatic Habitat | Chaparral | Grassland | Freshwater marsh | Mixed-Conifer Forest | Knobcone pine forest | Redwood forest | Riparian forest | Mixed coastal woodland | Landslides, Cliffs, Rock Outcrops | Other** |
|------------------------|--------------------------------|-----------------|-----------|-----------|------------------|----------------------|----------------------|----------------|-----------------|------------------------|-----------------------------------|---------|
| Purisima Creek OSP     | Harkins Ridge Cutover          |                 | X         |           |                  | X                    |                      | X              |                 |                        |                                   |         |
|                        | Harkins Ridge Trail            |                 | X         |           |                  | X                    |                      | X              | X               | X                      |                                   |         |
|                        | North Ridge                    |                 | X         |           |                  | X                    |                      |                |                 |                        |                                   |         |
|                        | PC01                           |                 | X         |           |                  | X                    |                      |                |                 |                        |                                   | X       |
|                        | PC03                           |                 |           |           |                  | X                    |                      | X              |                 |                        |                                   |         |
|                        | Upper Purisima Creek           |                 | X         |           |                  | X                    |                      | X              | X               |                        |                                   |         |
| Rancho San Antonio OSP | Lower Meadow Trail             |                 |           | X         |                  |                      |                      |                |                 | X                      |                                   | X       |
|                        | Shop                           |                 | X         | X         |                  |                      |                      |                |                 | X                      |                                   | X       |
| Saratoga Gap OSP       | Charcoal Residence             |                 |           | X         |                  | X                    |                      |                |                 | X                      |                                   |         |
|                        | Lysons Property                |                 | X         |           |                  |                      |                      |                |                 | X                      |                                   |         |
| St. Joseph's Hill OSP  | Vineyard                       |                 | X         | X         |                  |                      |                      |                |                 | X                      |                                   | X       |
|                        | Vista/Y Star/Hilltop           |                 | X         | X         |                  |                      |                      |                |                 | X                      |                                   | X       |
| Sierra Azul OSP        | Air Base                       |                 | X         |           |                  |                      | X                    |                |                 | X                      | X                                 | X       |
|                        | Austrian Gulch (Moss Property) |                 | X         |           |                  | X                    | X                    |                |                 | X                      |                                   | X       |
|                        | Beatty                         |                 | X         | X         |                  |                      |                      |                |                 | X                      |                                   | X       |
|                        | Hicks Creek Ranch              |                 | X         |           |                  |                      |                      |                |                 | X                      |                                   | X       |
|                        | Pheasant                       |                 |           | X         |                  |                      |                      |                |                 | X                      |                                   |         |
|                        | RDG                            | X               | X         | X         | X                |                      |                      |                |                 | X                      |                                   |         |
|                        | Reynolds                       |                 | X         |           |                  |                      |                      |                |                 | X                      |                                   |         |
|                        | SA19                           |                 | X         | X         |                  |                      |                      |                |                 | X                      |                                   |         |
|                        | Williams Property              |                 | X         |           |                  | X                    | X                    | X              | X               | X                      |                                   | X       |
| Skyline Ridge OSP      | Tree Farm Restoration          |                 | X         |           |                  |                      |                      | X              | X               |                        | X                                 |         |

## AQUATIC HABITAT

Aquatic habitat does not occur within the project area but does occur near the following work sites in the form of: a small pond near the Alma College treatment site [of Bear Creek Redwoods OSP and a small pond across Bear Creek Road from the West Roads site, both within Bear Creek Redwoods OSP](#); sag ponds near the Page Mill and Highway 35 treatment site in Coal Creek OSP; near the Monte Bello Road treatment site on Monte Bello OSP; Cherry Springs Reservoir near the RDG treatment site; Lexington Reservoir across from the Beatty treatment site in Sierra Azul OSP; and Horseshoe Lake near the Tree Farm Restoration treatment site in Skyline Ridge OSP (Table 3.6-1). These perennial ponds provide habitat for certain invertebrates, as well as for many amphibians, such as frogs, salamanders, and turtles.

## CHAPARRAL

Chaparral is widespread throughout the project area (Table 3.6-1) and typically consists of dense, often impenetrable scrub dominated by a variety of shrub species, especially including chamise (*Adenostoma fasciculatum*), big berry manzanita (*Arctostaphylos glauca*), coyote brush (*Baccharis pilularis*), birch leafed mountain mahogany (*Cercocarpus betuloides*), and poison oak (*Toxicodendron diversilobum*). It may also consist of such species as manzanita (*Arctostaphylos* spp.) and California sagebrush (*Artemisia californica*).

Chaparral habitat generally has lower wildlife diversity than most forest and woodland habitats (Mayer and Laudenslayer 1988, pp. 104-107). However, scrub does provide habitat for many wildlife species, including some that are considered rare elsewhere. Common reptiles found in chaparral consist of western rattlesnake (*Crotalus*

*oreganus*), California kingsnake (*Lampropeltis getula californiae*), and western fence lizard (*Sceloporus occidentalis*). Common birds in scrub habitat consist of California thrasher (*Toxostoma redivivum*), Bewick's wren (*Thryomanes bewickii*), and California quail (*Callipepla californica*). Mammals commonly associated with scrub consist of gray fox (*Urocyon cinereoargenteus*) and black-tailed deer (*Odocoileus hemionus*).

## GRASSLAND

California grasslands in the project area (Table 3.6-1) are typically dominated by non-native, mostly annual grasses such as slender wild oat (*Avena barbata*), soft chess (*Bromus hordeaceus*), ripgut grass (*Bromus diandrus*), and six-weeks fescue (*Vulpia bromoides*). Native perennial grasses such as purple needlegrass (*Nassella pulchra*) and meadow barley (*Hordeum brachyantherum*) are often present, but few areas are dominated by native grasses.

In areas where serpentine soils are present, serpentine grassland may mix with California grassland. Serpentine grassland is characterized by having generally lower vegetation cover than is typical for most California annual grassland, and generally lower plant stature. The serpentine grasslands on District lands are quite variable in species composition, but native grasses are typically among the dominant species. These consist of perennial species such as one-sided bluegrass (*Poa secunda* ssp. *secunda*), big squirreltail grass (*Elymus multisetus*), June grass (*Koeleria macrantha*), California melic grass (*Melica californica*), and purple needlegrass. A diverse and somewhat distinctive assemblage of native herb species is associated with these serpentine grasslands, including hayfield tarweed (*Hemizonia congesta* ssp. *luzulifolia*), Fremont's western rosinweed (*Calycadenia fremontii*), California plantain (*Plantago erecta*), flaxflowered linanthus (*Linanthus liniflorus*), and blue-eyed grass (*Sisyrinchium bellum*).

In general, grasslands support lower wildlife diversity than woodland and shrub-dominated habitats, but are invaluable to a number of grassland-dependent species (Mayer and Laudenslayer 1988, p. 118). A great diversity and abundance of insects rely on grasslands. Reptiles found in annual grasslands consist of northern alligator lizard (*Elgaria coerulea*) and common gopher snake (*Thamnophis sirtalis*). Birds that are common in this habitat consist of western meadowlark (*Sturnella neglecta*) and savannah sparrow (*Passerculus sandwichensis*). Annual grassland also provides important foraging habitat for turkey vulture (*Cathartes aura*), northern harrier (*Circus cyaneus*), American kestrel (*Falco sparverius*), and red-tailed hawk (*Buteo jamaicensis*). Mammals known to use this habitat consist of California ground squirrel (*Spermophilus beecheyi*), black-tailed jackrabbit (*Lepus californicus*), and Botta's pocket gopher (*Thomomys bottae*).

## FRESHWATER MARSH

Freshwater marsh habitat is located in BC01 within the Bear Creek Redwoods OSP and on RDG within the Sierra Azul OSP (Table 3.6-1). Freshwater marsh habitat develops in shallow, standing or slow-moving water at the edge of lakes, ponds, and rivers that support emergent vegetation adapted to permanently or seasonally flooded soils. Dominant vegetation consists of cattails (*Typha* spp.), sedges (*Carex* spp.), and rushes (*Juncus* spp.).

Wildlife values of freshwater marsh habitat is generally high, due to the available surface water, abundance of insects, algae, and plant forage, and protective cover. Various birds, amphibians, and reptiles are often abundant. Typical species consist of marsh wren (*Cistothorus palustris*), red-winged blackbird (*Agelaius phoeniceus*), and Pacific chorus frog (*Pseudacris regilla*).

## MIXED-CONIFER FOREST

Mixed conifer forest occurs on six of the OSPs (Table 3.6-1) dominated by Douglas-fir (*Pseudotsuga menziesii*). Other species consist of coast redwoods (*Sequoia sempervirens*) and California Bay (*Umbellularia californica*).

Bird species typical of this habitat consist of western flycatcher, chestnut-backed chickadee, and solitary vireo. Other species consist of Pacific giant salamander (*Dicamptodon ensatus*), deer mouse (*Peromyscus maniculatus*), dusky-footed woodrat (*Neotoma fuscipes*), and Trowbridge's shrew (*Sorex trowbridgii*).

## KNOBCONE PINE FOREST

Knobcone pine forest is a generally open-canopy forest of more or less evenly spaced trees of knobcone pine (*Pinus attenuata*), a pine that is essentially dependent on fire for its reproduction. Few other tree species occur in well-developed knobcone pine forest. The understory vegetation in knobcone pine forest consists of chaparral shrubs species and grassland species. Knobcone pine forest is found on three sites (Air Base, Austrian Gulch, and Williams Property) in the Sierra Azul OSP (Table 3.6-1).

Representative wildlife species consist of: California mountain kingsnake (*Lampropeltis zonata*), hairy woodpecker (*Picoides villosus*), western wood-pewee (*Contopus sordidulus*), brown creeper (*Certhia americana*), and western gray squirrel (*Sciurus griseus*).

## REDWOOD FOREST

Redwood forest habitat in the project area is dominated by redwoods (*Sequoia sempervirens*). Other species may consist of big-leaf maple (*Acer macrophyllum*) and Douglas-fir.

Redwood habitats provide food, cover, or special habitat elements for 193 wildlife species. This total is composed of 12 reptiles, 18 amphibians, 109 birds, and 54 mammals (Mayer 2012). Species such as the red-legged frog (*Rana* spp.), ensatina (*Ensatina escholtzii*), osprey (*Pandion haliaetus*), ringtail (*Bassariscus astutus*), and marbled murrelet (*Brachyramphus marmoratus*) show a relatively high preference for redwood habitat.

## RIPARIAN FOREST

The riparian forest of the study area is located in sites within Los Trancos, Purisima Creek, Sierra Azul, Skyline Ridge, and St. Joseph's Hill OSPs. Riparian forest is typically tree- or shrub dominated and occurs along streams and rivers. Dominant species consist of arroyo willow (*Salix lasiolepis*), white alder (*Alnus rhombifolia*), and big-leaf maple (*Acer macrophyllum*). Other willows (*Salix* spp.) and alders (*Alnus* spp.) may also be present.

Riparian forests are particularly valuable in their function as an interface between aquatic and terrestrial communities. Riparian zones provide nutrients, shade, and bank stabilization for aquatic systems, as well as nesting and foraging habitat, migration corridors, and refuges for wildlife. Common mammals found in this habitat type consist of raccoon (*Procyon lotor*), gray fox, striped skunk (*Mephitis mephitis*), and dusky-footed woodrat. Numerous birds are also found in this habitat, such as Wilson's warbler (*Wilsonia pusilla*), yellow warbler (*Dendroica petechia*), red-shouldered hawk (*Buteo lineatus*), song sparrow (*Melospiza melodia*), and black-headed grosbeak (*Pheucticus melanocephalus*).

## MIXED COASTAL WOODLAND

Mixed coastal woodland habitats at the treatment sites (Table 3.6-1) consist of plant communities dominated by coast live oak (*Quercus agrifolia*), valley oak (*Quercus lobata*), California bay (*Umbellularia californica*), and

California buckeye (*Aesculus californica*). Blue oak (*Quercus douglasii*) and eucalyptus (*Eucalyptus globulus*) may also be present. Most of the woodlands are dense, closed-canopy broadleaved evergreen forests, but some areas are deciduous.

Woodland habitats support a wide variety of wildlife species (Mayer and Laudenslayer 1988, pp. 72-79). This rich fauna largely results from acorn production and the availability of cavities for breeding and cover in large oak trees. In fact, the presence of at least some oaks in any habitat type increases wildlife abundance (CalPIF 2002, p. 8). Typical reptiles and amphibians that use this habitat consist of ringneck snake (*Diadophis punctatus*), California slender salamander (*Batrachoseps attenuatus*), western skink (*Eumeces skiltonianus*). Representative bird species consist of: wild turkey (*Meleagris gallopavo*), Cooper's hawk (*Accipiter cooperii*), great horned owl (*Bubo virginianus*), acorn woodpecker (*Melanerpes formicivorus*), and oak titmouse (*Baeolophus inornatus*). Common mammals in coastal woodlands consist of black-tailed deer (*Odocoileus hemionus*), mountain lion (*Felis concolor*), and wild boar (*Sus scrofa*).

## LANDSLIDES, CLIFFS, AND ROCKY OUTCROPS

Landslides, cliffs, and rocky outcrops are only found on the Air Base treatment site in the Sierra Azul OSP (Table 3.6-1). Due to the thin soil layer developed on the serpentine bedrock, a low moisture-holding capacity and a unique chemical composition, the serpentine areas support numerous endemic plant species. Fremont's western rosinweed, smooth lessingia (*Lessingia micradenia* var. *glabrata*), flax-flowered linanthus (*Linanthus liniflorus*), coast range false bindweed (*Calystegia collina* ssp. *collina*), and most beautiful jewel-flower (*Streptanthus albidus* ssp. *peramoenus*) are species that are entirely or largely restricted to serpentine substrate or are regionally uncommon.

## OTHER (DISTURBED, DEVELOPED, PLANTATION, RESTORATION, UNVEGETATED)

Disturbed land dominated by yellow star-thistle (*Centaurea solstitialis*), an invasive weed, is located on sites within Bear Creek Redwoods, El Corte de Madera Creek, and St. Joseph's Hill OSPs. Developed ground cover in the project area is largely composed of intermittent built elements, such as roadways, parking lots, and restrooms. These occur on treatment sites within Bear Creek Redwoods, Coal Creek, El Corte de Madera Creek, and Sierra Azul OSPs. Artificially established forests, groves, and farms are located in the project area. A Christmas tree farm is located within Bear Creek Redwoods OSP, olive groves in Sierra Azul OSP, plantation pines on Coal Creek OSP, and planted stands of pine on Los Trancos OSP. These trees may provide nesting habitat for birds. Vegetation restoration sites have been mapped on Pulgas Ridge and St. Joseph's Hill OSPs. Small amounts of unvegetated land have been mapped within seven OSPs (Table 3.6-1).

## 3.4.2 DISCUSSION

- a) **Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?**

**Less-than-Significant with Mitigation Incorporated.** Implementation of the proposed project would result in activities to control weeds and other target pests within 13 OSPs at [4542](#) distinct sites over the next three years, 2012-2014. The proposed project would result in an overall improvement to the natural environment by removing invasive weeds that displace natural vegetation. However, treatment actions associated with the proposed project have the potential to adversely affect special-status species. The District's qualified biological staff is familiar with all treatment sites and with known locations of special-status species, and are not aware of any special-status species known to currently occur within any of the treatment areas. Occurrences of special-

status species within 1-mile of the treatment sites were compiled using the California Natural Diversity Database (CNDDDB), District GIS data, and the California Native Plant Society's (CNPS's) online *Inventory of Rare and Endangered Plants*. Tables E-1 and E-2 in Appendix E provide information on special-status plant and wildlife species, respectively, that might potentially occur on the treatment sites. Potential to occur was determined by the presence of suitable habitat and District biologist knowledge of treatment sites and locations of special-status species. Searches of the CNDDDB, CNPS online electronic inventory, and MROSD database identified 32 special-status plant species that have been documented within 1-mile of the treatment sites (Appendix E, Table E-1). One of these species is not expected to occur in the study area due to lack of suitable habitat, such as coastal dunes and coastal scrub. The remaining 31 plant species have potential to occur within the treatment sites based on suitable habitat (Appendix E, Table E-1). Based on a review of the results of the CNDDDB and MROSD database searches, documented species ranges, and available habitat, a list of 26 special-status wildlife species within 1-mile of the treatment sites was compiled (Appendix E, Table E-2). Eighteen special-status wildlife species have the potential to occur within the treatment sites.

Impacts to special-status species would either be avoided or reduced to less than significant by following standard District best management practices (BMPs described under Section 2.7) and incorporated mitigation measures. All treatment actions that are proposed under this project are described in Section 2.6.2 and their potential effects are listed below, including actions required by BMPs that reduce potential impacts.

Prior to any work activity, site surveys would be conducted by a District biologist to determine site conditions and develop any necessary site-specific avoidance measures (BMP 21). All treatment sites would be surveyed to determine the presence of special-status species which could occur in the project area (BMPs 19, 22, and 25). District biological staff would consult database records and conduct site assessments to determine the presence of special status-species or potential habitat prior to work being conducted. To minimize potential impacts to special-status species, worker environmental awareness training would be conducted for all treatment field crews and contractors for special-status species determined to have the potential to occur on the treatment site by a District biologist. The education training would be conducted prior to starting work on the project and upon the arrival of any new worker. The training would consist of a brief review of life history, field identification, habitat requirements for each species, known or potential locations, possible fines for violations, avoidance measures, and necessary actions if special-status species are encountered (BMP 21).

## HERBICIDE TREATMENTS

As described in Section 2.6.2, the District is proposing the use of the following pesticides: glyphosate herbicide (Roundup PROMAX or AquaMaster with a Liberate surfactant); aminopyralid herbicide (Milestone VM); and a systematic fungicide consisting of potassium phosphite (Agri-Fos with Pentra-Bark surfactant). These herbicides may be applied utilizing a variety of equipment depending on the size of the infestation, including a backpack sprayer (spot spraying), hand-application (cut-stump or wipe application), or, for larger areas, a tank mounted on an all-terrain vehicle or truck with a hose that is manually controlled. As described in BMP 4, herbicide application would be completed by or under the direction of a person with a Qualified Applicator License or Qualified Applicator Certificate.

## SPECIAL-STATUS PLANTS

Herbicide treatment under the proposed project has the potential to adversely affect special-status plant species through over spraying or spray drift. Herbicide application would be completed in areas primarily infested with invasive weeds. As described in BMP 25, impacts to special-status plant species would be minimized by establishing a 15-foot no spray buffer around special-status plants identified by District biologists. BMP 6 would further minimize impacts from over spraying by mixing an appropriate non-toxic colorant or dye to the herbicide. BMP 6 also minimizes potential impacts to non-target plants during spot treatment applications.



Potential spray drift impacts would be minimized through the implementation of general herbicide application parameters (BMP 7), including weather parameters, spray nozzle configurations, and spray distances.

## **SPECIAL-STATUS ANIMALS**

Herbicide treatment under the proposed project has the potential to affect special-status animal species through habitat modification or direct mortality.

### **Special-Status Invertebrates**

The project has the potential to harm non-target plant species during herbicide treatment of target species, as discussed above. Indirect impacts to the bay checkerspot butterfly (*Euphydryas editha bayensis*) could result if its primary larval host plants, dwarf plantain (*Plantago erecta*) and purple owl's clover (*Castilleja exserta*), were harmed. All habitats for the bay checkerspot butterfly exist on shallow, serpentine soils. Serpentine soils is present on five treatment sites: Air Base, Austrian Gulch (Moss Property), Pheasant, and Williams Property on Sierra Azul OSP and Vineyard on St. Joseph's Hill OSP. The proposed project contains a number of BMPs to prevent adverse effects upon non-target vegetation, as described above. However, any incidental damage to bay checkerspot butterfly larval host plants on serpentine soils within the treatment sites could result in a potentially significant impact to the bay checkerspot butterfly.

### **Special-Status Fish Species**

Critical habitat for Central Coast (ESU) steelhead (*Oncorhynchus (=Salmo) mykiss*) is present in Los Trancos, Purisima Creek Redwoods, and Skyline Ridge OSPs, but does not occur within any of the treatment sites. However, some treatment sites are within 500 feet of critical habitat for steelhead and indirect impacts could occur from herbicides entering the water via surface runoff. Herbicide releases resulting from the proposed project could result in impacts to special-status fish species. However, the project contains BMPs that will avoid impacts to special-status fish species. BMP 19 requires that a District biologist shall survey all treatment sites in the field every year prior to work to determine whether any aquatic features are located onsite. No herbicide treatments shall occur within 15 feet of aquatic features. Aquatic features are defined as any natural or manmade lake, pond, river, creek, drainageway, ditch, spring, saturated soils, or similar feature that holds water at the time of treatment or typically becomes inundated during winter rains. If during the survey it is found that aquatic features are present within 15 feet of the proposed treatment area, the District shall either eliminate all areas within 15 feet of the aquatic feature from the project (i.e., do not implement treatment actions in those areas) or if the District wishes to continue treatment actions in these areas, it shall survey the work area prior to treatment to determine presence of suitable habitat or critical habitat for central-coast steelhead trout (*Oncorhynchus mykiss*). If suitable habitat is found, coordination with the National Marine Fisheries shall occur before weed treatment activities may be conducted within this buffer or activities shall be canceled in this area. If suitable habitat is not found, treatment may proceed (BMP 19). BMP 5 requires that all mixing and handling of concentrated pesticide solution take place at least 300 feet from aquatic features. BMP 7 prohibits herbicide treatment during precipitation or if rain is forecasted with greater than a 70 percent probability in the next 24 hour period to prevent herbicides and sediment from entering aquatic features via surface runoff. BMP 28 requires that erosion control measures and revegetation occur on certain treated sites to prevent sedimentation into nearby aquatic features.

### **Special-Status Amphibian and Reptile Species**

Pesticide releases, erosion-related sediment, and habitat modification could result from the proposed herbicide treatment resulting in indirect impacts to special-status amphibian and reptile species, including California red-legged frog (*Rana aurora draytonii*), California tiger salamander (*Ambystoma californiense*), foothill yellow-legged frog (*Rana boylei*), and western pond turtle (*Actinemys marmorata*). As described above under Special-Status Fish Species, BMPs 5, 7, 19, and 28 would minimize impacts to aquatic features from herbicide treatment

by ensuring that non-aquatic approved pesticides are not accidentally released into aquatic habitat and erosion control measures are implemented to prevent sedimentation of aquatic features.

As part of the 2006 Stipulated Injunction regarding pesticides and the California red-legged frog, the Environmental Protection Agency developed “effects determinations” for 66 named pesticides including glyphosate. The results of the risk assessment for glyphosate based products determined that California red-legged frog eating broadleaf plants (as well as small insects and small herbivorous mammals) may be at risk to direct effects following chronic exposure to glyphosate at application rates of 7.5 lb (3 quarts) acid equivalent/acre (a.e./A) and above. Additionally, indirect effects could affect aquatic-phase California red-legged frog due to reduction in the prey base with aquatic weed management uses at an application rate of 3.75 lb (1.5 quarts) a.e./A. Indirect effects could also occur at any registered rate due to reduction in prey base for terrestrial CRLF (EPA 2012a). The stipulated injunction restricts the use of certain pesticides in potential California red-legged frog habitat. The injunction generally applies to invasive species and noxious weed control. However, the injunction does not apply to the proposed pesticide use if all of the following conditions are met (EPA 2012b):

- ▲ The pesticide is applied for purposes of controlling state-designated invasive species and noxious weeds under a program administered by a public entity. The pesticide is not applied within 15 feet of aquatic breeding critical habitat or non-breeding aquatic critical habitat within critical habitat areas, or within 15 feet of aquatic features within non-critical habitat sections subject to the injunction;
- ▲ Application is limited to localized spot treatment using hand-held devices;
- ▲ Precipitation is not occurring or forecast to occur within 24 hours; and
- ▲ The person applying the pesticide is a certified applicator or working under the direct supervision of a certified applicator.

Purisima Creek Redwoods, El Corte de Madera Creek, and Skyline Ridge OSPs are designated California red-legged frog critical habitat. Under the injunction, Purisima Creek Redwoods, El Corte de Madera Creek, Skyline Ridge, and small areas of Sierra Azul and Rancho San Antonio OSPs are specifically identified as including aquatic areas and surrounding uplands suitable for California red-legged frog. The District has identified locations in Monte Bello and Coal Creek OSPs where California red-legged frog are known to occur, and therefore has committed to following the provisions of the injunction at these additional locations (Roessler 2012). No red-legged frog aquatic breeding or non-breeding habitat is present on the proposed treatment sites; however, some treatment sites are within the critical habitat designation. BMP 19 requires that no herbicide treatment will occur within 15 feet of aquatic features; BMP 20 further requires that herbicide spraying of invasive plants be conducted in a manner consistent with the red-legged frog injunction; and BMP 21 requires that treatment sites be surveyed for suitable habitat for special-status species (including California red-legged frog), and training and consultation be undertaken accordingly.

### Special-Status Mammals

Herbicide treatment could coat the food sources of special-status mammals (e.g., understory plants browsed by San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*) and insects on the surface of treated vegetation which are the primary diet of special-status bats), resulting in indirect pesticide ingestion. However, impacts to these species resulting from food source exposure would be less than significant due to a limited potential for exposure and due to the low toxicity to small mammals of the dilute herbicides used for this project. Treatment sites represent a small percentage of the overall vegetative cover within the project area, and treatments would not occur more than a few times a year. Given the limited nature of the treatment application, it is unlikely that moths and other prey insects would be exposed to herbicide spray, and less likely that that special-status bat species would consume such insects as they would represent only a tiny portion of the overall food supply. The San Francisco dusky-footed woodrat browses on shrubs and trees, such as willows or poison oak, in the area surrounding its nest. The woodrat prefers foraging in the branches of the trees and

shrubs rather than on open ground. For these reasons, the dusky-footed woodrat would be unlikely to consume treated plant material. BMP 23 prohibits disturbance of woodrat nests.

## MANUAL CONTROL TREATMENTS

Manual control treatments consist of pulling (by hand and with a weed wrench), digging, and cutting. Manual control methods are effective for the removal of small populations, individual occurrences, and populations near aquatic areas or special-status species.

## SPECIAL-STATUS PLANTS

Manual treatments have the potential to adversely affect special-status plant species through pulling (root disturbance), digging (root disturbance) and brushcutting (direct mortality). BMP 25 requires pretreatment surveys for special-status plants and a 15-foot buffer around special-status plants. Manual treatments can be used within 15 feet of special-status plants. Manual control treatments could result in smothering, compaction of soils, or crushing of root systems which could affect the survival of special-status plants if they are present.

## SPECIAL-STATUS ANIMALS

Manual removal of large trees with chainsaws and brushcutting of vegetation could adversely affect nesting birds by disturbing nests or nesting behavior during treatment activities. Ground nesting species often place their nests in or near low vegetation and could be vulnerable to brushcutting activities associated with the proposed project. Raptors are also particularly sensitive to human disturbance while nesting. During pre-treatment planning, the potential for nesting birds in trees, brush, or grasslands would be considered and incorporated into treatment timing. Disturbance to nesting birds could result in nest abandonment by the adults and mortality of chicks and eggs. BMP 22 requires that all treatment sites be reviewed to evaluate the potential for nesting birds. Tree removal will be limited to the non-breeding season. For all other treatments, if birds exhibiting nesting behavior are found within the treatment sites during the bird nesting season (February 15 through August 31), impacts on nesting birds would be avoided by the establishment of appropriate buffers around the nests. A 500-foot buffer around raptor nests and 50-foot buffer around songbird nests are generally adequate to protect them from disturbance, but the size of the buffer may be adjusted by a District biologist in consultation with the U.S. Fish & Wildlife Service (USFWS) depending on site specific conditions. Monitoring of the nest by a District biologist during and after treatment activities will be required if the activity has potential to adversely affect the nest. These areas can be subsequently treated after a District biologist confirms that any young have fledged or the nest is no longer active. In addition, as described above under "Herbicide Treatments", the proposed project contains a number of BMPs that would prevent adverse effects to special-status animals. Prior to treatment activities, a District biologist would survey all treatment sites to determine site conditions and develop any necessary site-specific avoidance measures (BMP 21). The District biologist would also evaluate the presence of suitable habitat for special-status species. BMP 23 prohibits disturbance of woodrat nests and BMP 19 requires pretreatment surveys for special-status aquatic wildlife species. Erosion control and revegetation measures would be implemented for sites with loose or unstable soils, steep slopes (greater than 30 percent), where a large percentage of the groundcover will be removed, or near aquatic features (BMP 28).

## GREEN FLAMING TREATMENTS

In green flaming, specially designed propane torches are used to kill dense areas of newly emerged invasive weed seedlings. The use of green flaming has the potential to impact special-status species.

Green flaming would only be conducted in a small area for this project, and would be conducted during light rains or on wet days when forest litter or grassland thatch is not likely to catch fire. Green flaming would only be used on dense patches of small seedlings which makes it easy to see and avoid any non-target plants or animals during this type of treatment.

Most impacts to special-status species would either be avoided or reduced to less than significant by following standard District BMPs, however potentially significant impacts to special-status invertebrates from herbicide treatment and special-status plants from manual treatments may occur. Implementation of BIO-1 and BIO-2 would reduce these impacts to a less than significant level.

***Mitigation Measures:***

**BIO-1.** *Pretreatment surveys for bay checkerspot butterfly larval host plants (dwarf plantain( *Plantago erecta*) and purple owl's clover (*Castilleja exserta*)), will be conducted by a District biologist on treatment sites where serpentine soil is present. This applies to Air Base, Austrian Gulch (Moss Property), Pheasant, and Williams Property on Sierra Azul OSP and Vineyard on St. Joseph's Hill OSP. If no host plants are found on serpentine soils, then no further study is required. If host plants are determined to be present on serpentine soils, a 15-foot buffer will be established around the plants. No herbicides will be allowed within this buffer. Non-herbicide methods may be used within the 15-foot buffer but they will be designed to avoid damage to the host plant.*

**BIO-2.** *As directed by a qualified biologist, populations of special-status plants will be identified with high-visibility flagging at the time of treatment. Training will be conducted for all treatment field crews and contractors that may be performing manual treatments within 15 feet of special-status plants. Training will consist of a brief review of life history, field identification, habitat requirements for each species, known or potential locations in the vicinity of the treatment site, potential fines for violations, avoidance measures, and necessary actions if special-status species are encountered. A District botanist will monitor all work within 15-feet of a special-status plant. If no special-status plants are found during pretreatment surveys no further actions are required.*

**LEVEL OF SIGNIFICANCE AFTER MITIGATION**

Implementation of mitigation measures BIO-1 would require surveys for larval host plants for the bay checkerspot butterfly that could potentially occur on serpentine soils within specified treatment sites. If host plants are found, a buffer would be established and no herbicide treatments would be allowed within the buffer. Implementation of BIO-2 would require high-visibility flagging of special-status plants and minimizing direct and indirect impacts associated with manual treatments. Implementation of these mitigation measures would reduce the impact to a less-than-significant level.

- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?**

***Less-Than-Significant Impact.*** Sensitive natural communities are of limited distribution statewide or within a county or region that provide important habitat value to native species. Most types of wetlands and riparian communities are considered sensitive natural communities due to their limited distribution in California. Sensitive natural communities are of special concern because they have high potential to support special-status plant and animal species. Sensitive natural communities can also provide other important ecological functions, such as enhancing flood and erosion control and maintaining water quality.

In the project area, the oak woodland, freshwater marsh, serpentine bunchgrass, redwood forest, and riparian woodland are considered sensitive natural communities. The proposed project would control invasive weed populations and, over the long-term, promote natural ecological function within natural communities. Short-term vegetation management activities are not expected to have substantial adverse effects on riparian or other sensitive natural community. The following BMPs would ensure that sensitive natural communities would not be affected by herbicide use, manual control, or green flaming treatments. BMPs are incorporated into the proposed project to protect riparian habitats (BMP 7, 19-20). In order to prevent herbicides from adversely affecting riparian vegetation, no herbicide application would be applied if rain is forecasted with greater than a 70 percent probability in the next 24 hour period to prevent sediment and herbicides from entering the water via surface runoff (BMP 7). Within 15 feet of aquatic features only the use of manual treatments would be permitted (BMP 19). Prior to treatment activities a District biologist would survey the treatment site for the presence of sensitive natural communities (BMP 21). If present, a District biologist would develop site-specific avoidance measures (BMP 21). To minimize impacts to sensitive natural communities from drift, general herbicide application parameters would be implemented (BMP 7), including weather parameters, spray nozzle configurations, and spray distances.

Through implementation of BMPs designed to protect riparian habitat or other sensitive natural communities, implementation of the proposed project is not expected to have a substantial adverse effect. Therefore, impacts on sensitive natural communities would be less than significant.

- c) **Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

**Less-than-significant Impact.** Wetlands or other jurisdictional waters do not exist on the treatment sites. Furthermore, the proposed project does not consist of any substantial soil disturbing activities. Therefore, the project would not remove, fill, or hydrologically interrupt federally protected wetlands. The impact is less than significant.

- d) **Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?**

**No Impact.** Wildlife corridors are features that provide connections between two or more areas of habitat that would otherwise be isolated and unusable. Often drainages, creeks, or riparian areas are used by wildlife as movement corridors as these features can provide cover and access across a landscape. The control of invasive weed species in the project area would not impede wildlife use of corridors or interfere with movement. No native wildlife nursery sites, such as important deer fawning areas or bat nursery colonies, would be affected.

- e) **Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**

**Less-than-Significant Impact.** The District's mission statement is "To acquire and preserve a regional greenbelt of open space land in perpetuity; protect and restore the natural environment; and provide opportunities for ecologically sensitive public enjoyment and education." One of the District's goals is to control invasive species that have a substantial impact on preserve resources in order to foster the restoration of native vegetation and habitat. The proposed project would control invasive weed populations and, over the long-term, promote natural ecological function within natural communities. The treatments under the proposed project are consistent with the District's goals and policies on the protection and restoration of the natural environment. In addition, prior to implementing projects or activities, the District consults with federal, State, and local agencies having jurisdiction over biological resources in order to comply with all regulations, ordinances, and policies and

to obtain necessary permits. Therefore, implementation of the proposed project would be consistent with local ordinances and policies designed to preserve and protect biological resources and associated impacts would be less than significant.

f) **Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?**

**No Impact.** A ~~draft~~ habitat plan for the Santa Clara Valley Habitat Conservation Plan (HCP) was released in ~~December 2010~~ August 2012, ~~and proposed revisions to the plan were released in August 2011.~~ The ~~proposed~~ treatment sites are not within the HCP planning area. ~~A~~The final EIR/EIS plan is currently being prepared for public review in mid-2012 document, ~~but~~ has ~~not~~ been adopted. ~~and t~~The project would result in no impact related to conflicts with ~~an adopted~~the HCP.

### 3.5 CULTURAL RESOURCES

| ENVIRONMENTAL ISSUES   | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact        | No Impact                |
|--|--------------------------------|--|-------------------------------------|--------------------------|
| <b>V. Cultural Resources. Would the project:</b>   |                                |  |                                     |                          |
| a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?    | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5? | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?              | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) Disturb any human remains, including those interred outside of formal cemeteries?                                 | <input type="checkbox"/>       | <input checked="" type="checkbox"/>                | <input type="checkbox"/>            | <input type="checkbox"/> |

#### 3.5.1 ENVIRONMENTAL SETTING

The San Francisco Peninsula has had a rich and diverse history, including settlement by Native American groups; the Spanish (1776-1821) and Mexican Republican (1821-1848) colonization of the region; the annexation of California by the United States in 1848; and subsequent industrial, agricultural, and residential development. There are remains from each of these periods on District lands, including Native American village sites, bedrock mortars, barns and other ranching features, orchards, wineries, historic homes, sawmills, mines, historic roads and trails, and outdoor recreational sites. As time passes, more recent periods of California’s history become historically significant. As such, some 20th century sites such as World War II and Cold War military sites are now considered historically significant resources throughout California. Collectively, these sites, structures, features, and artifacts comprise the cultural resources of the District.

The District maintains in-house records regarding the confidential locations of all known cultural resources within its boundaries. The District has compiled this information over time through direct information provided by qualified archaeologists as well as a variety of reports and record searches that have been performed for many projects throughout the District. At the time District staff identified sites for consideration as part of this project, staff reviewed the in-house records regarding known cultural resources locations to determine whether any known historic resources were located at the proposed treatment sites. No known cultural resources or historic structures are located at any of the selected treatment sites (Bird 2012). [Staff reviewed the three additional sites in the same manner to determine whether any known historic or cultural resources were located within their boundaries. No known cultural resources or historic structures are located within the three additional sites.](#)

### 3.5.2 DISCUSSION

With the additional sites, the project’s environmental impacts related to Cultural Resources will be the same as those analyzed in the IS/MND. Mitigation Measure CUL-1 will apply to the new sites and will ensure that any impacts related to currently unknown human remains will be reduced to a less than significant level.

## 3.6 GEOLOGY AND SOILS

| ENVIRONMENTAL ISSUES  | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact        | No Impact                           |
|---|--------------------------------|--|-------------------------------------|-------------------------------------|
| <b>VI. Geology and Soils. Would the project:</b>  |                                |  |                                     |                                     |
| a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:  |                                |  |                                     |                                     |
| i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.) | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| ii) Strong seismic ground shaking?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| iii) Seismic-related ground failure, including liquefaction?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| iv) Landslides?   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| b) Result in substantial soil erosion or the loss of topsoil?   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial risks to life or property?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

### 3.6.1 ENVIRONMENTAL SETTING

See IS/MND



## 3.6.2 DISCUSSION

[With the additional sites, the project's environmental impacts related to geology and soils will be the same as those analyzed in the IS/MND.](#)

### 3.7 GREENHOUSE GAS EMISSIONS

| ENVIRONMENTAL ISSUES   | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact        | No Impact                |
|--|--------------------------------|--|-------------------------------------|--------------------------|
| <b>VII. Greenhouse Gas Emissions. Would the project:</b>   |                                |  |                                     |                          |
| a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?      | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

#### 3.7.1 ENVIRONMENTAL SETTING

[See IS/MND](#)

#### 3.7.2 DISCUSSION

- a) **Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

**Less-than-significant Impact.** GHG emissions generated by the proposed project would predominantly be in the form of CO<sub>2</sub> from the exhaust associated with worker commute trips and equipment used on site (e.g., off-highway trucks, tractor mower). While emissions of other GHGs such as methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O) are important with respect to global climate change, the emission levels of these GHGs for the sources associated with project activities are nominal compared with CO<sub>2</sub> emissions, even considering their higher global warming potential (GWP). Therefore, all GHG emissions for construction are reported as CO<sub>2</sub>.

GHG emissions associated with the project were calculated using applicable portions of the California Emissions Estimator Model (CalEEMod), as recommended by BAAQMD. Modeling was based on past and anticipated future weed control activities. Because weed control methods (e.g., tank spraying of herbicide, tractor mower) are chosen based on the type of weed/pest infestation on the treatment site, the proposed project consists of continued maintenance and follow-up weed control activities of existing infestations, and the District has implemented similar management activities throughout its lands, future activities would be similar to past activities. The modeling conducted is considered conservative because it assumed simultaneous use of motorized equipment and conservatively high worker commute trip lengths. Table 3.7-1 below summarizes the modeled annual operational GHG emissions for the proposed project. See Appendix D for model input and output parameters and detailed assumptions.

| Weed Control Activities                               | <a href="#">Original 42 Sites</a><br>CO <sub>2</sub> MT/yr |
|---|--|
| Onsite Activities (Tractor mower, off-highway trucks) | 5.4  |
| Mobile-source (worker commute)                        | 3.9  |

|   |       |
|---|-------|
| Yearly Total  | 9.3   |
| BAAQMD Thresholds of Significance   | 1,100 |
| Notes: CO <sub>2</sub> = carbon dioxide; GHG = greenhouse gas; MT/yr = metric tons per year.<br>See Appendix D for detailed modeling results.<br>Source: Modeling Conducted by Ascent Environmental 2012. |       |

Based on the modeling conducted, project-related activities [for the original 42 sites](#) would result in a total of 9.3 MT of CO<sub>2</sub>. These emissions levels are well below BAAQMD's threshold of significance of 1,100 MT/year. [The additional 3 project sites addressed in this document are similar in respect to the original 42 project sites in regards to the production of GHG emission \(similar onsite activities, similar work commutes\). No new analysis was performed for the additional 3 sites, but GHG emissions were assumed to rise proportionally to the number of project sites \(3÷42×100 = 7.1% increase\). Even if total annual GHG emissions for the project doubled \(100% increase\) with the 3 added sites, the total for the year would only be 18.6 metric tons of CO<sub>2</sub> per year \(CO<sub>2</sub>-MT/yr\). This is far below the BAAQMD threshold of significance of 1,100 \(CO<sub>2</sub> MT/yr\).](#) Additionally, the project would involve minimal activity over the duration of the entire operational phase (i.e., 1-2 weeks per site), and overall project-related GHG emissions would not be considered substantial (i.e., less than 10 MT of CO<sub>2</sub>). Thus, project-generated operational emissions would not result in a cumulatively considerable net increase of GHGs. As a result, this impact would be less than significant.

**b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?**

***Less-than-significant Impact.*** As discussed under item a) above, the total GHG emissions associated with this project would be less than BAAQMD's threshold of 1,100 MT/year. Because this threshold is based on the emissions reduction targets established by AB 32 for the year 2020 and because project-generated GHG emissions would not conflict with any other applicable plans, policies, or regulations established for the purposes of GHG emissions reduction. Also stated above, there would be no new mobile, area, or stationary sources of GHGs associated with the proposed project. Therefore, implementation of the proposed project would not result in a net increase of long-term operation-related GHG emissions from mobile, stationary, or area sources. Project-generated operational emissions would not result in a cumulatively considerable net increase of GHGs, and this impact would be less than significant.

### 3.8 HAZARDS AND HAZARDOUS MATERIALS

| ENVIRONMENTAL ISSUES   | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact        | No Impact                           |
|--|--------------------------------|--|-------------------------------------|-------------------------------------|
| <b>VIII. Hazards and Hazardous Materials. Would the project:</b>   |                                |  |                                     |                                     |
| a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?                                   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

#### 3.8.1 ENVIRONMENTAL SETTING

[See IS/MND](#)

#### 3.8.2 DISCUSSION

[With the additional sites, the project’s environmental impacts related to hazards and hazardous materials will be the same as those analyzed in the IS/MND.](#)

### 3.9 HYDROLOGY AND WATER QUALITY

| ENVIRONMENTAL ISSUES   | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact        | No Impact                           |
|--|--------------------------------|--|-------------------------------------|-------------------------------------|
| <b>IX. Hydrology and Water Quality. Would the project:</b>   |                                |  |                                     |                                     |
| a) Violate any water quality standards or waste discharge requirements?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)? | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial on- or off-site erosion or siltation?   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in on- or off-site flooding?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| f) Otherwise substantially degrade water quality?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| j) Result in inundation by seiche, tsunami, or mudflow?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

#### 3.9.1 ENVIRONMENTAL SETTING

[See IS/MND](#)

## 3.9.2 DISCUSSION

With the additional sites, the project's environmental impacts related to hydrology and water quality will be the same as those analyzed in the IS/MND.

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### 3.10 LAND USE AND PLANNING

| ENVIRONMENTAL ISSUES   | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact                           |
|--|--------------------------------|--|------------------------------|-------------------------------------|
| <b>X. Land Use and Planning. Would the project:</b>  |                                |  |                              |                                     |
| a) Physically divide an established community?   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |
| b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |
| c) Conflict with any applicable habitat conservation plan or natural community conservation plan?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |

#### 3.10.1 ENVIRONMENTAL SETTING

See IS/MND

#### 3.10.2 DISCUSSION

With the additional sites, the project’s environmental impacts related to land use and planning will be the same as those analyzed in the IS/MND.

### 3.11 MINERAL RESOURCES

| ENVIRONMENTAL ISSUES   | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact                           |
|--|--------------------------------|--|------------------------------|-------------------------------------|
| <b>XI. Mineral Resources. Would the project:</b>   |                                |  |                              |                                     |
| a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?                                 | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |
| b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan? | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |

#### 3.11.1 ENVIRONMENTAL SETTING

See IS/MND

### 3.11.2 DISCUSSION

[With the additional sites, the project's environmental impacts related to mineral resources will be the same as those analyzed in the IS/MND.](#)



### 3.12 NOISE

| ENVIRONMENTAL ISSUES  | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact        | No Impact                           |
|---|--------------------------------|--|-------------------------------------|-------------------------------------|
| <b>XII. Noise. Would the project result in:</b>   |                                |  |                                     |                                     |
| a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards?   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

#### 3.12.1 ENVIRONMENTAL SETTING

[See IS/MND](#)

#### 3.12.2 DISCUSSION

[With the additional sites, the project’s environmental impacts related to noise will be the same as those analyzed in the IS/MND.](#)

### 3.13 POPULATION AND HOUSING

| ENVIRONMENTAL ISSUES   | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact                           |
|--|--------------------------------|--|------------------------------|-------------------------------------|
| <b>XIII. Population and Housing. Would the project:</b>  |                                |  |                              |                                     |
| a) Induce substantial population growth in an area, either directly (for example, by proposing new | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |

homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

- b) Displace substantial numbers of existing homes, necessitating the construction of replacement housing elsewhere?
- c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

### 3.13.1 ENVIRONMENTAL SETTING

[See IS/MND](#)

### 3.13.2 DISCUSSION

[With the additional sites, the project’s environmental impacts related to population and housing will be the same as those analyzed in the IS/MND.](#)

## 3.14 PUBLIC SERVICES

| ENVIRONMENTAL ISSUES  | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact                           |
|---|--------------------------------|--|------------------------------|-------------------------------------|
| <b>XIV. Public Services. Would the project:</b>   |                                |  |                              |                                     |
| a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services: |                                |  |                              |                                     |
| Fire protection?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |
| Police protection?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |
| Schools?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |
| Parks?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |
| Other public facilities?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |

### 3.14.1 ENVIRONMENTAL SETTING

[See IS/MND](#)

### 3.14.2 DISCUSSION

[With the additional sites, the project’s environmental impacts related to public services will be the same as those analyzed in the IS/MND.](#)

## 3.15 RECREATION

| ENVIRONMENTAL ISSUES   | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact        | No Impact                |
|--|--------------------------------|--|-------------------------------------|--------------------------|
| <b>XV. Recreation. Would the project:</b>  |                                |  |                                     |                          |
| a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?                        | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

### 3.15.1 ENVIRONMENTAL SETTING

The District manages land primarily to preserve a regional greenbelt of open space land. District OSPs offer a variety of recreational opportunities to residents and visitors to the San Francisco Bay area. With over 220 miles of public trails inviting low-intensity recreational activities such as hiking, biking, jogging, horse-back riding, dog walking, and picnicking, District OSPs serve as popular weekday and weekend recreational destinations. There are relatively few improvements on District OSPs, other than gravel parking areas, public restrooms, informational signs, and maintenance and staging facilities.

Most treatment sites are located along trails and in areas that are open to public recreation; however a few of the sites are closed or are in areas that do not have recreational facilities (trails). Table 3.15-1 shows access information for the vegetation treatment sites.

| Open Space Preserve      | Site Name                               | Recreation Status                      |
|--------------------------|---|--|
| Bear Creek Redwoods      | Alma                                    | Closed                                 |
|                          | BC01                                    | Open by permit only                    |
|                          | Tree Farm                               | Closed                                 |
|                          | West Roads                              | Closed                                 |
| Coal Creek               | Page Mill & 35                          | Open, area with no trail or facilities |
| El Corte de Madera Creek | Lawrence Creek                          | Open                                   |
|                          | Methuselah Trail                        | Open                                   |
|                          | Future staging area between CM03 & CM04 | Open                                   |

| Table 3.15-1. Proposed Sites and Recreation Access Status |                                |                   |
|---|--------------------------------|-------------------|
| Open Space Preserve                                       | Site Name                      | Recreation Status |
|   | Virginia Mill Trail            | Open              |
| El Sereno   | Aquinas Trail                  | Open              |
|   | Loma vista                     | Open              |
|   | Overlook                       | Open              |
| Los Trancos   | Event Meadow                   | Open              |
|   | Fault Trail                    | Open              |
|   | Franciscan Loop Trail          | Open              |
|   | Greater Los Trancos            | Open              |
|   | Knoll                          | Open              |
|   | LT02                           | Open              |
|   | Norton                         | Open              |
|   | Parking Lot                    | Open              |
| Monte Bello   | Montebello Road                | Open              |
|   | Water Wheel Creek              | Open              |
| Pulgas Ridge  | Hassler Loop                   | Open              |
| Purisima Creek  | Harkins Ridge Cut-over         | Open              |
|   | Harkins Ridge Trail            | Open              |
|   | North Ridge                    | Open              |
|   | PC01                           | Open              |
|   | PC03                           | Open              |
|   | Upper Purisima Creek           | Open              |
| Rancho San Antonio  | Lower Meadow Trail             | Open              |
|   | Shop                           | Open              |
| Saratoga Gap  | Charcoal Residence             | Closed            |
|   | Lysons Property                | Closed            |
| Sierra Azul   | Air Base                       | Closed            |
|   | Austrian Gulch (Moss Property) | Closed            |
|   | Beatty                         | Closed            |
|   | Hicks Creek Ranch              | Closed            |
|   | Pheasant                       | Closed            |
|   | RDG                            | Closed            |
|   | Reynolds                       | Closed            |
|   | SA19                           | Closed            |
|   | Williams property              | Closed            |
| Skyline Ridge   | Tree Farm Restoration          | Open              |
| St. Joseph's Hill   | Vineyard                       | Open              |

| Table 3.15-1. Proposed Sites and Recreation Access Status |                      |                   |
|---|----------------------|-------------------|
| Open Space Preserve                                       | Site Name            | Recreation Status |
|   | Vista/Y Star/Hilltop | Open              |

Source: MROSD 2012; [\\*Sites added under this Addendum are highlighted in gray.](#)

### 3.15.2 DISCUSSION

[With the additional sites, the project's environmental impacts related to recreation will be the same as those analyzed in the IS/MND.](#)

### 3.16 TRANSPORTATION/TRAFFIC

| ENVIRONMENTAL ISSUES  | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact                           |
|---|--------------------------------|--|------------------------------|-------------------------------------|
| <b>XVI. Transportation/Traffic. Would the project:</b>  |                                |  |                              |                                     |
| a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |
| b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |
| c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |
| d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |
| e) Result in inadequate emergency access?   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |
| f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |

#### 3.16.1 ENVIRONMENTAL SETTING

[See IS/MND](#)

#### 3.16.2 DISCUSSION

[With the additional sites, the project’s environmental impacts related to transportation/traffic will be the same as those analyzed in the IS/MND.](#)

### 3.17 UTILITIES AND SERVICE SYSTEMS

| ENVIRONMENTAL ISSUES | Potentially Significant | Less Than Significant | Less Than Significant | No Impact |
|----------------------|-------------------------|-----------------------|-----------------------|-----------|
|----------------------|-------------------------|-----------------------|-----------------------|-----------|

|   | Impact                   | with Mitigation Incorporated | Impact                              |                                     |
|---|--------------------------|------------------------------|-------------------------------------|-------------------------------------|
| <b>XVII. Utilities and Service Systems. Would the project:</b>  |                          |                              |                                     |                                     |
| a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?   | <input type="checkbox"/> | <input type="checkbox"/>     | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?                            | <input type="checkbox"/> | <input type="checkbox"/>     | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?                                     | <input type="checkbox"/> | <input type="checkbox"/>     | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?  | <input type="checkbox"/> | <input type="checkbox"/>     | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| e) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand, in addition to the provider's existing commitments? | <input type="checkbox"/> | <input type="checkbox"/>     | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?  | <input type="checkbox"/> | <input type="checkbox"/>     | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| g) Comply with federal, state, and local statutes and regulations related to solid waste?   | <input type="checkbox"/> | <input type="checkbox"/>     | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

### 3.17.1 ENVIRONMENTAL SETTING

[See IS/MND](#)

### 3.17.2 DISCUSSION

- a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?
- b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Response to items a and b.

**No Impact.** The project would not generate any wastewater. No impact would occur.

- c) **Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

**No Impact.** Proposed project activities would be limited to vegetation management and would not result in any activities or uses that would increase stormwater runoff (e.g., grading, compaction, paving) such that new or expanded facilities would be required. No impact would occur.

- d) **Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?**
- e) **Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand, in addition to the provider's existing commitments?**

Response to items d and e.

**No Impact.** The proposed project would not consume water beyond existing use levels, and would not generate any wastewater. No impact would occur.

- f) **Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?**

- g) **Comply with federal, state, and local statutes and regulations related to solid waste?**

Response to items f and g.

**Less-than-significant Impact.** The project would generate minimal solid waste consistent with existing waste generation rates. No more than [220290](#) cubic yards of plant material would be disposed of into landfills. When appropriate, plant material would be left to decompose on site. The District's BMP 9 identifies the proper disposal requirements for herbicide containers. Because the project would not generate substantial solid waste above existing levels and appropriate disposal of waste containers would occur, the project would have less-than-significant impacts related to landfill capacity and compliance with applicable solid waste regulations.



### 3.18 MANDATORY FINDINGS OF SIGNIFICANCE

| ENVIRONMENTAL ISSUES  | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact        | No Impact                |
|---|--------------------------------|--|-------------------------------------|--------------------------|
| <b>XVIII. Mandatory Findings of Significance.</b>   |                                |  |                                     |                          |
| a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory? | <input type="checkbox"/>       | <input checked="" type="checkbox"/>                | <input type="checkbox"/>            | <input type="checkbox"/> |
| b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Authority: Public Resources Code Sections 21083, 21083.5.  
 Reference: Government Code Sections 65088.4.  
 Public Resources Code Sections 21080, 21083.5, 21095; *Eureka Citizens for Responsible Govt. v. City of Eureka* (2007) 147 Cal.App.4th 357; *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th at 1109; *San Franciscans Upholding the Downtown Plan v. City and County of San Francisco* (2002) 102 Cal.App.4th 656.

#### 3.18.1 DISCUSSION

a) **Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?**

***Less-than-significant with Mitigation Incorporated.*** As discussed in previous sections, the proposed project would not degrade the natural environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a native plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory. The proposed project is expected to restore and protect the long-term ecological integrity of the OSPs on which they are located.

BMPs identified in the Project Description (Section 2.7) and mitigation recommended as part of this IS would prevent impacts on natural resources. No sensitive special-status plant or animal species would be harmed, and no sensitive natural communities or habitats would be permanently or substantially affected. The project would not obstruct habitat corridors necessary for the movement of species. The project would not disturb geological, archaeological, paleontological, or historical resources. Impacts pertaining to biological and cultural resources were determined to be less than significant with mitigation incorporated.

- b) **Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)**

**Less-than-significant Impact.** The proposed project consists of a [4542](#) distinct and separate sites on 13 OSPs. In addition, the District has been implementing habitat improvement projects and vegetation management projects using IPM techniques for control of invasive species on a variety of sites throughout the district, and in some cases on adjacent lands. Recent and on-going vegetation management projects include invasive species control at Mindego Ranch on the Russian Ridge Preserve, pond improvements on the La Honda Preserve, and an IPM program for slender false brome on District lands and other adjacent open space lands. Because of the dispersed location of these projects, the environmental effects are site-specific and generally do not combine to create cumulative impacts. Impacts associated with population increases or demand for services and infrastructure would not result from these types of projects and, therefore, would not combine to create a significant cumulative impact. Impacts associated with water quality are minimized at each site through the use of protective measures or the District’s standard BMPs, such that no cumulative impacts would occur with projects located within the same drainages. Air emissions associated with the project in combination with other cumulative projects would be minimal and would be substantially below adopted thresholds. Therefore, the proposed project would not result in a considerable contribution to any significant cumulative impacts.

- c) **Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?**

**Less-than-significant Impact.** No substantial adverse effects on humans are expected. As described in the Hazards and Hazardous Materials section, implementation of BMP’s 1 through 10 would result in the appropriate storage, use, and transport of pesticides including minimizing over spray and potential contact with non-target species. As discussed in the Project Description, herbicides that would be used for treatment of invasive plants and SOD pathogen have low toxicity to humans. Section 3.8, Hazards and Hazardous Materials, describes potential impacts associated with general pesticide handling and Section 3.9, Hydrology and Water Quality, describes potential impacts associated with water quality degradation. Impacts on human health and safety were determined to be less than significant in these sections.

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## 5 REPORT PREPARERS (ADDENDUM)

### MIDPENINSULA REGIONAL OPEN SPACE DISTRICT

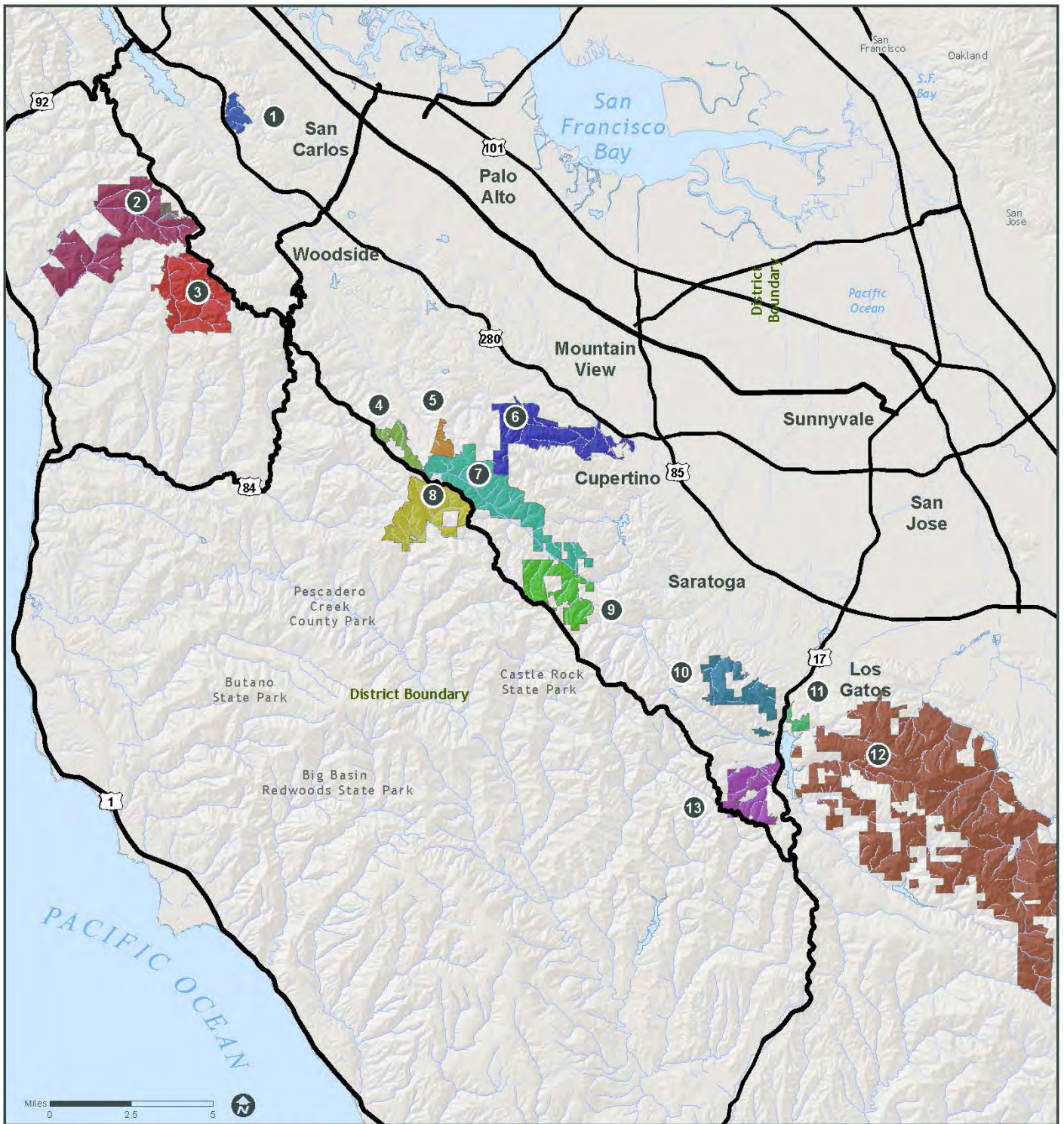
~~Cindy Roessler ..... Senior Resource Management Specialist~~  
Joel Silverman ..... Resource Management Specialist I  
~~Cindy Roessler ..... Senior Resource Management Specialist~~  
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~~Melinda Rivasplata ..... Environmental Planner~~  
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~~Austin Kerr ..... Senior Air/Noise Specialist~~  
~~Amber Giffin ..... Document Production~~

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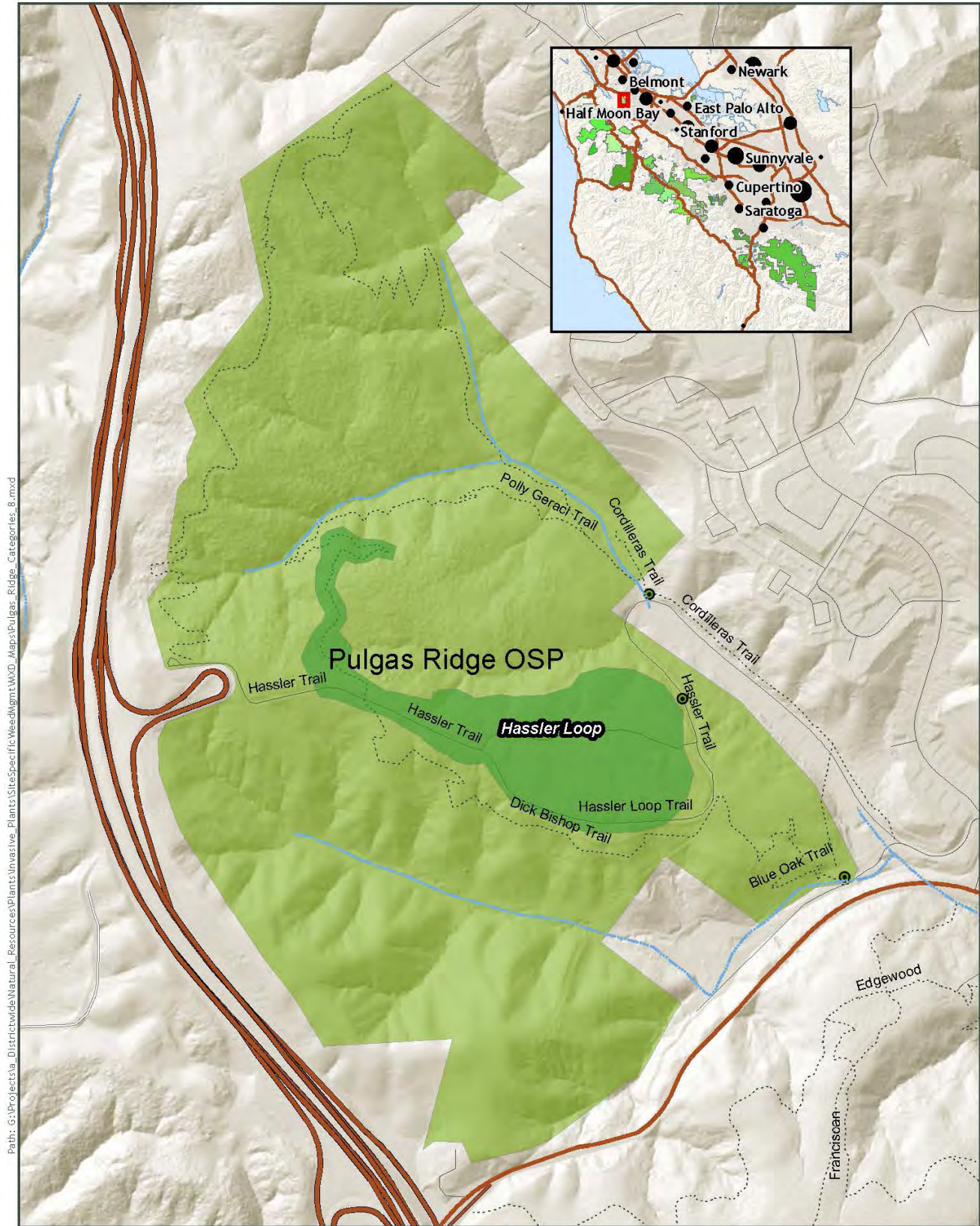


### Midpeninsula Regional Open Space District



*Note: Only Open Space Preserves Pertaining to This Document are Displayed*

- |                           |                        |
|---------------------------|------------------------|
| 1 Pulgas Ridge            | 8 Skyline Ridge        |
| 2 Purisima Creek Redwoods | 9 Saratoga Gap         |
| 3 El Corte de Madera      | 10 El Sereno           |
| 4 Coal Creek              | 11 St. Joseph's Hill   |
| 5 Los Trancos             | 12 Sierra Azul         |
| 6 Rancho San Antonio      | 13 Bear Creek Redwoods |
| 7 Monte Bello             |                        |

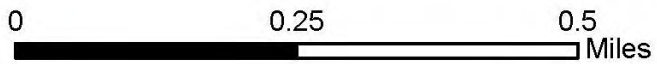


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While the District strives to use the best available digital data, this data does not represent a legal survey and is merely a graphic illustration of geographic features.

Midpeninsula Regional Open Space District (MROSD)

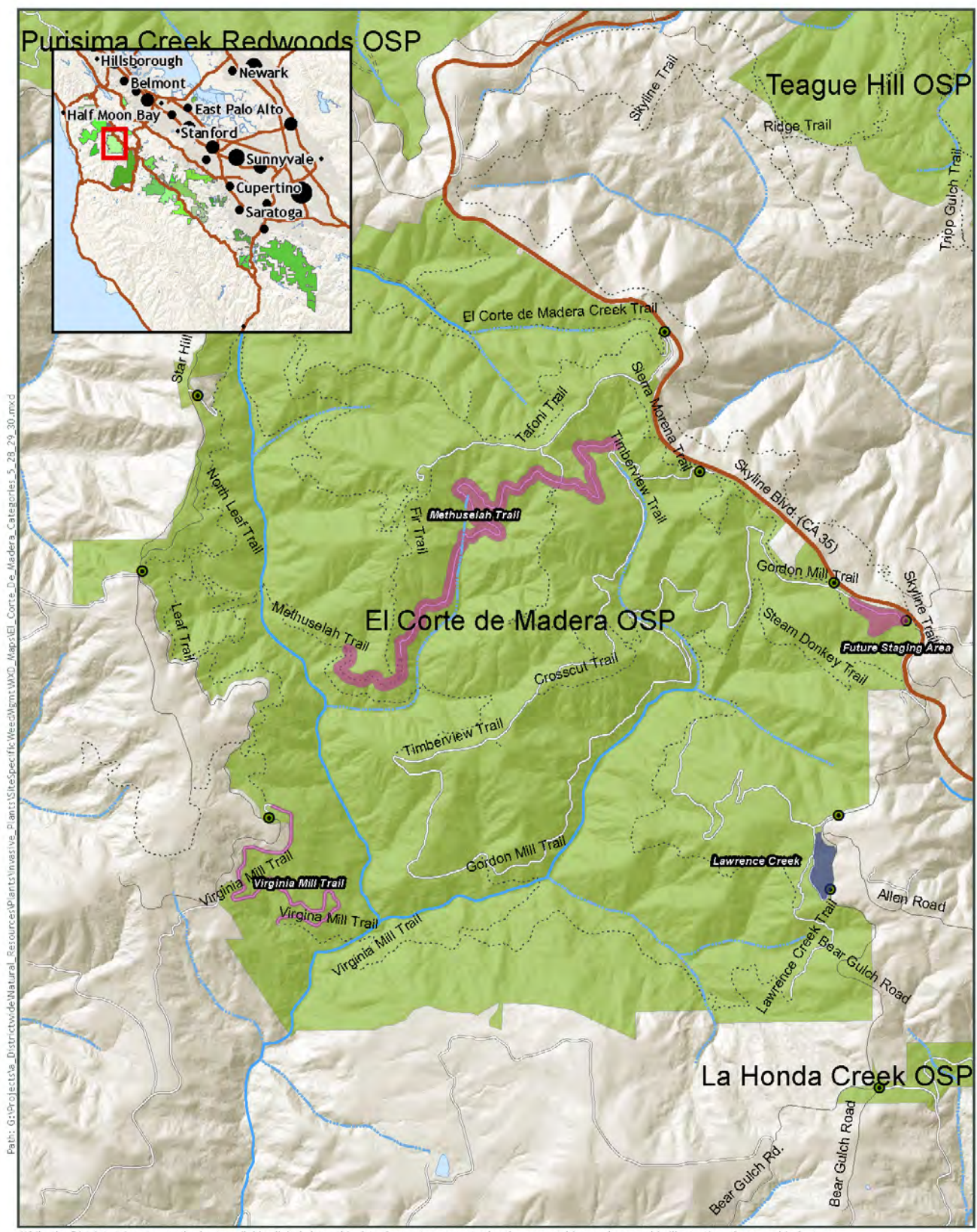
- Habitat restoration site
- MROSD Preserves



Last Updated: 3/15/2012

Pulgas Ridge Open Space Preserve



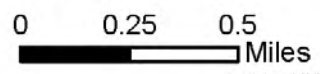


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- SOD
- Broom at selected sites
- MROSD Preserves

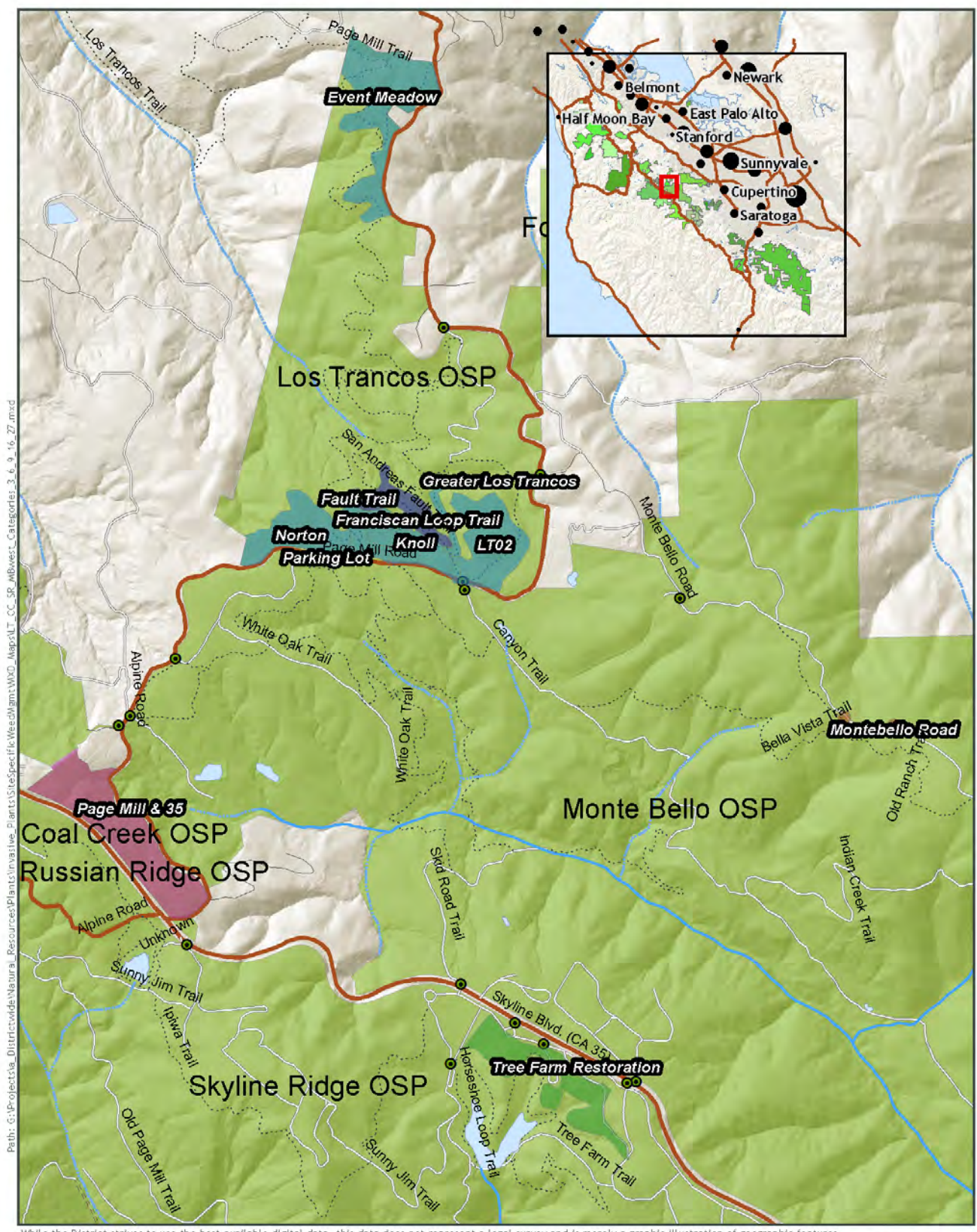
Midpeninsula Regional Open Space District (MROSD)



Last Updated: 3/22/2012



### El Corte de Madera OSP

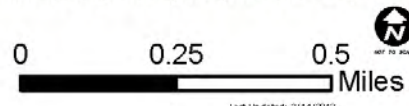


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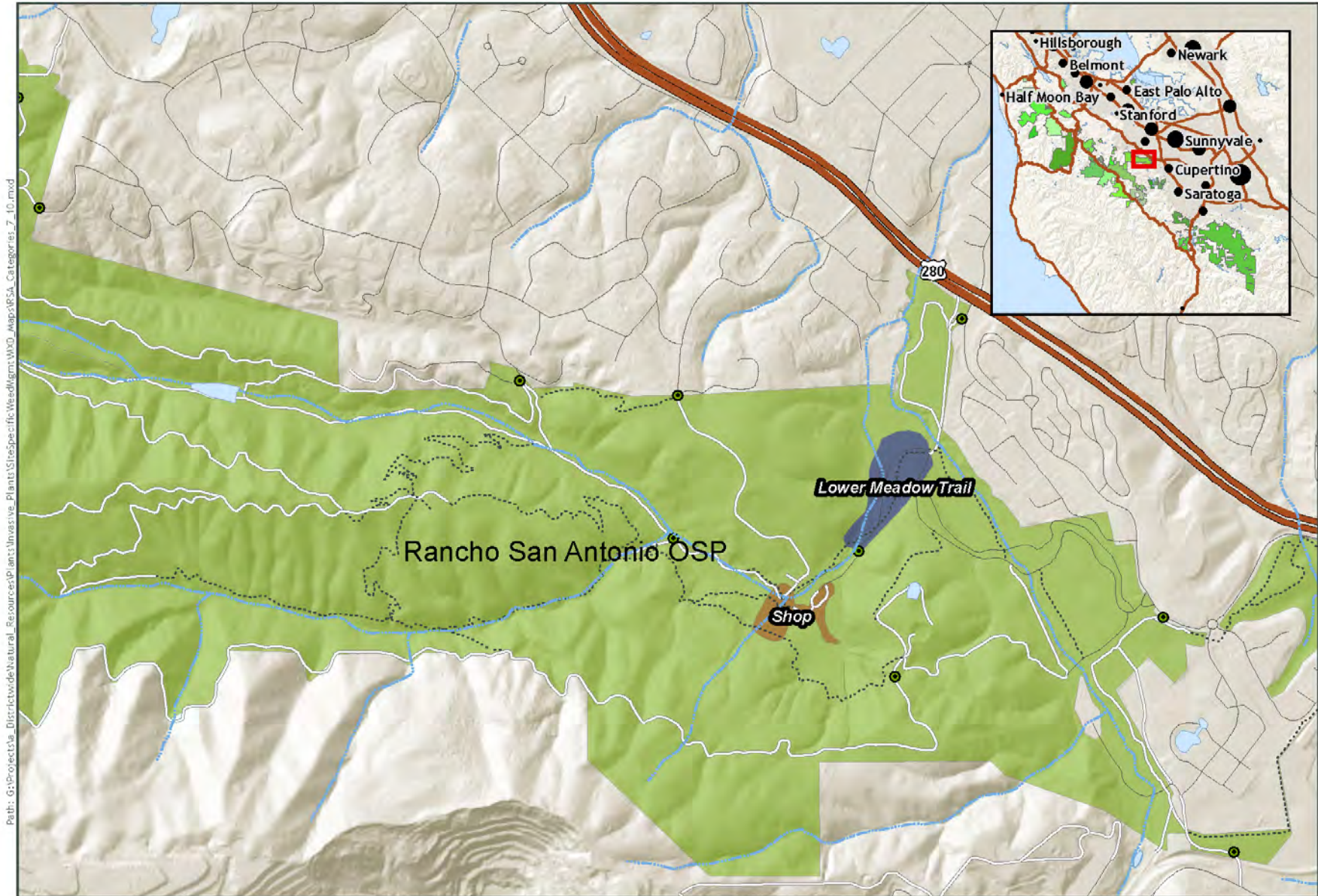
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- Habitat restoration site
- LT grassland weeds
- Broom at selected sites
- Satellite population of priority weeds
- SOD
- MROSD Preserves

Midpeninsula Regional Open Space District (MROSD)



Los Trancos Open Space Preserve

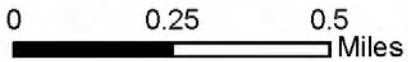


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- SOD
- Satellite population of priority weeds
- MROSD Preserves

Midpeninsula Regional Open Space District (MROSD)

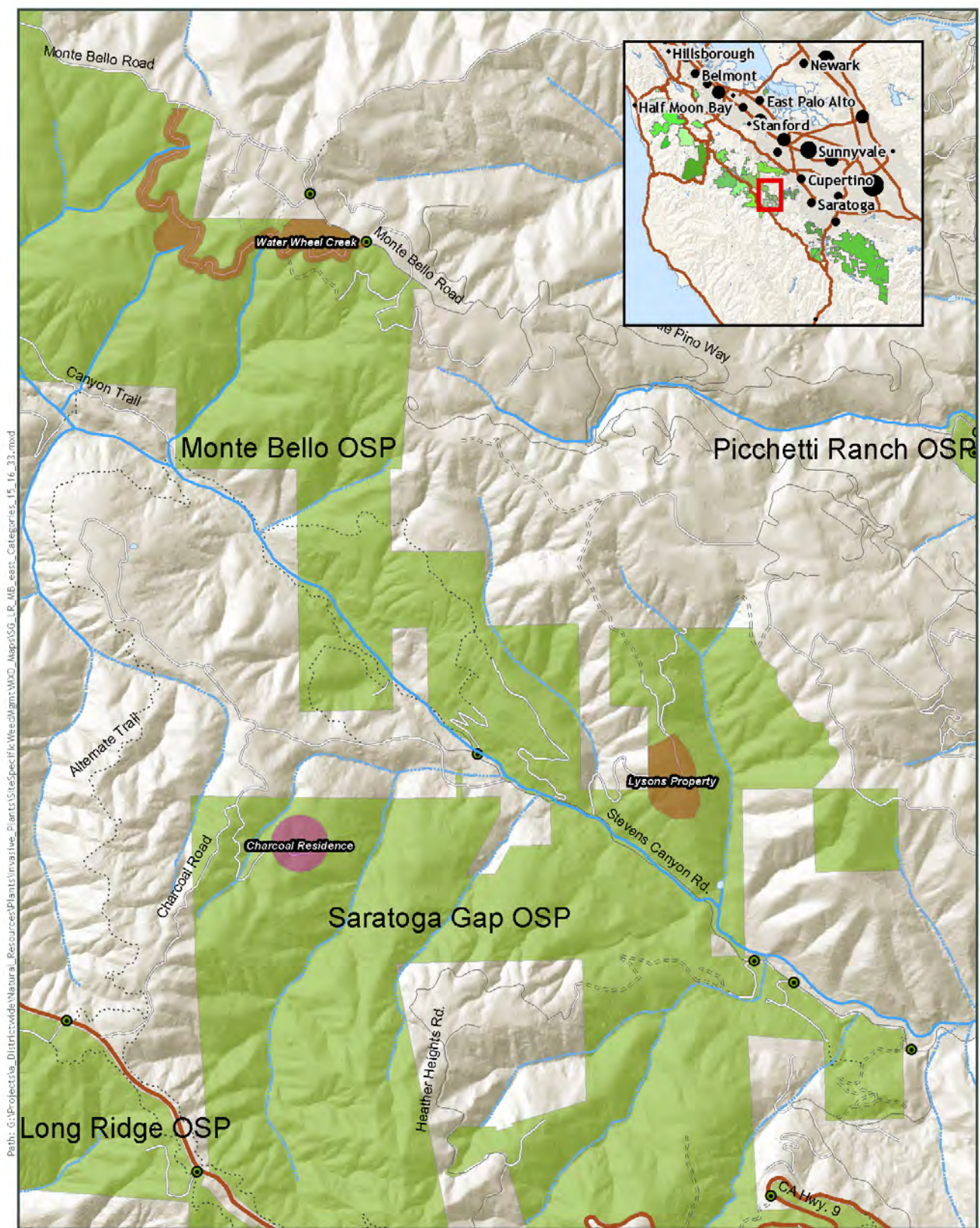


Last Updated: 3/21/2012



Rancho San Antonio Open Space Preserve





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While the District strives to use the best available digital data, this data does not represent a legal survey and is merely a graphic illustration of geographic features.

- Broom at selected sites
- Satellite population of priority weeds
- MROSD Preserves

**Midpeninsula Regional Open Space District (MROSD)**

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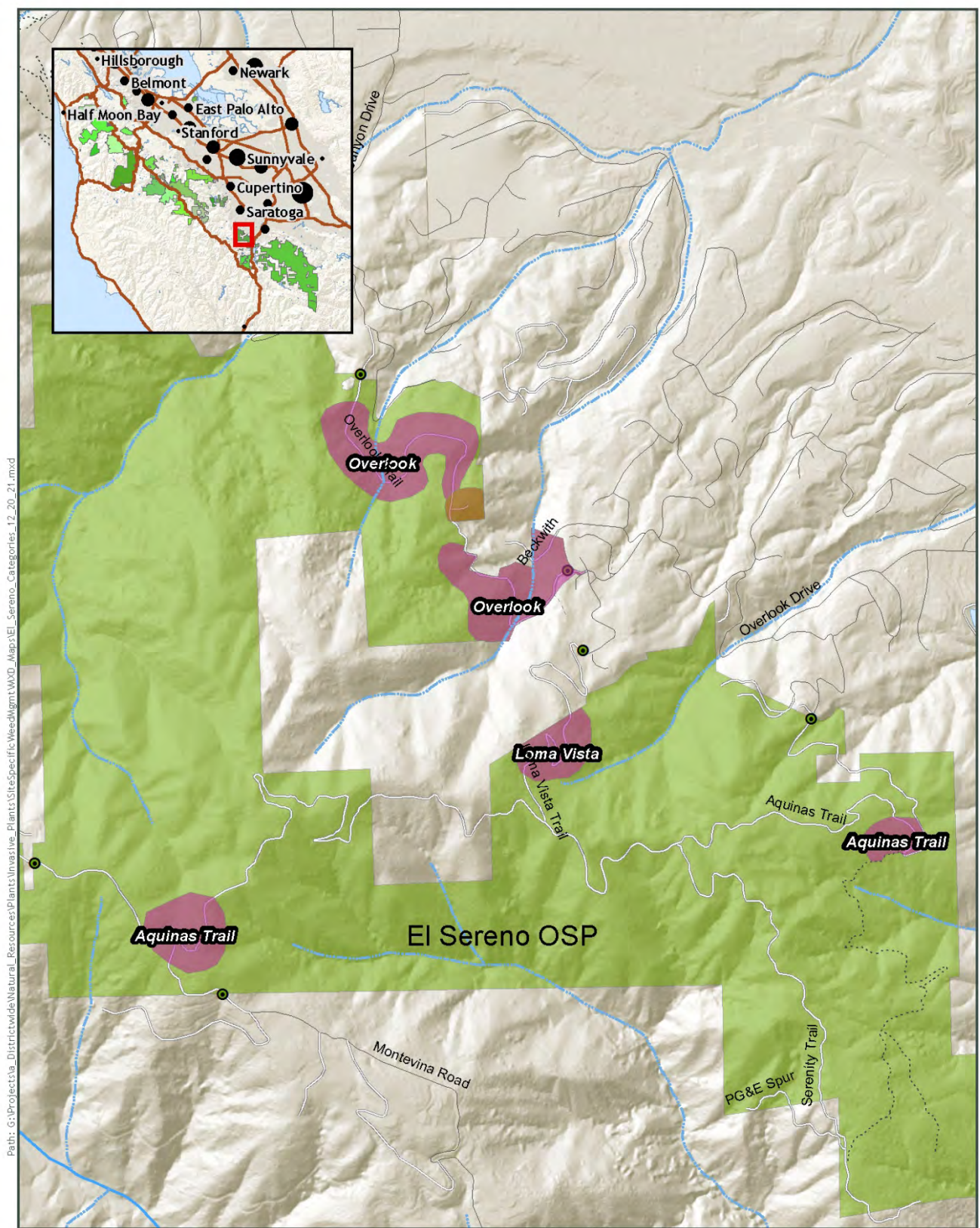
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REGIONAL  
OPEN  
SPACE

Last Updated: 3/15/2012

### Monte Bello and Saratoga Gap Open Space Preserves

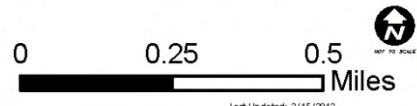


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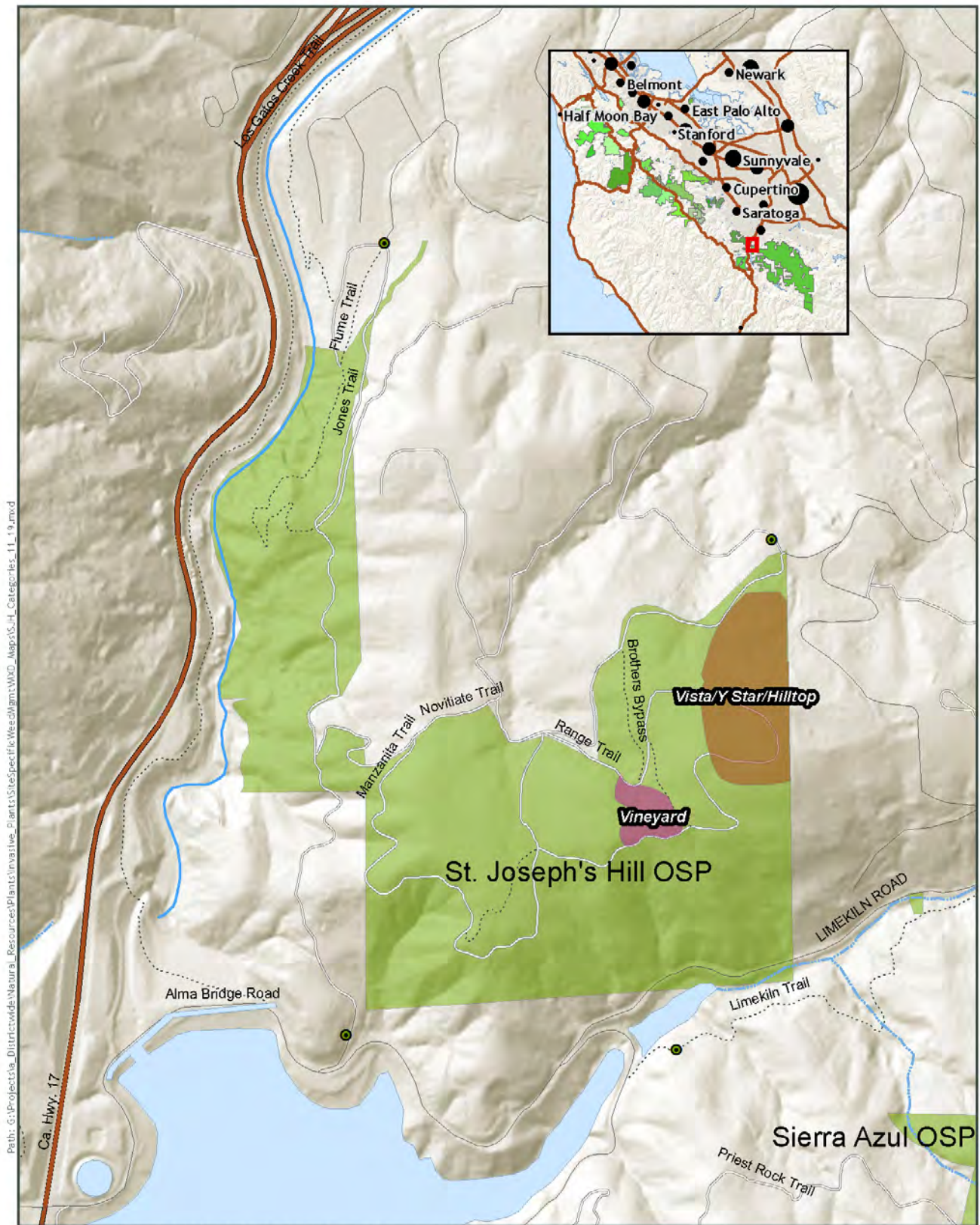
While the District strives to use the best available digital data, this data does not represent a legal survey and is merely a graphic illustration of geographic features.

- Satellite population of priority weeds
- Broom at selected sites
- MROSD Preserves

Midpeninsula Regional Open Space District (MROSD)



El Sereno Open Space Preserves



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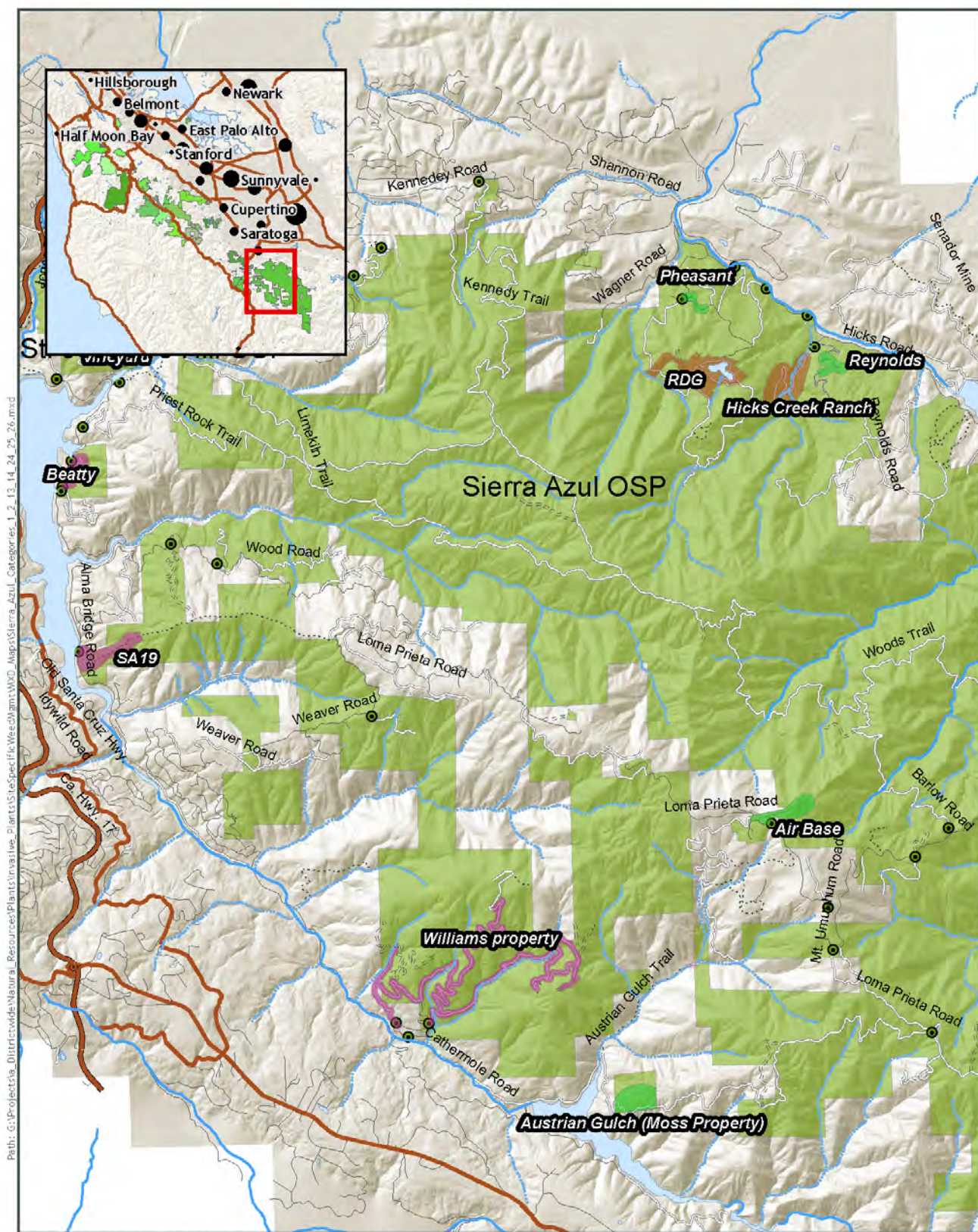
**Midpeninsula Regional Open Space District (MROSD)**

- Broom at selected sites
- Satellite population of priority weeds
- MROSD Preserves

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Miles

Last Updated: 3/15/2012

**St. Joseph's Hill Openspace Preserve**



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While the District strives to use the best available digital data, this data does not represent a legal survey and is merely a graphic illustration of geographic features.

- Broom at selected sites
- MROSD Preserves
- State rated noxious weed
- Satellite population of priority weeds

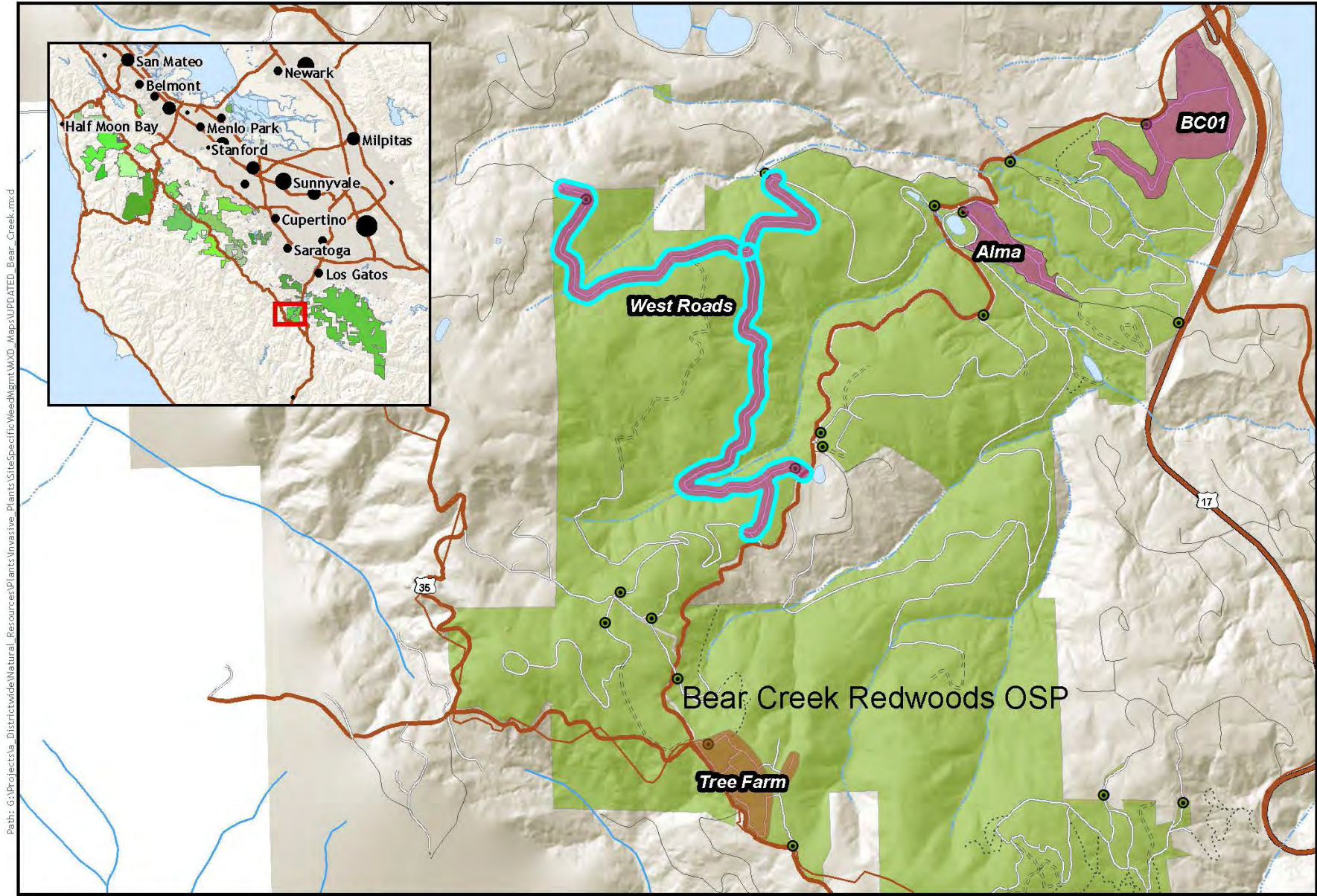
Midpeninsula Regional Open Space District (MROSD)

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Last Updated: 3/22/2012

### Sierra Azul Open Space Preserve

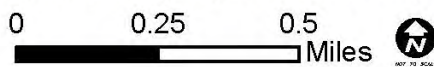


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While the District strives to use the best available digital data, this data does not represent a legal survey and is merely a graphic illustration of geographic features.

- Broom at selected sites
- Broom at selected sites (newly added under the Addendum)
- Woodland Weeds
- MROSD Preserves

Midpeninsula Regional Open Space District (MROSD)



Last Updated: 1/25/2013



### Bear Creek Redwoods Open Space Preserve

### Appendix C. Detailed Treatment Table of Past Activities (Updated for Addendum)

| Preserve            | Site Name                                | Management Category                     | Target Pest          | Treatment Method | Type of Herbicide     | Application Method    | Gallons of herbicide | Gross Treatment Acres |
|---------------------|--|---|----------------------|------------------|-----------------------|-----------------------|----------------------|-----------------------|
| Bear Creek Redwoods | Alma College                             | Broom control                           | French broom         | Herbicide        | Round Up Pro Max      | backpack/spot sprayer | 1.8                  | 11.9                  |
|                     |  | Broom control                           | French broom         | Herbicide        | Round Up Pro Max      | backpack/spot sprayer | 3.1                  | 11.9                  |
|                     | BC01                                     | Broom control                           | French broom         | Pull             | N/A                   | N/A                   | N/A                  | 17.3                  |
|                     |  | Broom control                           | French broom         | Pull             | N/A                   | N/A                   | N/A                  | 17.3                  |
|                     | Tree Farm                                | Woodland weeds                          | Eggleaf spurge       | Herbicide        | Round Up Pro Max      | backpack/spot sprayer | 0.1                  | 34.4                  |
|                     |  | Woodland weeds                          | French broom         | Herbicide        | Round Up Pro Max      | backpack/spot sprayer | 0.5                  | 34.4                  |
|                     |  | Woodland weeds                          | French broom         | Herbicide        | Round Up Pro Max      | backpack/spot sprayer | 0.8                  | 1.4                   |
|                     |  | Woodland weeds                          | French broom         | Pull             | N/A                   | N/A                   | N/A                  | 17.3                  |
|                     |  | Woodland weeds                          | mullein              | Pull             | N/A                   | N/A                   | N/A                  | 16.9                  |
|                     |  | Woodland weeds                          | St. John's wort      | Herbicide        | Round Up Pro Max      | backpack/spot sprayer | 0.05                 | 15.5                  |
|                     |  | Woodland weeds                          | stinkwort            | Herbicide        | Round Up Pro Max      | backpack/spot sprayer | 0.01                 | 15.5                  |
|                     |  | Woodland weeds                          | stinkwort            | Pull             | N/A                   | N/A                   | N/A                  | 16.9                  |
|                     |  | Woodland weeds                          | sweet pea            | Herbicide        | Round Up Pro Max      | backpack/spot sprayer | 0.8                  | 15.5                  |
|                     |  | Woodland weeds                          | Xmas trees           | Chainsaw         | N/A                   | N/A                   | N/A                  | 16.9                  |
|                     | West Roads                               | Broom control                           | French broom         | Herbicide        | Round Up Pro Max      | backpack/spot sprayer | 3.0                  | 55.9                  |
| Broom control       |  | French broom                            | Pull                 | N/A              | N/A                   | N/A                   | 55.9                 |                       |
| Coal Creek          | Page Mill & Highway 35                   | Broom control                           | French broom         | Herbicide        | Round Up Pro Max      | backpack/spot sprayer | 0.04                 | 15.5                  |
|                     |  | Broom control                           | French broom         | Pull             | N/A                   | N/A                   | N/A                  | 16.9                  |
|                     |  | Broom control                           | Spanish broom        | Herbicide        | Round Up Pro Max      | backpack/spot sprayer | 0.04                 | 15.5                  |
|                     |  | Broom control                           | Spanish broom        | Herbicide        | Round Up Pro Max      | backpack/spot sprayer | 0.04                 | 15.5                  |
| El Corte de Madera  | Lawrence Creek Trail                     | Sudden Oak Death                        | Bay laurel           | Herbicide        | Round Up Pro Max      | cut-stump, squirt     | 0.2                  | 48.6                  |
|                     |  | Sudden Oak Death                        | Bay laurel           | Pull             | N/A                   | N/A                   | N/A                  | 14.3                  |
|                     |  | Sudden Oak Death                        | Phytophthora ramorum | Herbicide        | Agri-Fos & Pentrabark | tank sprayer          | 18.3                 | 14.3                  |
|                     | Methuselah Trail                         | Broom control                           | French broom         | Herbicide        | Round Up Pro Max      | backpack/spot sprayer | 0.2                  | 15.5                  |
|                     |  | Broom control                           | French broom         | Flaming          | N/A                   | N/A                   | N/A                  | 7.4                   |
|                     | Future staging areas between CM03 & CM04 | Broom control                           | French broom         | Herbicide        | Round Up Pro Max      | backpack/spot sprayer | 0.04                 | 15.5                  |
|                     |  | Broom control                           | French broom         | Herbicide        | Round Up Pro Max      | backpack/spot sprayer | 0.04                 | 15.5                  |
|                     |  | Broom control                           | French broom         | Herbicide        | Round Up Pro Max      | backpack/spot sprayer | 0.1                  | 24.8                  |
|                     |  | Broom control                           | French broom         | Pull             | N/A                   | N/A                   | N/A                  | 14.3                  |
|                     | Virginia Mill Trail                      | Broom control                           | French broom         | Pull             | N/A                   | N/A                   | N/A                  | 14.3                  |
| Broom control       |  | French broom                            | Pull                 | N/A              | N/A                   | N/A                   | 15.2                 |                       |
| El Sereno           | Aquinas Trail                            | Broom control                           | French broom         | Herbicide        | Round Up Pro Max      | backpack/spot sprayer | 0.3                  | 24.8                  |
|                     |  | Broom control                           | French broom         | Herbicide        | Round Up Pro Max      | backpack/spot sprayer | 0.5                  | 24.8                  |
|                     |  | Broom control                           | French broom         | Pull             | N/A                   | N/A                   | N/A                  | 15.2                  |
|                     | Loma Vista Trail                         | Broom control                           | French broom         | Herbicide        | Round Up Pro Max      | backpack/spot sprayer | 0.2                  | 24.8                  |
|                     |  | Broom control                           | French broom         | Pull             | N/A                   | N/A                   | N/A                  | 20.5                  |
|                     | Overlook Trail                           | Broom control                           | French broom         | Herbicide        | Round Up Pro Max      | backpack/spot sprayer | 0.8                  | 6.4                   |
|                     |  | Broom control                           | French broom         | Herbicide        | Round Up Pro Max      | backpack/spot sprayer | 1.6                  | 6.4                   |
|                     |  | Satellite populations of priority weeds | Stinkwort            | Herbicide        | Round Up Pro Max      | backpack/spot sprayer | 0.2                  | 6.4                   |

| Preserve        | Site Name             | Management Category                     | Target Pest          | Treatment Method | Type of Herbicide     | Application Method    | Gallons of herbicide | Gross Treatment Acres |
|-----------------|-----------------------|---|----------------------|------------------|-----------------------|-----------------------|----------------------|-----------------------|
| Los Trancos     | Event Meadow          | Grassland weeds                         | harding grass        | Herbicide        | Round Up Pro Max      | backpack/spot sprayer | 0.05                 | 49.3                  |
|                 |                       | Grassland weeds                         | yellow starthistle   | Herbicide        | Milestone VM          | backpack/spot sprayer | 0.02                 | 49.3                  |
|                 | Fault Trail           | Sudden Oak Death                        | Bay laurel           | Herbicide        | Round Up Pro Max      | cut-stump, squirt     | 0.2                  | 48.6                  |
|                 |                       | Sudden Oak Death                        | Bay laurel           | Herbicide        | Round Up Pro Max      | cut-stump, squirt     | 0.1                  | 48.6                  |
|                 |                       | Sudden Oak Death                        | Bay laurel           | Herbicide        | Round Up Pro Max      | cut-stump, squirt     | 0.00                 | 35.6                  |
|                 |                       | Sudden Oak Death                        | Bay laurel           | Herbicide        | Round Up Pro Max      | cut-stump, squirt     | 0.00                 | 35.6                  |
|                 |                       | Sudden Oak Death                        | Bay laurel           | Herbicide        | Round Up Pro Max      | cut-stump, squirt     | 0.00                 | 35.6                  |
|                 |                       | Sudden Oak Death                        | Bay laurel           | Herbicide        | Round Up Pro Max      | cut-stump, squirt     | 0.00                 | 35.6                  |
|                 |                       | Sudden Oak Death                        | Bay laurel           | Herbicide        | Round Up Pro Max      | cut-stump, squirt     | 0.00                 | 35.6                  |
|                 |                       | Sudden Oak Death                        | Bay laurel           | Herbicide        | Round Up Pro Max      | cut-stump, squirt     | 0.00                 | 35.6                  |
|                 |                       | Sudden Oak Death                        | Bay laurel           | Herbicide        | Round Up Pro Max      | cut-stump, squirt     | 0.00                 | 35.6                  |
|                 |                       | Sudden Oak Death                        | Bay laurel           | Pull             | N/A                   | N/A                   | N/A                  | 21.9                  |
|                 | Franciscan Loop Trail | Sudden Oak Death                        | Bay laurel           | Herbicide        | Round Up Pro Max      | backpack/spot sprayer | 0.2                  | 6.6                   |
|                 |                       | Sudden Oak Death                        | Bay laurel           | Herbicide        | Round Up Pro Max      | cut-stump, squirt     | 0.2                  | 35.6                  |
|                 |                       | Sudden Oak Death                        | Bay laurel           | Herbicide        | Round Up Pro Max      | cut-stump, squirt     | 0.0                  | 35.6                  |
|                 | Greater Los Trancos   | Grassland weeds                         | Jointed Goatgrass    | Pull             | N/A                   | N/A                   | N/A                  | 27.2                  |
|                 |                       | Grassland weeds                         | yellow starthistle   | Pull             | N/A                   | N/A                   | N/A                  | 14.0                  |
|                 |                       | Sudden Oak Death                        | Phytophthora ramorum | Herbicide        | Agri-Fos & Pentrabark | tank sprayer          | 16.8                 | 14.3                  |
|                 | Knoll                 | Grassland weeds                         | yellow starthistle   | Herbicide        | Milestone VM          | backpack/spot sprayer | 0.05                 | 6.6                   |
|                 |                       | Grassland weeds                         | medusahead           | Brush-cut        | N/A                   | N/A                   | N/A                  | 14.0                  |
|                 |                       | Grassland weeds                         | yellow starthistle   | Pull             | N/A                   | N/A                   | N/A                  | 14.0                  |
|                 | LT02                  | Grassland weeds                         | yellow starthistle   | Herbicide        | Milestone VM          | backpack/spot sprayer | 0.5                  | 6.6                   |
|                 | Norton                | Grassland weeds                         | harding grass        | Herbicide        | Round Up Pro Max      | backpack/spot sprayer | 0.1                  | 6.6                   |
|                 |                       | Grassland weeds                         | harding grass        | Herbicide        | Round Up Pro Max      | backpack/spot sprayer | 0.1                  | 9.7                   |
|                 |                       | Grassland weeds                         | yellow starthistle   | Herbicide        | Milestone VM          | backpack/spot sprayer | 0.04                 | 9.7                   |
|                 |                       | Grassland weeds                         | yellow starthistle   | Herbicide        | Milestone VM          | backpack/spot sprayer | 0.04                 | 6.5                   |
|                 |                       | Grassland weeds                         | medusahead           | Brush-cut        | N/A                   | N/A                   | N/A                  | 14.0                  |
|                 |                       | Grassland weeds                         | yellow starthistle   | Pull             | N/A                   | N/A                   | N/A                  | 14.0                  |
|                 |                       | Grassland weeds                         | yellow starthistle   | Pull             | N/A                   | N/A                   | N/A                  | 14.0                  |
|                 | Parking Lot           | Grassland weeds                         | harding grass        | Herbicide        | Round Up Pro Max      | backpack/spot sprayer | 0.05                 | 15.4                  |
| Grassland weeds |                       | harding grass                           | Herbicide            | Round Up Pro Max | backpack/spot sprayer | 0.4                   | 15.4                 |                       |
| Grassland weeds |                       | yellow starthistle                      | Herbicide            | Milestone VM     | backpack/spot sprayer | 0.03                  | 11.2                 |                       |
| Monte Bello     | Montebello Road       | Satellite populations of priority weeds | Purple Star Thistle  | Herbicide        | Milestone VM          | backpack/spot sprayer | 0.02                 | 11.2                  |
|                 |                       | Satellite populations of priority weeds | Purple Star Thistle  | Herbicide        | Milestone VM          | backpack/spot sprayer | 0.02                 | 23.9                  |
|                 |                       | Satellite populations of priority weeds | Purple Star Thistle  | Dig              | N/A                   | N/A                   | N/A                  | 14.0                  |
|                 |                       | Satellite populations of priority weeds | Purple Star Thistle  | Dig              | N/A                   | N/A                   | N/A                  | 14.0                  |
|                 | Water Wheel Creek     | Satellite populations of priority weeds | Purple Star Thistle  | Herbicide        | Milestone VM          | backpack/spot sprayer | 0.02                 | 30.7                  |
|                 |                       | Satellite populations of priority weeds | Purple Star Thistle  | Herbicide        | Milestone VM          | backpack/spot sprayer | 0.02                 | 3.5                   |
|                 |                       | Satellite populations of priority weeds | Purple Star Thistle  | Dig              | N/A                   | N/A                   | N/A                  | 45.7                  |

| Preserve                 | Site Name             | Management Category                     | Target Pest          | Treatment Method | Type of Herbicide     | Application Method    | Gallons of herbicide | Gross Treatment Acres |
|--------------------------|-----------------------|---|----------------------|------------------|-----------------------|-----------------------|----------------------|-----------------------|
| Pulgas Ridge             | Hassler Loop          | Habitat restoration                     | Acacia sprouts       | Pull             | N/A                   | N/A                   | N/A                  | 3.5                   |
|                          |                       | Habitat restoration                     | eucalyptus           | Herbicide        | Round Up Pro Max      | cut-stump, squirt     | 0.1                  | 35.6                  |
|                          |                       | Habitat restoration                     | eucalyptus           | Herbicide        | Round Up Pro Max      | cut-stump, squirt     | 0.1                  | 35.6                  |
|                          |                       | Habitat restoration                     | French Broom         | Herbicide        | Round Up Pro Max      | backpack/spot sprayer | 0.1                  | 22.0                  |
|                          |                       | Habitat restoration                     | French Broom         | Herbicide        | Round Up Pro Max      | backpack/spot sprayer | 0.1                  | 22.0                  |
|                          |                       | Habitat restoration                     | French broom         | Pull             | N/A                   | N/A                   | N/A                  | 4.0                   |
|                          |                       | Habitat restoration                     | Stinkwort            | Herbicide        | Round Up Pro Max      | backpack/spot sprayer | 0.2                  | 0.02                  |
|                          |                       | Habitat restoration                     | Stinkwort            | Herbicide        | Round Up Pro Max      | backpack/spot sprayer | 0.2                  | 0.02                  |
|                          |                       | Habitat restoration                     | Stinkwort            | Herbicide        | Round Up Pro Max      | backpack/spot sprayer | 0.2                  | 0.02                  |
|                          |                       | Habitat restoration                     | Stinkwort            | Pull             | N/A                   | N/A                   | N/A                  | 59.1                  |
| Purisima Creek           | Harkins Ridge Cutover | Broom control                           | French broom         | Herbicide        | Round Up Pro Max      | backpack/spot sprayer | 0.00                 | 0.02                  |
|                          |                       | Broom control                           | French broom         | Pull             | N/A                   | N/A                   | N/A                  | 13.1                  |
|                          | Harkins Ridge Trail   | Broom control                           | French broom         | Herbicide        | Round Up Pro Max      | backpack/spot sprayer | 0.3                  | 0.02                  |
|                          |                       | Broom control                           | French broom         | Herbicide        | Round Up Pro Max      | backpack/spot sprayer | 1.0                  | 0.02                  |
|                          |                       | Broom control                           | French broom         | Pull             | N/A                   | N/A                   | N/A                  | 30.1                  |
|                          | North Ridge           | Satellite populations of priority weeds | English holly        | Herbicide        | Round Up Pro Max      | cut-stump, squirt     | 0.02                 | 35.6                  |
|                          |                       | Satellite populations of priority weeds | English ivy          | Herbicide        | Round Up Pro Max      | cut-stump, squirt     | 0.03                 | 23.9                  |
|                          |                       | Satellite populations of priority weeds | English ivy          | Pull             | N/A                   | N/A                   | N/A                  | 30.1                  |
|                          | PC01                  | Satellite populations of priority weeds | English ivy          | Herbicide        | Round Up Pro Max      | cut-stump, squirt     | 0.03                 | 23.9                  |
|                          |                       | Satellite populations of priority weeds | English ivy          | Herbicide        | Round Up Pro Max      | cut-stump, squirt     | 0.03                 | 110.4                 |
|                          |                       | Satellite populations of priority weeds | Cape ivy             | Herbicide        | Round Up Pro Max      | cut-stump, squirt     | 0.01                 | 16.9                  |
|                          |                       | Satellite populations of priority weeds | English ivy          | Pull             | N/A                   | N/A                   | N/A                  | 30.1                  |
|                          | PC03                  | Broom control                           | French Broom         | Herbicide        | Round Up Pro Max      | backpack/spot sprayer | 1.0                  | 37.1                  |
|                          |                       | Broom control                           | French Broom         | Pull             | N/A                   | N/A                   | N/A                  | 37.1                  |
| Upper Purisima Creek Rd. | Broom control         | French Broom                            | Herbicide            | Round Up Pro Max | backpack/spot sprayer | 2.0                   | 116.9                |                       |
|                          | Broom control         | French Broom                            | Pull                 | N/A              | N/A                   | N/A                   | 116.9                |                       |
| Rancho San Antonio       | Lower Meadow Trail    | Sudden Oak Death                        | Bay laurel           | Herbicide        | Round Up Pro Max      | cut-stump, squirt     | 0.1                  | 110.4                 |
|                          |                       | Sudden Oak Death                        | Bay laurel           | Pull             | N/A                   | N/A                   | N/A                  | 146.4                 |
|                          |                       | Sudden Oak Death                        | Phytophthora ramorum | Herbicide        | Agri-Fos & Pentrabark | tank sprayer          | 4.6                  | 14.3                  |
|                          | Shop                  | Satellite populations of priority weeds | Stinkwort            | Herbicide        | Round Up Pro Max      | backpack/spot sprayer | 0.2                  | 0.02                  |
| St. Joseph's Hill        | Vineyard              | Broom control                           | French broom         | Herbicide        | Round Up Pro Max      | backpack/spot sprayer | 0.2                  | 0.5                   |
|                          |                       | Broom control                           | French broom         | Pull             | N/A                   | N/A                   | N/A                  | 15.6                  |
|                          | Vista/Y Star/Hilltop  | Broom control                           | French Broom         | Herbicide        | Round Up Pro Max      | backpack/spot sprayer | 3.1                  | 0.4                   |
|                          |                       | Broom control                           | French broom         | Pull             | N/A                   | N/A                   | N/A                  | 2.8                   |
|                          |                       | Satellite populations of priority weeds | Stinkwort            | Pull             | N/A                   | N/A                   | N/A                  | 2.8                   |
| Saratoga Gap             | Charcoal Residence    | Broom control                           | French broom         | Herbicide        | Round Up Pro Max      | backpack/spot sprayer | 0.7                  | 0.02                  |
|                          |                       | Broom control                           | French broom         | Pull             | N/A                   | N/A                   | N/A                  | 146.4                 |
|                          | Lysons Property       | Satellite populations of priority weeds | stinkwort            | Herbicide        | Round Up Pro Max      | backpack/spot sprayer | 0.1                  | 6.0                   |



| Preserve            | Site Name                      | Management Category                     | Target Pest       | Treatment Method      | Type of Herbicide | Application Method        | Gallons of herbicide | Gross Treatment Acres |
|---------------------|--------------------------------|---|-------------------|-----------------------|-------------------|---------------------------|----------------------|-----------------------|
| Sierra Azul         | Air Base                       | State-rated noxious weeds               | Spotted Knapweed  | Herbicide             | Milestone VM      | backpack/spot sprayer     | 0.1                  | 0.02                  |
|                     | Austrian Gulch (Moss Property) | State-rated noxious weeds               | Eggleaf spurge    | Herbicide             | Round Up Pro Max  | backpack/spot sprayer     | 0.2                  | 0.02                  |
|                     | Beatty                         | Broom control                           | French broom      | Herbicide             | Round Up Pro Max  | backpack/spot sprayer     | 0.6                  | 0.03                  |
|                     |                                | Satellite populations of priority weeds | Stinkwort         | Herbicide             | Round Up Pro Max  | backpack/spot sprayer     | 1.1                  | 4.6                   |
|                     |                                | Satellite populations of priority weeds | Stinkwort         | Herbicide             | Round Up Pro Max  | herbicide wand/brush/wick | 0.3                  | 110.4                 |
|                     |                                | Broom control                           | French broom      | Pull                  | N/A               | N/A                       | N/A                  | 15.6                  |
|                     |                                | Broom control                           | French broom      | Pull                  | N/A               | N/A                       | N/A                  | 15.6                  |
|                     |                                | Broom control                           | French broom      | Pull                  | N/A               | N/A                       | N/A                  | 15.6                  |
|                     |                                | Broom control                           | French broom      | Pull                  | N/A               | N/A                       | N/A                  | 15.6                  |
|                     | Hicks Creek Ranch              | Satellite populations of priority weeds | Stinkwort         | Herbicide             | Round Up Pro Max  | backpack/spot sprayer     | 0.9                  | 2.7                   |
|                     | Pheasant                       | State-rated noxious weeds               | Eggleaf spurge    | Herbicide             | Round Up Pro Max  | backpack/spot sprayer     | 0.2                  | 6.0                   |
|                     |                                | State-rated noxious weeds               | Eggleaf Spurge    | Herbicide             | Round Up Pro Max  | backpack/spot sprayer     | 0.1                  | 5.5                   |
|                     | RDG                            | Satellite populations of priority weeds | harding grass     | Herbicide             | Round Up Pro Max  | backpack/spot sprayer     | 0.5                  | 5.5                   |
|                     |                                | Satellite populations of priority weeds | Stinkwort         | Herbicide             | Round Up Pro Max  | backpack/spot sprayer     | 0.5                  | 4.8                   |
|                     | Reynolds                       | State-rated noxious weeds               | Eggleaf spurge    | Herbicide             | Round Up Pro Max  | backpack/spot sprayer     | 0.2                  | 14.1                  |
|                     | SA19                           | Broom control                           | French broom      | Herbicide             | Round Up Pro Max  | backpack/spot sprayer     | 0.3                  | 12.5                  |
|                     |                                | Broom control                           | French broom      | Herbicide             | Round Up Pro Max  | backpack/spot sprayer     | 0.5                  | 12.5                  |
|                     |                                | Broom control                           | French broom      | Herbicide             | Round Up Pro Max  | backpack/spot sprayer     | 0.9                  | 12.5                  |
|                     |                                | Broom control                           | French broom      | Pull                  | N/A               | N/A                       | N/A                  | 15.6                  |
|                     | Williams property              | Broom control                           | French broom      | Herbicide             | Round Up Pro Max  | backpack/spot sprayer     | 4.7                  | 2.4                   |
| Broom control       |                                | French broom                            | Pull              | N/A                   | N/A               | N/A                       | 15.6                 |                       |
| Skyline Ridge       | Tree Farm Restoration          | Habitat restoration                     | bristly ox tongue | Herbicide             | Milestone VM      | backpack/spot sprayer     | 0.02                 | 12.5                  |
|                     |                                | Habitat restoration                     | bristly ox tongue | Pull                  | N/A               | N/A                       | N/A                  | 15.6                  |
|                     |                                | Habitat restoration                     | bull thistle      | Dig                   | N/A               | N/A                       | N/A                  | 15.6                  |
|                     |                                | Habitat restoration                     | bull thistle      | Herbicide             | Milestone VM      | backpack/spot sprayer     | 0.02                 | 12.5                  |
|                     |                                | Habitat restoration                     | French broom      | Herbicide             | Round Up Pro Max  | backpack/spot sprayer     | 0.1                  | 12.5                  |
|                     |                                | Habitat restoration                     | French broom      | Pull                  | N/A               | N/A                       | N/A                  | 15.6                  |
|                     |                                | Habitat restoration                     | Italian thistle   | Herbicide             | Milestone VM      | backpack/spot sprayer     | 0.02                 | 4.8                   |
|                     |                                | Habitat restoration                     | Italian thistle   | Pull                  | N/A               | N/A                       | N/A                  | 15.6                  |
|                     |                                | Habitat restoration                     | milk thistle      | Herbicide             | Milestone VM      | backpack/spot sprayer     | 0.02                 | 4.8                   |
|                     |                                | Habitat restoration                     | milk thistle      | Pull                  | N/A               | N/A                       | N/A                  | 15.6                  |
|                     |                                | Habitat restoration                     | Stinkwort         | Herbicide             | Round Up Pro Max  | backpack/spot sprayer     | 0.02                 | 4.8                   |
|                     |                                | Habitat restoration                     | Stinkwort         | Pull                  | N/A               | N/A                       | N/A                  | 15.6                  |
|                     |                                | Habitat restoration                     | velvet grass      | Herbicide             | Round Up Pro Max  | backpack/spot sprayer     | 0.1                  | 0.4                   |
|                     |                                | Habitat restoration                     | velvet grass      | Pull                  | N/A               | N/A                       | N/A                  | 15.6                  |
| Habitat restoration | yellow starthistle             | Herbicide                               | Milestone VM      | backpack/spot sprayer | 0.02              | 0.5                       |                      |                       |
| Habitat restoration | yellow starthistle             | Pull                                    | N/A               | N/A                   | N/A               | 15.6                      |                      |                       |

**Table E-1  
Special Status Plants in Vicinity of the Project Area**

| Species  | Status <sup>1</sup> |      |                    | Habitat  | Blooming Period  | Potential to Occur in Project Area <sup>2</sup>  |
|--|---------------------|------|--------------------|--|------------------|--|
|  | FESA                | CESA | CA Rare Plant Rank |  |                  |  |
| <i>Acanthomintha duttonii</i><br>San Mateo thorn-mint                              | E                   | E    | 1B.1               | Serpentine soil, chaparral, valley and foothill grassland                                | April-June       | Could occur. Serpentine habitat is present on treatment sites in the project area.   |
| <i>Allium peninsulare</i> var. <i>franciscanum</i><br>Franciscan onion             | –                   | –    | 1B.2               | Clay, volcanic, serpentine soils, cismontane woodland, valley and foothill grassland     | May-June         | Could occur. Serpentine habitat is present on treatment sites in the project area.   |
| <i>Arctostaphylos andersonii</i><br>Anderson's manzanita                           | –                   | –    | 1B.2               | Chaparral; openings in and edges of broadleaf upland forest and coniferous forest        | November-April   | Could occur. Suitable habitat is present on sites in the project area  |
| <i>Arctostaphylos regismontana</i> Kings<br>Mountain manzanita                     | –                   | –    | 1B.2               | Broadleafed upland forest, chaparral, North Coast coniferous forest                      | January-April    | Could occur. Suitable habitat is present on sites in the project area. Known locations at El Corte de Madera Creek <a href="#">and Purisima Creek OSP</a> .  |
| <i>Arenaria paludicola</i><br>marsh sandwort                                       | E                   | E    | 1B.1               | Freshwater marshes   | May-August       | Could occur. Suitable habitat is present on sites in the project area  |
| <i>Chorizanthe robusta</i> var. <i>robusta</i><br>robust spineflower               | E                   | –    | 1B.1               | Coastal dunes, coastal scrub, openings in cismontane woodland, in sandy or gravelly soil | April-September  | Could occur. Suitable habitat is present on sites in the project area.   |
| <i>Cirsium fontinale</i> var. <i>campylon</i><br>Mt. Hamilton fountain thistle     | –                   | –    | 1B.2               | Seeps, moist places in serpentine soil, chaparral, cismontane woodland, grassland        | February-October | Could occur. Serpentine habitat is present on treatment sites in the project area. Known locations at Sierra Azul OSP.   |
| <i>Cirsium fontinale</i> var. <i>fontinale</i><br>Crystal Springs fountain thistle | E                   | E    | 1B.1               | Serpentine seeps, chaparral openings, cismontane woodland, valley and foothill grassland | May-October      | Could occur. Serpentine habitat is present on treatment sites in the project area. Known locations near Crystal Springs Reservoir, District biologists have not detected it on OSPs further south. |
| <i>Clarkia concinna</i> spp. <i>automixa</i><br>Santa Clara red-ribbons            | –                   | –    | 4.3                | Chaparral and cismontane woodland  | April-July       | Could occur. Suitable habitat is present on sites in the project area. Known locations at Bear Creek Redwoods OSP.   |
| <i>Collinsia multicolor</i><br>San Francisco collinsia                             | –                   | –    | 1B.2               | Closed-cone coniferous forest, coastal scrub, broad-leafed upland forest                 | March-May        | Could occur. Suitable habitat is present on sites in the project area.   |

**Table E-1  
Special Status Plants in Vicinity of the Project Area**

| Species   | Status <sup>1</sup> |      |                    | Habitat   | Blooming Period | Potential to Occur in Project Area <sup>2</sup>  |
|---|---------------------|------|--------------------|---|-----------------|--|
|   | FESA                | CESA | CA Rare Plant Rank |   |                 |  |
| <i>Dirca occidentalis</i><br>western leatherwood                                | –                   | –    | 1B.2               | Moist places, broad-leafed upland forest, closed-cone coniferous forest, chaparral, cismontane woodland, north coast coniferous forest, riparian forest, riparian woodland, coastal scrub | January-April   | Could occur. Suitable habitat is present on sites in the project area. Known locations at Rancho San Antonio, Pulgas Ridge, and Coal Creek OSPs. |
| <i>Dudleya abramsii</i> ssp. <i>setchellii</i><br>Santa Clara Valley dudleya    | E                   | –    | 1B.1               | Rocky areas in serpentine soil, cismontane woodland, grassland  | April-October   | Could occur. Serpentine habitat is present on treatment sites in the project area. Known locations at Sierra Azul OSP.                           |
| <i>Eriogonum nudum</i> var. <i>decurrens</i><br>Ben Lomond buckwheat            | –                   | –    | 1B.1               | Inland marine sands in chaparral, closed-cone coniferous forest, sand parkland, sandhill ponderosa pine forest  | June-October    | Could occur. Suitable habitat is present on sites in the project area  |
| <i>Erysimum teretifolium</i><br>Santa Cruz wallflower                           | E                   | E    | 1B.1               | Lower montane coniferous forest, chaparral  | March - July    | Could occur. Suitable habitat is present on sites in the project area  |
| <i>Eriophyllum latilobum</i><br>San Mateo woolly sunflower                      | E                   | E    | 1B.1               | Serpentine soils, chaparral, valley and foothill grassland  | May-June        | Could occur. Serpentine habitat is present on treatment sites in the project area.   |
| <i>Fritillaria liliacea</i><br>fragrant fritillary                              | –                   | –    | 1B.2               | Heavy clay soil, cismontane woodland, coastal prairie, coastal scrub, valley and foothill grassland   | February-April  | Could occur. Suitable habitat is present on sites in the project area  |
| <i>Hesperocypris abramsiana</i><br>Santa Cruz cypress                           | E                   | E    | 1B.2               | Closed-cone coniferous forest, chaparral, sandhill ponderosa pine forest on sandstone or granitic substrate   | Not applicable  | Could occur. Suitable habitat is present on sites in the project area  |
| <i>Hesperocypris abramsiana</i> var. <i>butanoensis</i><br>Butano Ridge cypress | E                   | E    | 1B.2               | Sanstone, closed-cone coniferous forest, chaparral, lower montane coniferous forest   | Not applicable  | Could occur. Suitable habitat is present on sites in the project area  |
| <i>Hesperolinon congestum</i><br>Marin western flax                             | T                   | T    | 1B.1               | Serpentine soils, chaparral, valley and foothill grassland  | April-July      | Could occur. Serpentine habitat is present on treatment sites in the project area.   |
| <i>Hoita strobilina</i><br>Loma Prieta hoita                                    | –                   | –    | 1B.1               | Moist sites in chaparral, cismontane woodland,  | May-October     | Could occur. Serpentine habitat is present on treatment sites in the   |

**Table E-1  
Special Status Plants in Vicinity of the Project Area**

| Species  | Status <sup>1</sup> |      |                    | Habitat  | Blooming Period | Potential to Occur in Project Area <sup>2</sup>                                      |
|--|---------------------|------|--------------------|--|-----------------|--|
|  | FESA                | CESA | CA Rare Plant Rank |  |                 |  |
|  |                     |      |                    | riparian woodland, usually serpentine soil   |                 | project area. Known locations at Sierra Azul, El Sereno, and St. Joseph's Hill OSPs. |
| <i>Holocarpa macradenia</i><br>Santa Cruz tarplant                                 | T                   | E    | 1.B.1              | Coastal prairie, coastal scrub, grasslands   | June-October    | Could occur. Suitable habitat is present on sites in the project area                |
| <i>Lessingia arachnoidea</i><br>Crystal Springs lessingia                          | –                   | –    | 1B.2               | Serpentine soils, cismontane woodland, coastal scrub, valley and foothill grassland                                | July-October    | Could occur. Serpentine habitat is present on treatment sites in the project area.   |
| <i>Lessingia micradenia</i> var. <i>glabrata</i><br>smooth lessingia               | –                   | –    | 1B.2               | Serpentine soil, chaparral, often disturbed areas  | July-November   | Could occur. Serpentine habitat is present on treatment sites in the project area.   |
| <i>Malacothamnus arcuatus</i><br>arcuate bush-mallow                               | –                   | –    | 1B.2               | Chaparral, cismontane woodland   | April-September | Could occur. Suitable habitat is present on sites in the project area.               |
| <i>Monolopia gracilens</i><br>woodland woollythreads                               | –                   | –    | 1B.2               | Openings on serpentine soils in broadleaf forest, chaparral, cismontane woodland, coniferous forest, and grassland | March-July      | Could occur. Suitable habitat is present on sites in the project area                |
| <i>Pentachaeta bellidiflora</i><br>white-rayed pentachaeta                         | E                   | E    | 1B.1               | Grassland, coastal scrub, coastal prairie  | March-May       | Could occur. Suitable habitat is present on sites in the project area                |
| <i>Piperia candida</i><br>white-flowered rein orchid                               | –                   | –    | 1B.2               | Broadleaf upland forest, lower montane coniferous forest, north coast coniferous forest                            | May-September   | Could occur. Suitable habitat is present on sites in the project area                |
| <i>Plagiobothrys chorisianus</i> var. <i>chorisianus</i><br>Choris' popcorn-flower | –                   | –    | 1B.2               | Mesic soil in chaparral, coastal prairie, coastal scrub  | March-June      | Could occur. Suitable habitat is present on sites in the project area                |
| <i>Plagiobothrys glaber</i><br>hairless popcorn-flower                             | –                   | –    | 1A                 | Alkaline soil in meadows, coastal salt marshes   | March-May       | Not expected to occur. No suitable habitat in project area.                          |
| <i>Polygonum hickmanii</i><br>Scotts Valley polygonum                              | E                   | E    | 1B.1               | Grassland  | May-August      | Could occur. Suitable habitat is present on sites in the project area                |
| <i>Silene verecunda</i> ssp. <i>verecunda</i><br>San Francisco campion             | –                   | –    | 1B.2               | Coastal bluff scrub, chaparral, coastal prairie, coastal scrub, grassland, in sandy or rocky soil                  | March-June      | Could occur. Suitable habitat is present on sites in the project area                |

**Table E-1  
Special Status Plants in Vicinity of the Project Area**

| Species   | Status <sup>1</sup> |      |                    | Habitat  | Blooming Period | Potential to Occur in Project Area <sup>2</sup>                                    |
|---|---------------------|------|--------------------|--|-----------------|--|
|   | FESA                | CESA | CA Rare Plant Rank |  |                 |  |
| <i>Streptanthus albidus</i> ssp. <i>albidus</i><br>Metcalf Canyon jewel-flower    | E                   | —    | 1B.1               | Serpentine soil, grassland                                 | April-July      | Could occur. Serpentine habitat is present on treatment sites in the project area. |
| <i>Streptanthus albidus</i> ssp. <i>peramoenus</i><br>most beautiful jewel-flower | —                   | —    | 1B.2               | Serpentine soil, chaparral, cismontane woodland, grassland | April-June      | Could occur. Serpentine habitat is present on treatment sites in the project area. |
|   |                     |      |                    |  |                 |  |

<sup>1</sup> Status definitions:

**Federal Endangered Species Act (FESA):**

- E Endangered
- T Threatened

**California Endangered Species Act (CESA):**

- E Endangered
- T Threatened

**California Rare Plant Rank:**

- 1A Presumed extinct in California
- 1B Considered rare or endangered in California and elsewhere (protected under CEQA, but not legally protected under ESA or CESA)
- 4 Limited distribution or infrequent throughout a broader area in California

**Extensions:**

- .1 Seriously endangered in California (>80% of occurrences are threatened and/or high degree and immediacy of threat)
  - .2 Fairly endangered in California (20 to 80% of occurrences are threatened/moderate degree and immediacy of threat)
  - .3 Not very threatened in California (<20% of occurrences threatened/low degree and immediacy of threat or no current threats known)
- <sup>2</sup> Potential to occur in the project area based on CNDDDB records, CNPS records, District GIS data, and suitable habitat. See Table E-3 for Special-Status Plants with Potential to Occur in Weed Management Sites

Source: CNDDDB 2012, CNPS 2012, MROSD 2012.

**Table E-2  
Special-Status Wildlife in vicinity of the Project Site**

| Species  | Status <sup>1</sup> |      |       | Habitat   | Potential to Occur in Project Area <sup>2</sup>  |
|--|---------------------|------|-------|---|--|
|  | FESA                | CESA | Other |   |  |
| <b>INVERTEBRATES</b>   |                     |      |       |   |  |
| Bay checkerspot butterfly<br><i>Euphydryas editha bayensis</i>       | T                   | –    | –     | Serpentine grassland containing oviposition and larval food plant <i>Plantago erecta</i>  | Could occur. Serpentine soils on Air Base, Austrian Gulch (Moss Property), Pheasant, and Williams Property on Sierra Azul OSP and Vineyard on St. Joseph's Hill OSP. |
| Zayante band-winged grasshopper<br><i>Trimerotropis infantalis</i>   | E                   | –    | –     | Restricted Zayante sandy soils in barren or sparsely-vegetated, sunlit areas  | Not expected to occur. No suitable habitat in project area.  |
| <b>AMPHIBIANS AND REPTILES</b>                                       |                     |      |       |   |  |
| California red-legged frog<br><i>Rana draytonii</i>                  | T                   | –    | CSC   | Ponds or slow moving deep water with dense shrubby or emergent riparian vegetation, minimum 11-20 weeks of water for larval development, and upland refugia for aestivation.                          | Could occur. Suitable aquatic habitat present at Monte Bello and Rancho San Antonio OSPs.  |
| California tiger salamander<br><i>Ambystoma californiense</i>        | T                   | T    | –     | Vernal pools and seasonal wetlands with a minimum 10-week inundation period and surrounding uplands, primarily grasslands, with burrows and other below ground refugia (e.g., rock or soil crevices). | Unlikely to occur. Do not occur in Santa Cruz Mountains except in southern Santa Clara County and on Stanford lands.   |
| foothill yellow-legged frog<br><i>Rana boylei</i>                    | –                   | –    | CSC   | Perennial streams with predominantly cobble, boulder, and gravel substrates.  | Not expected to occur. No suitable aquatic habitat in project area.  |
| San Francisco garter snake<br><i>Thamnophis sirtalis tetrataenia</i> | E                   | E    | FP    | Grasslands or wetlands near ponds, marshes and sloughs.   | Not expected to occur. No suitable aquatic habitat in project area.  |
| western pond turtle<br><i>Actinemys marmorata</i>                    | –                   | –    | CSC   | Ponds, marshes, slow-moving streams, sloughs, and irrigation/drainage ditches; nests in nearby uplands with low, sparse vegetation.   | Could occur. Suitable aquatic habitat present at Bear Creek Redwoods OSP.  |

**Table E-2  
Special-Status Wildlife in vicinity of the Project Site**

| Species  | Status <sup>1</sup> |      |             | Habitat   | Potential to Occur in Project Area <sup>2</sup>   |
|--|---------------------|------|-------------|---|---|
|  | FESA                | CESA | Other       |   |   |
| <b>BIRDS</b>   |                     |      |             |   |   |
| Alameda song sparrow<br><i>Melospiza melodia pusillula</i><br>(year round) | -                   | -    | CSC         | Tidal salt marshes adjacent to San Francisco Bay  | Not expected to occur. Project sites are not within species range.                        |
| burrowing owl<br><i>Athene cucularia</i><br>(breeding)                     | -                   | -    | CSC         | Nests and forages in grasslands, agricultural lands, open shrublands, and open woodlands with existing ground squirrel burrows or friable soils.            | Could occur. Suitable habitat is present on sites in the project area.                    |
| Golden eagle<br><i>Aquila chrysaetos</i>                                   | -                   | -    | FP<br>BGEPA | Nests in large trees in open woodlands. Forages in large open areas of foothill woodlands and grassland habitats and occasionally croplands.                | Could occur. Suitable habitat is present on sites in the project area.                    |
| grasshopper sparrow<br><i>Ammodramus savannarum</i><br>(breeding)          | -                   | -    | CSC         | Nests and forages in dense grasslands; favors a mix of native grasses, forbs, and scattered shrubs.   | Could occur. Suitable habitat is present on sites in the project area.                    |
| long-eared owl<br><i>Asio otus</i><br>(breeding)                           | -                   | -    | CSC         | Woodlands with nearby open meadows for foraging.  | Could occur. Suitable habitat is present on sites in the project area.                    |
| loggerhead shrike<br><i>Lanius ludovicianus</i><br>(breeding)              | -                   | -    | CSC         | Forages and nests in grasslands, shrublands, and open woodlands.  | Could occur. Suitable habitat is present on sites in the project area.                    |
| northern harrier<br><i>Circus cyaneus</i><br>(breeding)                    | -                   | -    | CSC         | Nests and forages in grasslands, agricultural fields, and marshes.  | Could occur. Suitable habitat is present on sites in the project area.                    |
| purple martin<br><i>Progne subis</i><br>(breeding)                         | -                   | -    | CSC         | Open riparian forests with large trees such as sycamores or snags with cavities for nesting   | Could occur. Suitable habitat is present on sites in the project area.                    |
| olive-sided flycatcher<br><i>Contopus cooperi</i><br>(breeding)            | -                   | -    | CSC         | Montane forests dominated by Douglas fir, but also tan oak, live oak and madrone  | Could occur. Suitable habitat is present on sites in the project area.                    |
| tricolored blackbird<br><i>Agelaius tricolor</i><br>(breeding)             | -                   | -    | CSC         | Forages in agricultural lands and grasslands; nests in marshes, riparian scrub, and other areas that support cattails or dense thickets of shrubs or herbs. | Not expected to breed on sites in project area as no suitable nesting habitat is present. |

**Table E-2  
Special-Status Wildlife in vicinity of the Project Site**

| Species   | Status <sup>1</sup> |      |       | Habitat   | Potential to Occur in Project Area <sup>2</sup>  |
|---|---------------------|------|-------|---|--|
|   | FESA                | CESA | Other |   |  |
| Vaux's swift<br><i>Chaetura vauxi</i><br>(breeding)                     | -                   | -    | CSC   | Mature coniferous forests, with snags or cavities for nesting. Also in chimneys.  | Could occur. Suitable habitat is present on sites in the project area.                         |
| white-tailed kite<br><i>Elanus leucurus</i><br>(breeding)               | -                   | -    | FP    | Forages in grasslands and agricultural fields; nests in riparian zones, oak woodlands, and isolated trees.  | Could occur. Suitable habitat is present on sites in the project area.                         |
| yellow-breasted chat<br><i>Icteria virens</i><br>(nesting)              | -                   | -    | CSC   | Well developed riparian habitats with cottonwoods, willows, and thick understory of brambles and brush  | Not expected to breed in project area as breeding range does not include Santa Cruz mountains. |
| yellow warbler<br><i>Dendroica petechia brewsteri</i><br>(nesting)      | -                   | -    | CSC   | Streams supporting willow, alder, and bigleaf maple with thick shrub understory   | Could occur. Suitable habitat is present on sites in the project area.                         |
| <b>MAMMALS</b>  |                     |      |       |   |  |
| pallid bat<br><i>Anthrozous pallidus</i>                                | -                   | -    | CSC   | Deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats. Roosts in rock crevices, oak hollows, bridges or buildings. Colonies are usually small and may contain 12 to 100 bats.                  | Could occur. Suitable roosting habitat may be present on sites in the project area.            |
| San Francisco dusky-footed woodrat<br><i>Neotoma fuscipes annectens</i> | -                   | -    | CSC   | Oak woodlands.  | Could occur. Suitable habitat is present on sites in the project area.                         |
| Townsend's big-eared bat<br><i>Corynorhinus townsendii</i>              | -                   | -    | CSC   | Typically roosts in caves; however, colonies of <100 individuals occasionally nest in buildings or bridges. Forages in all habitats except alpine and subalpine, though most commonly in moist forests and woodlands.               | Not expected to roost in the project area as suitable roosting habitat is absent.              |
| western mastiff bat<br><i>Eumops perotis californicus</i>               | -                   | -    | CSC   | Typically roosts in high cliffs and rock crevices in small colonies of <100 individuals. Forages in a variety of grassland, shrub and wooded habitats including riparian and urban areas, though most commonly in open, arid lands. | Not expected to roost in the project area as suitable roosting habitat is absent.              |



**Table E-2  
Special-Status Wildlife in vicinity of the Project Site**

| Species                                       | Status <sup>1</sup> |      |       | Habitat   | Potential to Occur in Project Area <sup>2</sup>                                     |
|---|---------------------|------|-------|---|---|
|   | FESA                | CESA | Other |   |   |
| western red bat<br><i>Lasiurus blossevill</i> | –                   | –    | CSC   | Roosts primarily in tree foliage, especially in cottonwood, sycamore, and other riparian trees or orchards. Prefers habitat edges and mosaics with trees that are protected from above and open below with open areas for foraging, including grasslands, shrublands, and open woodlands. | Could occur. Suitable roosting habitat may be present on sites in the project area. |

**<sup>1</sup> Status definitions:**

***Federal Endangered Species Act (FESA):***

E Endangered

T Threatened

***California Endangered Species Act (CESA):***

E Endangered

T Threatened

***Other:***

CSC Considered California species of special concern by DFG (no formal protection other than CEQA consideration)

FP Fully protected (legally protected under Fish and Game Code)

BGEPA Legally protected under the Bald and Golden Eagle Protection Act

<sup>2</sup> Potential to occur in the project area based on District GIS data, District biologist, and suitable habitat.

Sources: CNDDDB 201, MROSD 2012

Table E-3. Special-Status Plants with Potential to Occur in Weed Management Sites<sup>1</sup>

| Preserve                     | Site Name                               | Anderson's manzanita | arcuate bush-mallow | Ben Lomond buckwheat | Butano Ridge cypress | Choris' popcorn-flower | Crystal Springs fountain thistle | Crystal Springs lessingia | Fragrant fritillary | Franciscan onion | Kings Mountain manzanita | Loma Prieta hoita | Marin western flax | Marsh sandwort | Metcalf Canyon jewel-flower | Most beautiful jewel-flower | Mt. Hamilton fountain thistle | Robust spineflower | San Francisco campion | San Francisco collinsia | San Mateo thorn mint | San Mateo woolly sunflower | Santa Clara red-ribbons | Santa Clara Valley dudleya | Santa Cruz cypress | Santa Cruz tarplant | Santa Cruz wallflower | Scotts Valley polygonum | Smooth lessingia | Western leatherwood | White-flowered rein orchid | White-rayed pentachaeta | Woodland woollythreads |
|------------------------------|---|----------------------|---------------------|----------------------|----------------------|------------------------|----------------------------------|---------------------------|---------------------|------------------|--------------------------|-------------------|--------------------|----------------|-----------------------------|-----------------------------|-------------------------------|--------------------|-----------------------|-------------------------|----------------------|----------------------------|-------------------------|----------------------------|--------------------|---------------------|-----------------------|-------------------------|------------------|---------------------|----------------------------|-------------------------|------------------------|
| Bear Creek Redwoods OSP      | Alma College                            | X                    | X                   |                      | X                    |                        |                                  |                           | X                   |                  |                          |                   |                    |                | X                           |                             |                               | X                  |                       |                         |                      | X                          |                         |                            |                    | X                   | X                     |                         |                  |                     |                            |                         |                        |
|                              | BC01                                    |                      | X                   |                      |                      |                        |                                  |                           | X                   |                  |                          |                   | X                  | X              |                             |                             |                               | X                  |                       |                         |                      | X                          |                         |                            | X                  |                     | X                     |                         |                  | X                   |                            |                         |                        |
|                              | Tree[us] Farm                           | X                    | X                   |                      | X                    | X                      |                                  |                           | X                   |                  | X                        |                   |                    |                |                             |                             | X                             | X                  | X                     |                         |                      | X                          |                         | X                          |                    | X                   |                       | X                       | X                |                     |                            |                         |                        |
|                              | West Roads                              | X                    | X                   |                      | X                    |                        |                                  |                           | X                   |                  | X                        |                   |                    |                |                             |                             | X                             |                    |                       |                         |                      |                            |                         |                            |                    |                     |                       |                         |                  |                     |                            |                         |                        |
| Coal Creek OSP               | Page Mill & Highway 35                  |                      | X                   |                      |                      | X                      |                                  |                           | X                   | X                |                          |                   |                    |                |                             |                             | X                             |                    |                       |                         |                      |                            |                         |                            | X                  |                     | X                     | X                       | X                |                     |                            |                         |                        |
| El Corte de Madera Creek OSP | Lawrence Creek Trail                    | X                    |                     |                      |                      |                        |                                  |                           |                     |                  | X                        |                   |                    |                |                             |                             |                               |                    |                       | X                       |                      |                            |                         |                            |                    | X                   |                       | X                       |                  |                     | X                          |                         |                        |
|                              | Methuselah Trail                        | X                    |                     |                      |                      |                        |                                  |                           |                     |                  | X                        |                   |                    |                |                             |                             |                               |                    |                       | X                       |                      |                            |                         |                            |                    | X                   |                       | X                       |                  |                     | X                          |                         |                        |
|                              | Future staging area between CM03 & CM04 | X                    | X                   |                      | X                    | X                      |                                  |                           |                     |                  | X                        |                   |                    |                |                             |                             |                               | X                  | X                     |                         |                      |                            |                         | X                          |                    | X                   |                       | X                       |                  |                     | X                          |                         |                        |
|                              | Virginia Mill Trail                     | X                    |                     |                      | X                    |                        |                                  |                           |                     |                  | X                        |                   |                    |                |                             |                             |                               |                    |                       | X                       |                      |                            |                         |                            |                    | X                   |                       | X                       |                  |                     |                            |                         |                        |
| El Sereno OSP                | Aquinas Trail                           | X                    | X                   |                      | X                    | X                      |                                  |                           | X                   |                  | X                        | X                 |                    |                |                             |                             | X                             | X                  |                       |                         |                      |                            |                         | X                          | X                  | X                   | X                     | X                       |                  | X                   | X                          |                         |                        |
|                              | Loma Vista Trail                        | X                    | X                   |                      | X                    | X                      |                                  |                           | X                   |                  | X                        | X                 |                    |                |                             |                             | X                             | X                  |                       |                         |                      |                            |                         | X                          |                    | X                   |                       | X                       |                  |                     | X                          |                         |                        |
|                              | Overlook Trail                          | X                    | X                   |                      | X                    | X                      |                                  |                           | X                   |                  | X                        | X                 |                    |                |                             |                             | X                             | X                  |                       |                         |                      |                            |                         | X                          |                    | X                   |                       | X                       |                  |                     | X                          |                         |                        |
| Los Trancos OSP              | Event Meadow                            | X                    | X                   |                      | X                    | X                      |                                  |                           | X                   | X                | X                        |                   |                    |                |                             |                             | X                             | X                  |                       |                         |                      |                            |                         | X                          | X                  | X                   | X                     | X                       | X                | X                   | X                          | X                       |                        |
|                              | Fault Trail                             |                      | X                   |                      |                      | X                      |                                  |                           | X                   | X                |                          |                   |                    |                |                             |                             | X                             |                    |                       |                         |                      |                            |                         |                            | X                  |                     | X                     | X                       | X                | X                   | X                          | X                       |                        |
|                              | Franciscan Loop Trail                   |                      | X                   |                      |                      | X                      |                                  |                           | X                   | X                |                          |                   |                    |                |                             |                             | X                             |                    |                       |                         |                      |                            |                         | X                          |                    | X                   | X                     | X                       | X                | X                   | X                          | X                       |                        |
|                              | Greater Los Trancos                     | X                    | X                   |                      | X                    | X                      |                                  |                           | X                   | X                | X                        |                   |                    |                |                             |                             | X                             | X                  |                       |                         |                      |                            |                         | X                          | X                  | X                   | X                     | X                       | X                | X                   | X                          | X                       |                        |
|                              | Knoll                                   | X                    | X                   |                      | X                    | X                      |                                  |                           | X                   | X                | X                        |                   |                    |                |                             |                             | X                             | X                  |                       |                         |                      |                            |                         | X                          | X                  | X                   | X                     | X                       | X                | X                   | X                          | X                       |                        |
|                              | LT02                                    | X                    | X                   |                      | X                    | X                      |                                  |                           | X                   | X                | X                        |                   |                    |                |                             |                             | X                             | X                  |                       |                         |                      |                            |                         | X                          | X                  | X                   | X                     | X                       | X                | X                   | X                          | X                       |                        |
|                              | Norton                                  | X                    | X                   |                      | X                    | X                      |                                  |                           | X                   | X                | X                        |                   |                    |                |                             |                             | X                             | X                  | X                     |                         |                      |                            |                         | X                          | X                  | X                   | X                     | X                       | X                | X                   | X                          | X                       |                        |
|                              | Parking Lot                             | X                    | X                   |                      | X                    | X                      |                                  |                           | X                   | X                | X                        |                   |                    |                |                             |                             | X                             | X                  |                       |                         |                      |                            |                         | X                          | X                  | X                   | X                     | X                       | X                | X                   | X                          | X                       |                        |
| Monte Bello OSP              | Montebello Road                         |                      | X                   |                      | X                    |                        |                                  |                           | X                   |                  |                          |                   |                    |                |                             |                             | X                             |                    |                       |                         |                      | X                          |                         | X                          | X                  | X                   | X                     | X                       | X                | X                   | X                          | X                       |                        |
|                              | Water Wheel Creek                       | X                    | X                   |                      | X                    | X                      |                                  |                           | X                   |                  | X                        |                   |                    |                |                             |                             | X                             | X                  |                       |                         |                      | X                          |                         | X                          | X                  | X                   | X                     | X                       | X                | X                   | X                          | X                       |                        |
| Pulgas Ridge OSP             | Hassler Loop                            | X                    | X                   |                      | X                    | X                      | X                                | X                         |                     |                  |                          | X                 |                    |                |                             |                             | X                             | X                  | X                     | X                       |                      |                            |                         | X                          | X                  | X                   | X                     | X                       | X                | X                   | X                          | X                       |                        |
| Purisima Creek OSP           | Harkins Ridge Cutover                   | X                    | X                   |                      | X                    | X                      |                                  |                           |                     |                  | X                        |                   |                    |                |                             |                             |                               |                    | X                     | X                       |                      |                            |                         | X                          |                    | X                   |                       | X                       | X                |                     |                            |                         |                        |
|                              | Harkins Ridge Trail                     | X                    | X                   |                      | X                    | X                      |                                  |                           |                     |                  | X                        |                   |                    |                |                             |                             |                               | X                  | X                     | X                       |                      |                            |                         | X                          |                    | X                   |                       | X                       | X                |                     |                            |                         |                        |
|                              | North Ridge                             | X                    | X                   |                      | X                    | X                      |                                  |                           | X                   |                  | X                        |                   |                    |                |                             |                             |                               |                    | X                     | X                       |                      |                            |                         | X                          |                    | X                   |                       | X                       | X                |                     |                            |                         |                        |
|                              | PC01                                    | X                    | X                   |                      | X                    | X                      |                                  |                           |                     |                  | X                        |                   |                    |                |                             |                             |                               |                    | X                     | X                       |                      |                            |                         | X                          |                    | X                   |                       | X                       | X                |                     |                            |                         |                        |
|                              | Upper Purisima Creek Road               | X                    | X                   |                      | X                    | X                      |                                  |                           |                     |                  |                          |                   |                    |                |                             |                             |                               |                    |                       |                         |                      |                            |                         |                            |                    |                     |                       |                         |                  |                     |                            |                         |                        |
| Rancho San Antonio OSP       | Lower Meadow Trail                      |                      | X                   |                      |                      |                        |                                  |                           | X                   |                  |                          |                   |                    |                |                             |                             | X                             |                    |                       |                         |                      |                            |                         |                            | X                  |                     | X                     |                         |                  | X                   |                            |                         |                        |
|                              | Shop                                    | X                    | X                   |                      | X                    | X                      |                                  |                           | X                   |                  | X                        |                   |                    |                |                             |                             | X                             | X                  |                       |                         |                      |                            |                         | X                          | X                  | X                   | X                     | X                       | X                | X                   | X                          | X                       |                        |
| St. Joseph's Hill OSP        | Vineyard                                | X                    | X                   |                      | X                    | X                      | X                                |                           | X                   | X                | X                        | X                 |                    |                | X                           | X                           | X                             | X                  |                       | X                       | X                    |                            |                         | X                          | X                  | X                   | X                     | X                       | X                | X                   | X                          | X                       |                        |
|                              | Vista/Y Star/Hilltop                    | X                    | X                   |                      | X                    | X                      |                                  |                           | X                   |                  | X                        | X                 |                    |                | X                           | X                           |                               |                    |                       | X                       | X                    |                            |                         | X                          | X                  | X                   | X                     | X                       | X                | X                   | X                          | X                       |                        |
| Saratoga Gap OSP             | Charcoal Residence                      | X                    | X                   | X                    | X                    |                        |                                  |                           | X                   |                  | X                        |                   |                    |                |                             |                             | X                             |                    | X                     |                         |                      | X                          |                         |                            | X                  | X                   | X                     | X                       | X                | X                   | X                          | X                       |                        |
|                              | Lysons Property                         | X                    | X                   | X                    | X                    | X                      |                                  |                           | X                   |                  | X                        |                   |                    |                |                             |                             | X                             | X                  |                       |                         |                      | X                          |                         |                            | X                  | X                   | X                     | X                       | X                | X                   | X                          | X                       |                        |
| Sierra Azul OSP              | Air Base                                | X                    | X                   | X                    | X                    | X                      | X                                |                           | X                   | X                | X                        | X                 |                    |                | X                           | X                           | X                             | X                  |                       | X                       | X                    |                            |                         | X                          | X                  | X                   | X                     | X                       | X                | X                   | X                          | X                       |                        |
|                              | Austrian Gulch (Moss Property)          | X                    | X                   | X                    | X                    | X                      | X                                |                           | X                   | X                | X                        | X                 |                    |                | X                           | X                           | X                             | X                  | X                     |                         | X                    | X                          |                         |                            | X                  | X                   | X                     | X                       | X                | X                   | X                          | X                       |                        |
|                              | Beatty                                  | X                    | X                   |                      | X                    | X                      |                                  |                           | X                   |                  | X                        | X                 |                    |                | X                           |                             |                               | X                  | X                     |                         |                      |                            |                         | X                          | X                  | X                   | X                     | X                       | X                | X                   | X                          | X                       |                        |
|                              | Hicks Creek Ranch                       | X                    | X                   |                      | X                    | XX                     |                                  |                           | X                   |                  | X                        | X                 |                    |                |                             |                             | X                             | X                  | X                     |                         |                      |                            |                         | X                          | X                  | X                   | X                     | X                       | X                | X                   | X                          | X                       |                        |
|                              | Pheasant                                |                      | X                   |                      |                      |                        | X                                |                           | X                   | X                |                          | X                 | X                  |                | X                           | X                           | X                             | X                  |                       |                         | X                    | X                          |                         |                            | X                  | X                   | X                     | X                       | X                | X                   | X                          | X                       |                        |
|                              | RDG                                     | X                    | X                   |                      | X                    | X                      |                                  |                           | X                   |                  | X                        | X                 |                    | X              |                             |                             | X                             | X                  | X                     |                         |                      |                            |                         | X                          | X                  | X                   | X                     | X                       | X                | X                   | X                          | X                       |                        |
|                              | Reynolds                                | X                    | X                   |                      | X                    |                        |                                  |                           | X                   |                  | X                        | X                 |                    |                |                             |                             | X                             | X                  | X                     |                         |                      |                            |                         | X                          | X                  | X                   | X                     | X                       | X                | X                   | X                          | X                       |                        |
|                              | SA19                                    | X                    | X                   |                      | X                    | X                      |                                  |                           | X                   |                  | X                        |                   |                    |                | X                           |                             |                               | X                  | X                     |                         |                      |                            |                         | X                          | X                  | X                   | X                     | X                       | X                | X                   | X                          | X                       |                        |
| Williams property            | X                                       | X                    | X                   | X                    | X                    | X                      |                                  | X                         | X                   | X                | X                        | X                 |                    | X              | X                           | X                           | X                             | X                  | X                     | X                       | X                    |                            |                         | X                          | X                  | X                   | X                     | X                       | X                | X                   | X                          |                         |                        |
| Skyline Ridge OSP            | Tree Farm Restoration                   | X                    | X                   |                      | X                    | X                      | X                                |                           | X                   | X                | X                        | X                 |                    |                | X                           | X                           | X                             | X                  |                       | X                       | X                    |                            |                         | X                          | X                  | X                   | X                     | X                       | X                | X                   | X                          | X                       |                        |

<sup>1</sup> Potential to occur in the treatment sites based on CNDDDB records, CNPS records, District GIS data, and suitable habitat.