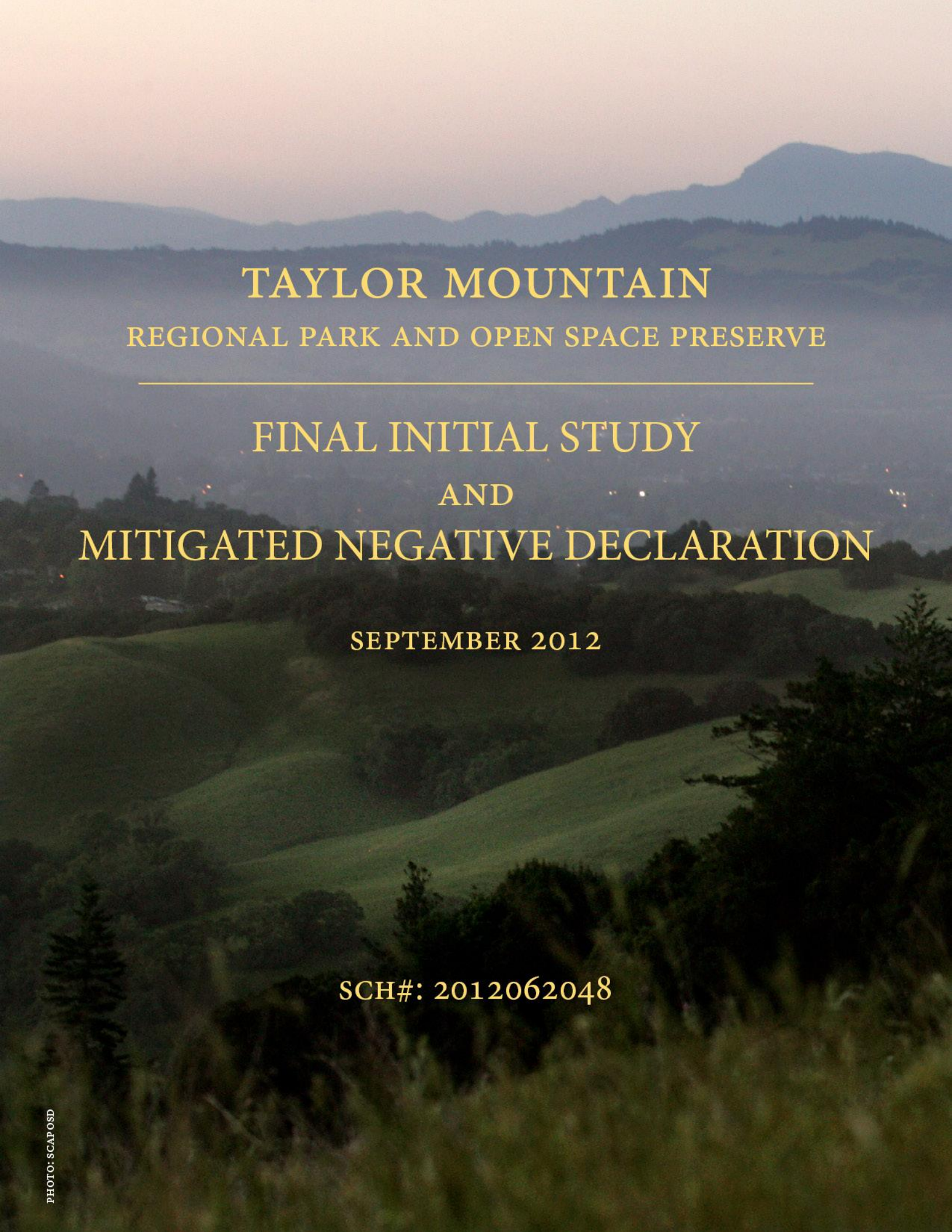

TAYLOR MOUNTAIN

REGIONAL PARK AND OPEN SPACE PRESERVE

FINAL INITIAL STUDY

AND

MITIGATED NEGATIVE DECLARATION

SEPTEMBER 2012

SCH#: 2012062048

PHOTO: SCAP OSD

Taylor Mountain Regional Park and Open Space Preserve Master Plan

Final Initial Study and Mitigated Negative Declaration

Prepared for:
The Sonoma County Agricultural Preservation and Open Space District
Sonoma County Regional Parks Department

September 2012

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A. Introduction

This section explains the background and purpose of the Taylor Mountain Regional Park and Open Space Preserve Master Plan Initial Study and Mitigated Negative Declaration (IS/MND), establishes the context and scope for the IS/MND, references relevant previous reports, and outlines the process for reviewing the IS/MND and issuing the Final IS/MND. The Sonoma County Agricultural Preservation and Open Space District (District) and the Sonoma County Regional Parks Department (Regional Parks) are joint sponsors of the Taylor Mountain Regional Park and Open Space Preserve Master Plan, and the District, which currently owns the property, is acting as the lead agency for purposes of environmental review under the California Environmental Quality Act (CEQA).

A.1 Purpose of IS/MND

Consistent with the State CEQA Guidelines, the District and Regional Parks have reviewed the information regarding the proposed Master Plan and associated Sonoma County General Plan/zoning amendments and determined that it is appropriate to prepare an Initial Study and Mitigated Negative Declaration. A mitigated negative declaration may be adopted if the project would result in less than significant impacts with mitigation measures incorporated into the project.

The primary purpose of this IS/MND is to satisfy CEQA requirements by fully disclosing any impacts that may occur as a result of changing the County General Plan land use designation, rezoning the property and implementing the Master Plan. The Master Plan and General Plan/zoning changes are described in Part B. This IS/MND provides decisionmakers, responsible and trustee agencies, other public agencies and the general public information on the short-term and long-term environmental effects associated with the project.

According to Article 6 (Negative Declaration Process) and Section 15070 (Decision to Prepare a Negative Declaration or Mitigated Negative Declaration) of the CEQA Guidelines, a public agency shall prepare a proposed negative declaration or mitigated negative declaration for a project subject to CEQA when:

(a) The initial study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, or

(b) The initial study identifies potentially significant effects, but:

(1) Revisions in the project plans or proposals made by, or agreed to by the applicant before a proposed mitigated negative declaration and initial study are released for public review

would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and

(2) There is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment.

Based on the analysis in the Initial Study, it has been determined that all project-related environmental impacts could be reduced to a less than significant level with the incorporation of feasible mitigation measures. Therefore, adoption of this IS/MND will satisfy the requirements of CEQA.

A.2 Project Background

The project is a proposed Master Plan and County General Plan amendment/zoning change for the approximate 1,100-acre Taylor Mountain Regional Park and Open Space Preserve (Preserve), which is located adjacent to and south of the City of Santa Rosa. The Master Plan has been developed jointly by the District and Regional Parks through a two-year process that included property surveys, technical reports, conceptual design and extensive community involvement. Additional Master Plan information is online at: www.sonoma-county.org/parks/mt_taylor.htm.

Previous CEQA documentation includes an Initial Study/Mitigated Negative Declaration (MND) (2008) and Recirculated Initial Study/MND (2009) to support the current Interim Public Access Permit Program for recreational use of the property.

A.3 Alternatives

The purpose of an alternatives analysis pursuant to CEQA is to identify options that would feasibly attain most of a project's objectives while reducing the significant environmental impacts resulting from a proposed project. CEQA does not require the inclusion of an alternatives analysis in MNDs because the Initial Study concludes that, with incorporation of mitigation measures, there would be no significant adverse impacts resulting from the land use designation/zone district change or implementation of the proposed Master Plan. Therefore, no alternatives analysis is provided, nor is it required to be provided, in the Initial Study. Many alternative uses for the property were considered during development of the Master Plan. The proposed uses in the Master Plan are the result of a lengthy evaluation and planning process that involved the public.

A.4 Environmental Findings

This Initial Study was prepared to identify the potential environmental effects resulting from the proposed project. The relevant guidelines and standards described in the proposed Master Plan are incorporated into the proposed project.

Based on the analysis and conclusions of the Initial Study, the impacts of the proposed project would be mitigated to less than significant levels with the implementation of the mitigation measures presented herein. Therefore, the analysis confirms that no significant adverse

impacts would result from implementation of the Master Plan or General Plan land use designation/zone district amendments.

The additional mitigation measures identified in Parts B (§ B.3) and C supplement the guidelines and standards that are included in the proposed Master Plan. The District and Regional Parks have agreed to implement all of the recommended mitigation measures for the proposed project. Implementation of these mitigation measures would avoid potentially significant impacts identified in the Initial Study or reduce them to less than significant levels.

A.5 IS/MND Contents and Organization

This IS/MND was prepared in conformance with CEQA Guidelines and includes the following sections:

Part A: Introduction, describes the purpose and background of the IS/MND and provides an overview of its scope and findings, public review process and documents incorporated by reference.

Part B, Section B.1: Project Description, describes the project location, proposed General Plan and zone district changes, proposed Master Plan uses, existing onsite and surrounding uses and permits required.

Part B, Section B.2: Environmental Determination, provides the required summary statement regarding the type of CEQA document appropriate for the project, considering the environmental factors analyzed within the Initial Study.

Part B, Sections B.3–B.16: Initial Study Environmental Setting, Impacts and Mitigation Measures, evaluates, by resource issue area, the potential environmental impacts associated with changing the General Plan land use designation, rezoning and implementation of the proposed Master Plan. The analysis provides an assessment of the potential short-term and long-term impacts of the project and a description of the mitigation measures that would reduce or eliminate impacts.

Part B, Section B-17: Mandatory Findings of Significance, includes the findings required by CEQA for a MND.

Part C, Mitigation Monitoring Plan, provides a table listing mitigation measures, responsible agencies and the timing and reporting requirements for each measure.

Part D, References, lists the documents, agencies, and persons consulted in the preparation of this document.

Part E, Report Preparation, lists those involved with the preparation of this document.

Appendix - Response to Comments Summary: The Response to Comments Summary addresses all written and oral comments on the Draft IS/MND and includes the full content of comment letters.

A separately bound Transportation Impact Study Appendix is available for review at the District and Regional Parks offices. This appendix includes traffic calculations and traffic volume figures.

A.6 Documents Incorporated by Reference

Since this document evaluates a comprehensive Master Plan, it necessarily builds on resource information developed for the Master Plan. The Master Plan and the technical reports and appendices prepared in conjunction with the Master Plan, are incorporated by reference into this IS/MND. With the exception of the confidential Archaeological Resources Reports, technical reports supporting the IS/MND are available for review at the offices of the Sonoma County Agricultural Preservation and Open Space District, at 747 Mendocino Avenue, Suite 100, in Santa Rosa, and Sonoma County Regional Parks, at 2300 County Center Drive, Suite 120A, in Santa Rosa.

A.7 Draft IS/MND Review and Public Comment

The Draft IS/MND was distributed to responsible and trustee agencies, other affected agencies, surrounding cities, and interested parties, as well as all parties requesting a copy of the Draft IS/MND in accordance with Public Resources Code 21092(b)(3). The public review period for the Draft IS/MND was from June 15, 2012, to July 16, 2012. During this period, the Draft IS/MND was available for review at the following locations:

Sonoma County Agricultural Preservation
and Open Space District
747 Mendocino Avenue, Suite 100
Santa Rosa, CA 95401

Sonoma County Regional Parks Department
2300 County Center Drive, Suite 120A
Santa Rosa, CA 95403

Santa Rosa Central Library
211 E Street
Santa Rosa, CA 95404

The Draft IS/MND was also available online at the following website:

www.sonoma-county.org/parks/mt_taylor.htm

A public meeting was held to describe the proposed Master Plan, summarize the environmental analysis, and receive oral comments, on:

Wednesday June 20, 2012, 6:30 p.m.
Santa Rosa Veterans Memorial Hall
1351 Maple Avenue
Santa Rosa, CA

Agencies and the public were invited to provide comments on the Draft IS/MND.

Three written comment letters and several oral comments were received on the Draft IS/MND. After the close of the public review period, agency staff and CEQA consultants reviewed the comments and determined that only minor modifications were needed to finalize the IS/MND. Additional text was provided to clarify several issues. All changes have been incorporated into this Final IS/MND.

Although not required under CEQA, a Response to Comments Summary has been prepared for consideration by the District and Regional Parks. The Response to Comments Summary, which includes all of the written letters and oral comments, is in the Appendix at the end of this document.

The agencies will consider adoption of the Final IS/MND and approval of the proposed General Plan land use designation change, rezone and Master Plan. If the agencies adopt the Final IS/MND and approve the Master Plan and associated General Plan and zoning changes, a Notice of Determination will be filed with the State Office of Planning and Research and the Clerk of Sonoma County.

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B. Initial Study

B.1 Project Description

The project is a proposed Master Plan for the Taylor Mountain Regional Park and Open Space Preserve. The plan will establish long-term guidelines and standards for natural resource protection and development of appropriate public recreational and educational uses on the property. In conjunction with the Master Plan, the property will be rezoned and redesignated in the County General Plan.

B.1.1 Project Information and Overview

Project Title & Sponsors
Taylor Mountain Regional Park and Open Space Preserve Master Plan
Sonoma County Agricultural Preservation and Open Space District
Sonoma County Regional Parks Department

CEQA Lead Agency Name and Address
Sonoma County Agricultural Preservation
and Open Space District
747 Mendocino Avenue, Suite 100
Santa Rosa, CA 95401

Lead Agency Contact Person
Sara Press, Sonoma County Agricultural
Preservation and Open Space District
Sara.Press@sonoma-county.org
(707) 565-7360

Property Owner
Sonoma County Agricultural Preservation and Open Space District

Project Overview

The proposed project is adoption and implementation of a Master Plan for the Taylor Mountain Regional Park and Open Space Preserve to address the natural resources on Taylor Mountain and the appropriate long-term public recreational use of the property. The Sonoma County Agricultural Preservation and Open Space District (District) will transfer ownership of the property to Sonoma County Regional Parks Department (Regional Parks) while retaining a conservation easement in order to ensure protection of the conservation values in perpetuity. Regional Parks will ultimately implement the comprehensive park and open space preserve master plan and the District will monitor consistency with the conservation easement and conformance with the master plan.

The property, now designated as the Taylor Mountain Regional Park and Open Space Preserve ("the Preserve"), is public land acquired for the preservation of the many natural resources on the property and the long-term recreational use of the community. The proposed Taylor Mountain Regional Park and Open Space Preserve Master Plan (Master Plan) outlines the vision for both the conservation of natural resources and the provision for appropriate public access and use of the land. The design concepts for the Preserve were generated after considerable

community input. The goals and objectives developed during the public outreach process emphasize the importance of protecting the property's natural resources while accommodating reasonable educational and recreational access.

B.1.2 Project Location

Taylor Mountain is located approximately two miles southeast of downtown Santa Rosa, as shown in Figure B.1-1, adjacent to the Kawana Springs neighborhood. The District has acquired in-fee properties that encompass portions of Taylor Mountain, totaling approximately 1,100 acres. The parcels that comprise this property include APNs: 044-061-027; 044-061-033; 044-061-035; 044-061-036; 044-180-010; 044-180-025; 044-180-026; 044-180-028; 044-180-029; 044-190-027; 044-200-035; and 049-170-040.

B.1.3 Project Purpose & Objectives

The purpose of the proposed project is to establish a long-term plan for the Taylor Mountain Regional Park and Open Space Preserve to provide for natural resource protection and to enable public recreational and educational access. The Master Plan will be the guiding document and the foundation for future implementation of projects and programs within the Taylor Mountain property.

Goals outlined in the Master Plan include the following:

- Conservation Goal
    - Preserve, protect, and enhance the scenic vistas and natural resources of Taylor Mountain;
    - Protect ecological processes and conserve native biodiversity.
- Recreational Goals
    - Provide recreational and educational opportunities and access for people of all ages and abilities;
    - Provide facilities and improvements in appropriate locations related to passive and low- to medium-intensity recreational opportunities.

In addition to the stated goals, the Master Plan includes a design philosophy that is intended to protect habitat areas, maintain agricultural grazing functions, restrict improvements to small development envelopes within previously disturbed areas and utilize Low Impact Development (LID) features. The Master Plan includes numerous objectives, guidelines and standards to achieve the goals for the property and implement the design philosophy.

Figure B.1-1. Vicinity Map

B.1.4 Existing Conditions

Existing Site Conditions

The Taylor Mountain property is primarily undeveloped. Part of the property is currently in agricultural use, and supports an Interim Public Access Permit Program (Permit Program), which consists of allowing public access on a permit basis to Taylor Mountain until the Master Plan is adopted and implemented. Existing development includes:

- Fencing to allow ongoing cattle grazing
- Interim access and gated parking area for park visitors (access is from Kawana Terrace)
- Two Sonoma County Water Agency water tanks located on a separate parcel in the northwest portion of the property
- A radio tower located on a separate parcel in the northeast portion of the property
- A bathhouse built in approximately 1876 and subsequently used as a residence that is no longer occupied
- A Life Estate west of the bathhouse that includes a currently–occupied residence
- A barn and various wooden sheds
- Rock walls
- A gazebo
- A concrete water tank
- Remnant concrete slabs from former dairy.

The undeveloped parts of the property consist of gently to steeply sloped hillsides, with coastal oak woodlands, annual grassland, and wetlands. It also has some areas of wet meadow, resulting from springs and seeps on the property. In addition, several seasonal creeks and drainages are located on the property, supporting riparian vegetation. Habitats on the site support a wide variety of wildlife and bird species.

The property is currently accessible to the public on a limited permit basis for hiking, bicycling and equestrian use on two existing dirt trails and ranch roads. Existing access is from Kawana Terrace through a gated entry. The interim access permit system was established after a Mitigated Negative Declaration was approved. The property also supports a year-round cow/calf cattle operation which results in a higher number of animals during the spring when there is more grass available and a greater need to reduce the fire fuel load.

Planning and Zoning

The Sonoma County 2020 General Plan Land Use map (Sonoma County, 2009) designates the majority of Taylor Mountain as Resource and Rural Development (RRD). The western portion of the site abutting Petaluma Hill Road is designated as Diverse Agriculture. County zoning on the property is shown in the following chart. The site is zoned Residential and Rural Development (RRD), Resources and Rural Development (Agricultural Preserve) (RRDWA), Diverse Agriculture (DA) and Rural Residential (RR). The Scenic Resources overlay district is designated on all of the property and several parcels are subject to the Valley Oak Habitat (VOH) combining district and

Geological Hazard Area (G) combining District. One parcel is subject to the Scenic Design (SD) overlay district. See proposed changes to land use designations and zone districts below.

Parcel Number	Base Zoning District	Combining (Overlay) District
044-061-027	RRD	G, SR
044-061-033	RRD	G, SR
044-061-035	RR	G, SR
044-061-036	RRD	SR
044-180-010	RRDWA	SR
044-180-025	RRDWA	SR
044-180-026	RRDWA	SR
044-180-028	RRDWA	SR, VOH
044-180-029	RRDWA	SR
044-190-027	DA	SR, VOH
044-200-035	RR	G, SD, SR
049-170-040	RRD	G, SR

Base Zones:
RRD = Residential and Rural Development
RR = Rural Residential
RRDWA = Residential and Rural Development – Agricultural Preserve
DA = Diverse Agriculture

Combining Districts:
G = Geological Hazard
SR = Scenic Resources
SD = Scenic Design
VOH = Valley Oak Habitat

Surrounding Land Uses

Land uses surrounding the project area consist of the Kawana Springs neighborhood to the northwest; Sonoma Academy high school to the north; Bennett Valley residential neighborhoods to the northeast; privately-owned agricultural acreage to the east; and privately-owned agricultural properties and a landscaping materials supply yard to the west.

B.1.5 Project Components

Proposed General Plan Amendment and Rezone

The District and Parks propose to change the Sonoma County General Plan land use designations on the property to Public/Quasi Public and to rezone all parcels within the property to Public Facility (PF). The Public/Quasi Public designation and PF zone district are intended to allow public facilities such as regional parks. The existing overlay or combining districts would remain on the parcels within the property.

Proposed Master Plan

The proposed Master Plan includes natural resource protection and restoration guidelines, limited development of educational and recreational uses, and infrastructure to support these uses. The Master Plan establishes the types of allowable uses within the different areas of the property and provides numerous strategies, guidelines and implementation measures for resource protection, impact avoidance, and resource enhancement. The development of infrastructure and the implementation of the allowable uses would occur over time, as funding becomes available. The Master Plan is intended to be a self-mitigating plan, and therefore contains numerous environmental compliance provisions.

The Master Plan addresses the following key components:

- Overall goals and objectives
- Public outreach process
- Natural resource management guidelines and standards
- Fire hazard reduction
- Climate change considerations
- Monitoring and adaptive management strategies
- Grazing management
- Cultural resources management
- Conceptual plan for park use
- Allowed uses, by designated development envelope
- Vehicle, pedestrian and equestrian access and parking
- Transportation improvements
- Trail system concept and development guidelines and standards
- Signage guidelines and standards
- Community stewardship opportunities and strategies
- Operations, management and maintenance provisions
- Implementation strategies and priorities

To provide a basis for the Plan strategies, the Master Plan also outlines existing resource conditions, sensitivities, regulatory setting and policy framework. Information in the Master Plan has been developed through numerous resource inventories, field visits, studies, design evaluations, and public review processes. The following subsections describe the key parts of the Master Plan that compose the project description for CEQA analysis.

Proposed Uses

The overall site plan, shown in Figure B.1-2, which shows park access points and trailheads with parking lots. In order to concentrate development such as parking or buildings away from sensitive resource areas, development envelopes are outlined in the areas that have already been disturbed and/or are adjacent to urban infrastructure (see Figure B.1-3). Areas of the site that have sensitive plant communities or are part of the Santa Rosa viewshed have been designated for less intensive park development such as trails, interpretive education and plant restoration activities.

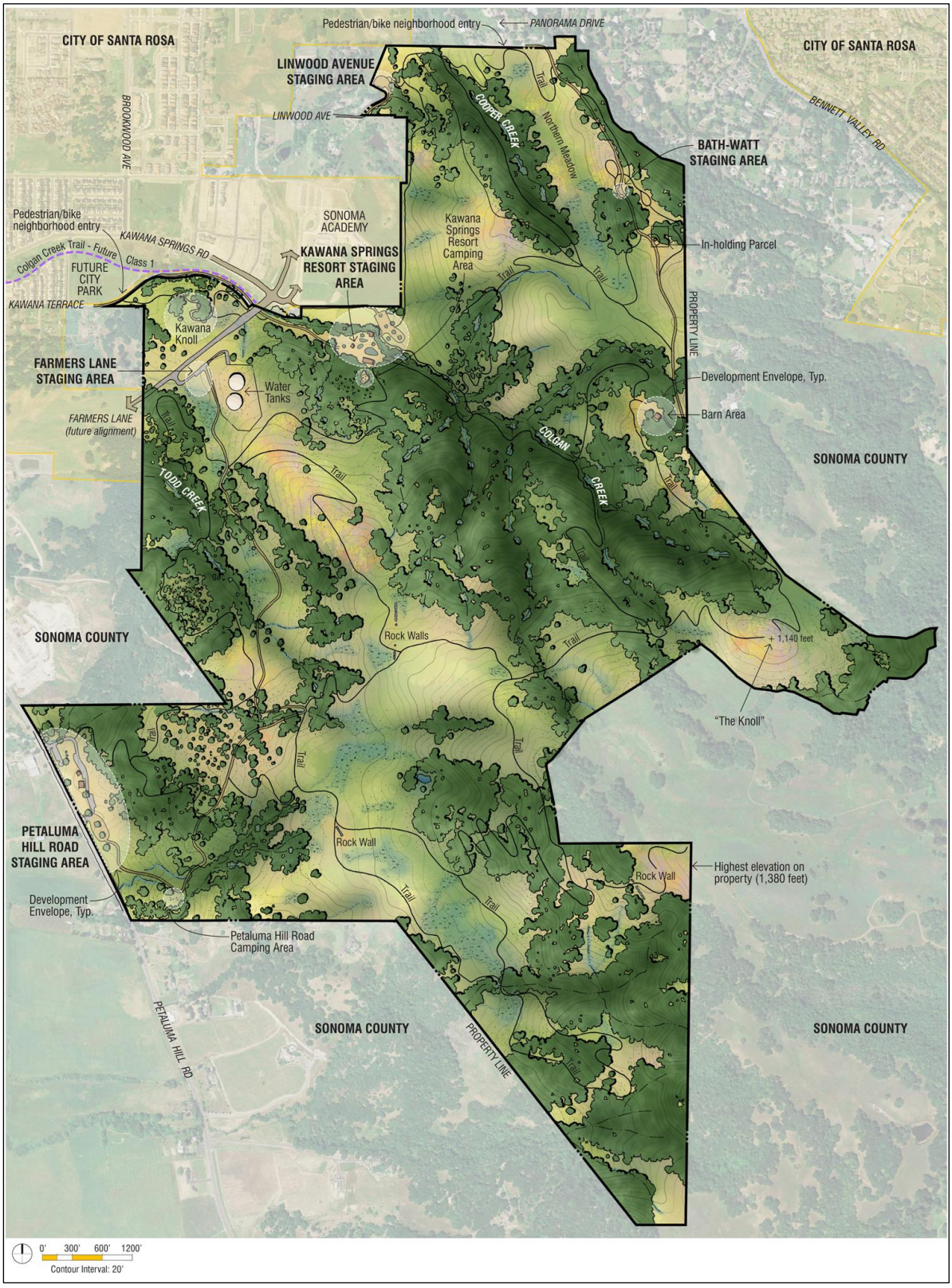

Figure B.1-2. Site Plan

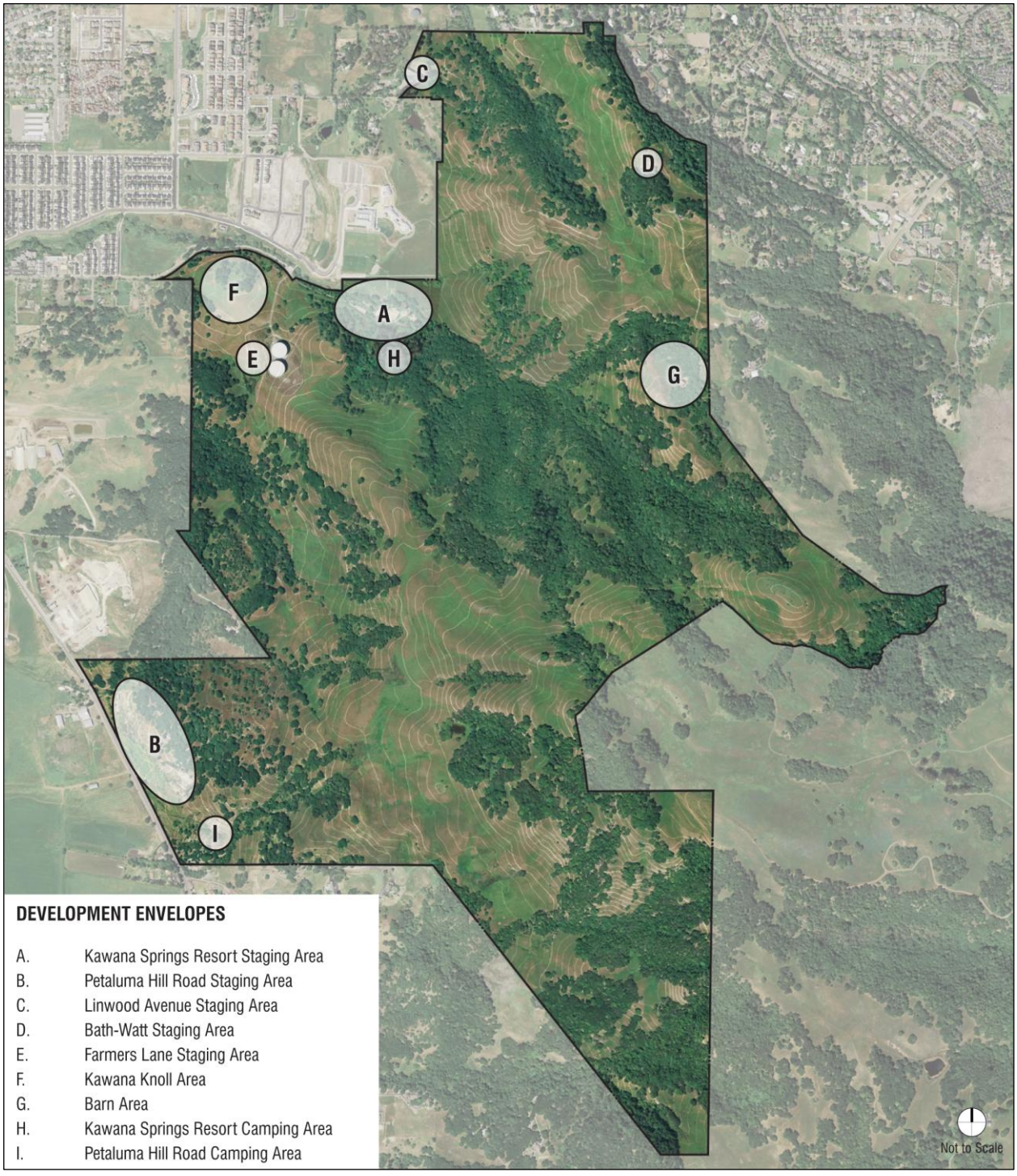

Figure B.1-3. Master Plan Development Envelopes

The Master Plan specifies uses that are allowed within the various designated development areas (see Table B.1-1). The following uses are allowable within one or more of these development areas:

- Parking
- Trails
- Trailheads
- Individual and group picnic areas
- Outdoor educational spaces/small amphitheater
- Restrooms
- Natural playcourse
- Disc golf course
- Small visitor center in the existing bathhouse structure
- Limited camping, including family, small group and environmental camping
- Café or food vendor
- Small bed and breakfast inn/hotel
- Fenced off-leash dog park
- Community/demonstration garden
- Special events space.

Although the conceptual site plans do not show all of these potential uses, the environmental analysis in this document fully considers all potential uses that could be developed under the Master Plan.

As access points are developed for the Preserve upon transfer of the property from the District to Regional Parks, the existing Interim Public Access Permit Program would be discontinued and the Preserve would be open to the public on a regular basis. The proposed staging areas are described below (see Access and Parking). In addition to these staging areas, several destinations within the property are designated for limited improvements, as listed in Table B.1-1:

- *Barn Area* – The barn site is accessible from multiple staging areas and is already graded flat. The Master Plan calls for limited architecturally appropriate improvements to the site and to the barn itself (see Figure B.1-4).
- *Kawana Knoll* – This approximate 18-acre area will be physically isolated from the main portion of the Preserve as a result of future construction of the Farmers Lane Extension by the City of Santa Rosa. The existing interim parking lot is located immediately adjacent to the knoll, but there will be no direct vehicular access to the knoll when the Farmers Lane Extension is constructed. Pedestrian and bicycle access from Kawana Terrace would be available. Because of its physical separation, this area lends itself to being a transitional zone between the urban edge and the Preserve's open space. Permanent improvements made prior to the Farmers Lane Extension would be located so that they are not displaced by the future road alignment. Allowed uses listed in Table B.1-1 would be confined to the development envelope for that area (see Figure B.1-3).

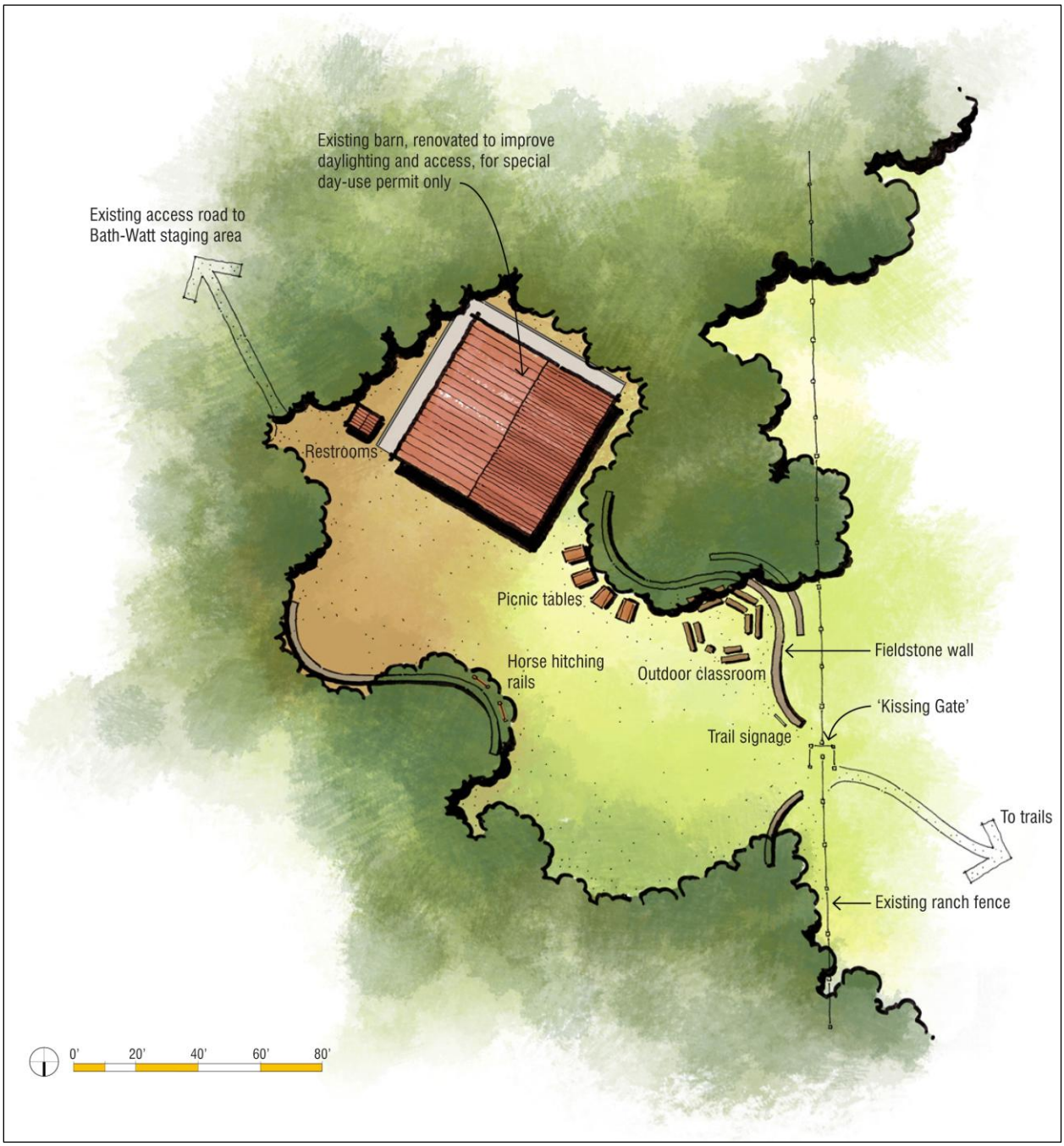

Figure B.1-4. Barn Area Conceptual Plan

Table B.1-1. Taylor Mountain Park and Open Space Preserve Allowed Uses Matrix

	Location								
Use	**Petaluma Hill Staging Area**	**Kawana Springs Resort**	**Interim Staging Area** (pre– Farmers Lane Extension)	**Water Tanks (Farmers Lane)** (post–Farmers Lane Extension)	**Kawana Knoll**	**Linwood Staging Area**	**Bath-Watt Staging Area**	**Barn Area**	**Trails**
Benches	x	x	x	x	x	x	x	x	x
Picnic tables	x	x	x	x	x	x	x	x	—
Small group picnic areas	x	x	x	x	x	x	—	x	—
Large group picnic areas (up to 75 by reservation)	x	x	x	—	x	—	—	—	—
Individual camping (up to 8 by reservation)	x	x	—	—	—	—	—	—	—
Group camping (up to 25 by permit)	x	x	—	—	—	—	—	—	—
Indoor accommodations Hotel/B&B	—	x (size limitation)	—	—	—	—	—	x (groups by permit)	—
Primitive cabins/yurts	x	x	—	—	—	—	—	—	—
Fire pits/cooking fires/BBQ	—	x	—	—	—	—	—	—	—
Camp stoves only	x		—	—	—	—	—	—	—
Natural play course	x	x	x	—	x	—	—	—	—
Trash and recycling receptacles	x (at trailhead)	x (by campsites)	x	x	x	x	x	x	—
Disc golf course	x	—	—	—	x	—	—	—	—
Off-leash fenced dog park	x	x	—	—	x	—	—	—	—
Outdoor classroom/small amphitheater	x	x	—	—	x	—	—	x	—
Visitor center/structure	x	x	—	—	—	—	—	—	—
Community and demonstration gardens	x	x	—	—	—	—	—	—	—

Table B.1-1. Taylor Mountain Park and Open Space Preserve Allowed Uses Matrix

	Location								
Use	**Petaluma Hill Staging Area**	**Kawana Springs Resort**	**Interim Staging Area** (pre– Farmers Lane Extension)	**Water Tanks (Farmers Lane)** (post–Farmers Lane Extension)	**Kawana Knoll**	**Linwood Staging Area**	**Bath-Watt Staging Area**	**Barn Area**	**Trails**
Café	—	x	—	—	—	—	—	—	—
Mobile food vendor	x	x	x	—	—	—	—	—	—
Rental space for daytime special events (limitations)	x	x	x	—	—	—	—	x (education only)	—
Maintenance sheds	x	x	x	—	—	x	—	x	—
Horse trailer parking	x	x (long-term)	x	—	—	x	—	—	—
Horse Stables (8 total)	x	x	—	—	—	—	—	—	—
Horse Corral (up to 12 horses each)	x	x	—	—	—	—	—	—	—
Restrooms (fixed or portable)	x	x	x	x	x	x	x	x	—
Lighting – security (restroom)	—	x	—	—	—	—	—	x	—
Lighting – entry (outside)	—	x (porch light)	—	—	—	—	—	x (motion sensor)	—
Lighting – low-level wayfinding, including at parking areas	—	x	—	—	—	—	—	—	—

*Not all of the allowed uses are depicted on conceptual site plans, however, all listed uses are analyzed in this IS/MND.

Development Standards and Guidelines

The Master Plan establishes provisions to guide development of the proposed uses. The information is organized into two basic categories: guidelines and standards. Guidelines represent good design principles and/or best management practices, and should be followed wherever possible and feasible; guidelines are, to an extent, discretionary and are open to the interpretation of Regional Parks and the District. A standard however, is less flexible and is required to be adhered to, primarily for the protection and management of natural resources and construction of recreational amenities.

Guidelines regarding development of the Preserve include general design provisions as well as specific measures for each of the proposed access and development envelopes. Standards include measures addressing structure setbacks, parking requirements, roadway widths, landscaping, infrastructure improvements and signage. The measures integrate unique features of each development envelope.

Access and Parking

Under the existing Interim Public Access Permit Program, there is one staging area that accesses two trails. The Master Plan concepts include several access points, staging areas and trailheads at locations along the western and northern property boundaries where the Park and Open Space Preserve is adjacent to urban infrastructure and existing linkages to the community. Staging areas will be located within the development envelopes established in the Master Plan and will include the improvements listed below. The locations are distributed to accommodate visitors coming from all parts of the City of Santa Rosa and Sonoma County (see Figure B.1-2). In general, the graded staging areas will be unpaved, except as necessary to comply with federal and State accessibility requirements. The proposed access points are described below.

1. *Petaluma Hill Road* – This new entrance would serve as a primary access point for hikers, mountain bikers, and equestrians; it would include auto and horse trailer parking, trailheads, restrooms and interpretive educational exhibits (see Figure B.1-5). Two driveways would connect parking areas, located within the Preserve, to Petaluma Hill Road. Petaluma Hill Road improvements would include:

   - Adding a southbound left-turn lane and acceleration lane for left-turn movements into and out of the southern driveway.
   - Providing approximately 450 feet of vehicle storage for the left-turn lane, contained between the two driveways.
   - Providing a minimum of 80 feet of vehicle storage, 310 feet for acceleration, and 120 feet for transition in the new acceleration lane.
   - Limiting the northern driveway to right-turn movements, in and out.

   Road widening is planned to encroach only into the Preserve property.

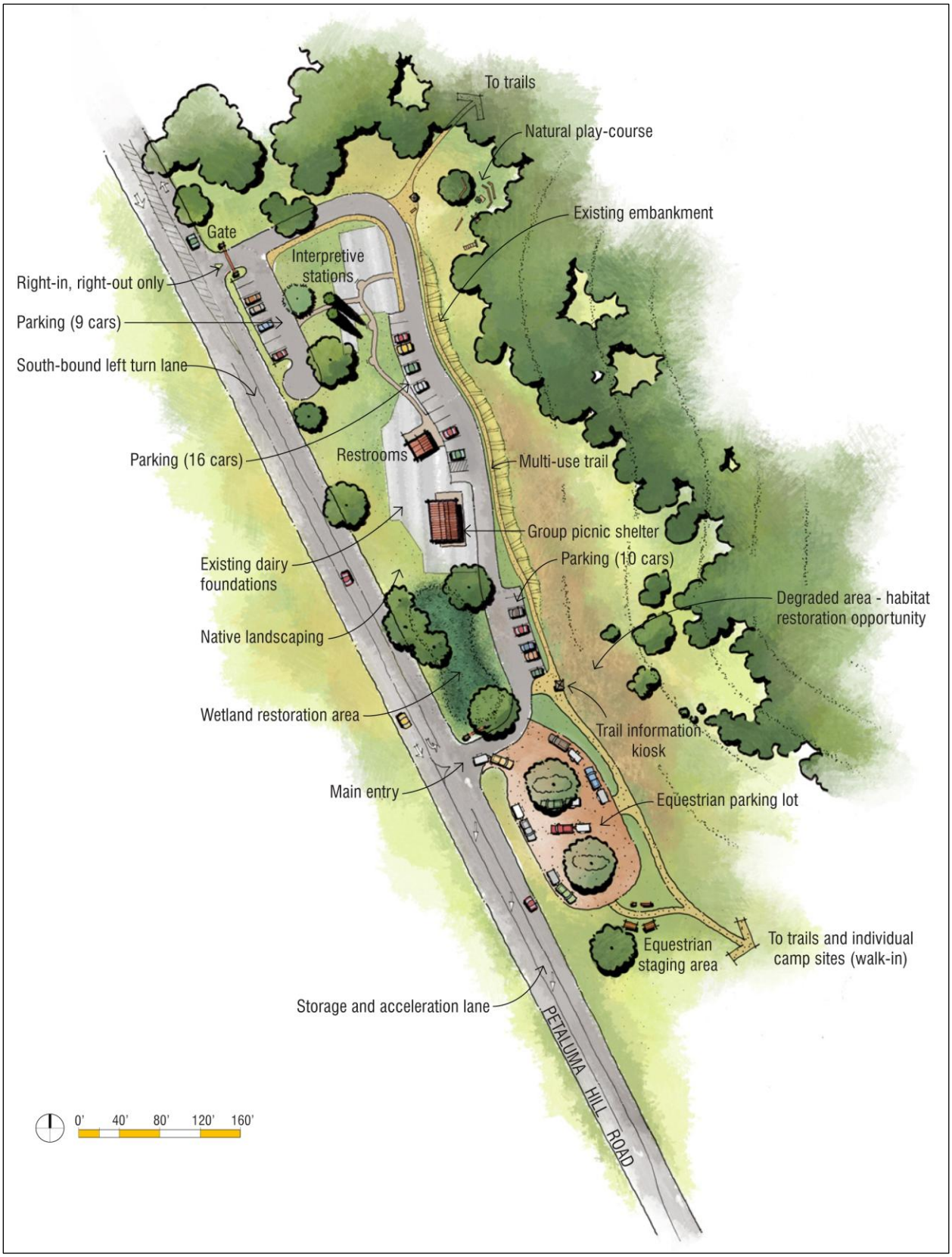

Figure B.1-5. Petaluma Hill Road Staging Area Conceptual Plan

2. *Future Farmers Lane Extension* – This access would be constructed if the City of Santa Rosa Farmers Lane Extension project is completed.[1] It would serve as an access point for pedestrians and mountain bikers only, with limited parking (see Figure B.1-6).

3. *Kawana Terrace* - The existing interim parking lot that is accessible from Kawana Terrace will remain in use as a primary access point for hikers, mountain bikers, and equestrians until it is required to be decommissioned for the construction of Farmers Lane Extension. The Farmers Lane Extension would require the removal of this parking lot and the need to reconfigure access from this general area. At that time, the staging area would be removed and vehicle entry from Kawana Terrace would only be to the Kawana Springs Resort area at such time that this area is developed for public use, as discussed below.

4. *Kawana Springs Resort / Kawana Springs Road* - The Kawana Springs Resort area is planned to be one of the primary staging areas for pedestrians (including ADA accessibility), hikers, mountain bikers, and equestrians,. Numerous visitor-serving uses are envisioned, including a renovated bathhouse that may incorporate a visitor center, educational components, and a small vendor space. Improvements at the site may include landscape restoration, wedding/outdoor event space, restrooms, camping areas, picnic areas, an outdoor classroom, parking, demonstration gardens, Colgan Creek restoration and the potential for a future bed and breakfast/hotel (designed to reflect the historic architecture of the period when John Taylor owned the property).

   The Master Plan includes short- and long-term concepts for staging areas. The need for a short-term plan is primarily due to two reasons:

   - Before Farmers Lane is extended through the Taylor Mountain property, less parking spaces are required at the Kawana Springs Resort Staging Area due to the existence of the interim access parking lot. The decommissioning of the interim lot at the time of the Farmers Lane extension will trigger the need for a larger lot at the Kawana Springs Resort staging area.
   - The short-term plan depicts less substantial improvements in order to be respective and sensitive to the privacy of the life estate residents whose property is immediately adjacent to the staging area.

[1] The City of Santa Rosa is planning to extend Farmers Lane to connect the Bennett Valley area with the southern part of the city, ultimately to Yolanda Avenue at Petaluma Hill Road. This connection would run through the northwest corner of the park, through the existing Kawana Terrace interim parking lot, thereby resulting in the need to modify access in this area of the property. A new road will be constructed as a part of the extension project in order to access the existing water tanks from Farmers Lane Extension, and this is proposed to double as a secondary staging area for the Preserve. Full access (both right and left turns in and out) is assumed.

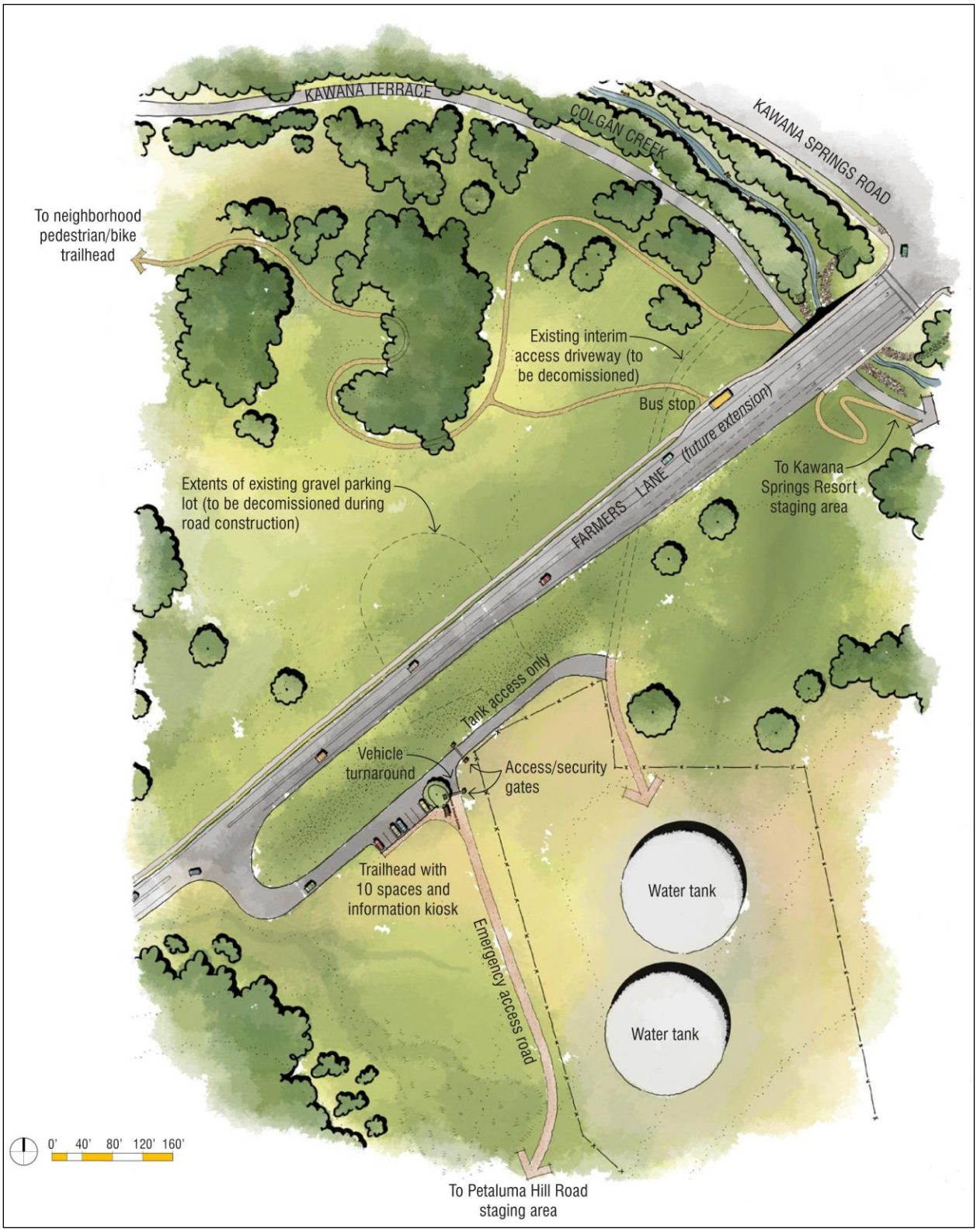

Figure B.1-6. Farmers Lane Extension/Kawana Knoll Staging Area Conceptual Plan

Short Term Plan. In the short-term, the existing access to the Kawana Springs Resort via Kawana Terrace may be used and a small parking lot may be developed at the Resort site (see Figure B.1-7). Short-term access to the Kawana Springs Resort staging area would be from the end of Kawana Terrace in either of the following two ways:

- Kawana Terrace would be converted to a park driveway starting at the Preserve boundary. The driveway from the end of Kawana Terrace would have a 5 mph speed limit and would require construction of pull-out locations.
- Access would be provided via Kawana Terrace to the long-term parking area, on the north side of Colgan Creek. A new bridge would cross Colgan Creek that could accommodate pedestrians, bikers, equestrians, and vehicles, including maintenance and emergency vehicles. An option for this approach would be to provide a one-way loop by continuing the road to the boundary between the Taylor Mountain property and Sonoma Academy, and then west along the boundary, connecting to Kawana Springs Road. This additional road would require approximately 12 to 14' of paved surface and approximately 2' of unpaved shoulder. The optional loop road could also be constructed as a two-way loop road, which would require increasing the paved width to approximately 24'.

Long-Term Plan. The future design essentially builds upon the short-term plan. The basic arrangement of the site is the same, with the addition of a small bed and breakfast inn, and a new parking lot on the north side of Colgan Creek adjacent to the boundary between the Preserve and Sonoma Academy that could accommodate 60 or more parking spaces. This parking area would be mostly out-of-sight for the majority of the Preserve and would be within walking distance of the future visitor center and trails that lead to the south and the northwest. The parking lot used in the short-term could either be retained or decommissioned and used for other purposes.

New possibilities for parking and vehicular access into the resort area will be provided when the 3.7-acre life estate expires in the future. Access to the Kawana Springs Resort staging area in the long-term could be in multiple ways:

- Pedestrians, bikers, equestrians, and authorized vehicles would access from Kawana Terrace.
- Vehicles would access from Kawana Springs Road, from the future intersection of Kawana Springs Road and Farmers Lane and along the boundary with Sonoma Academy, to the parking area. A new bridge would allow pedestrians, bikers, equestrians, and maintenance and emergency vehicles to cross Colgan Creek to access the core of the staging area.
- After the life estate expires, if Farmers Lane Extension is not yet constructed, vehicles could access from Kawana Terrace and park at the life estate area or cross Colgan Creek in the life estate area to access the parking area. This would require increasing the existing paved width by approximately 10', and potentially providing a new vehicular bridge.

If this long-range access is not developed, visitors who would have used it would likely use the Petaluma Hill Road and/or Kawana Terrace access points.

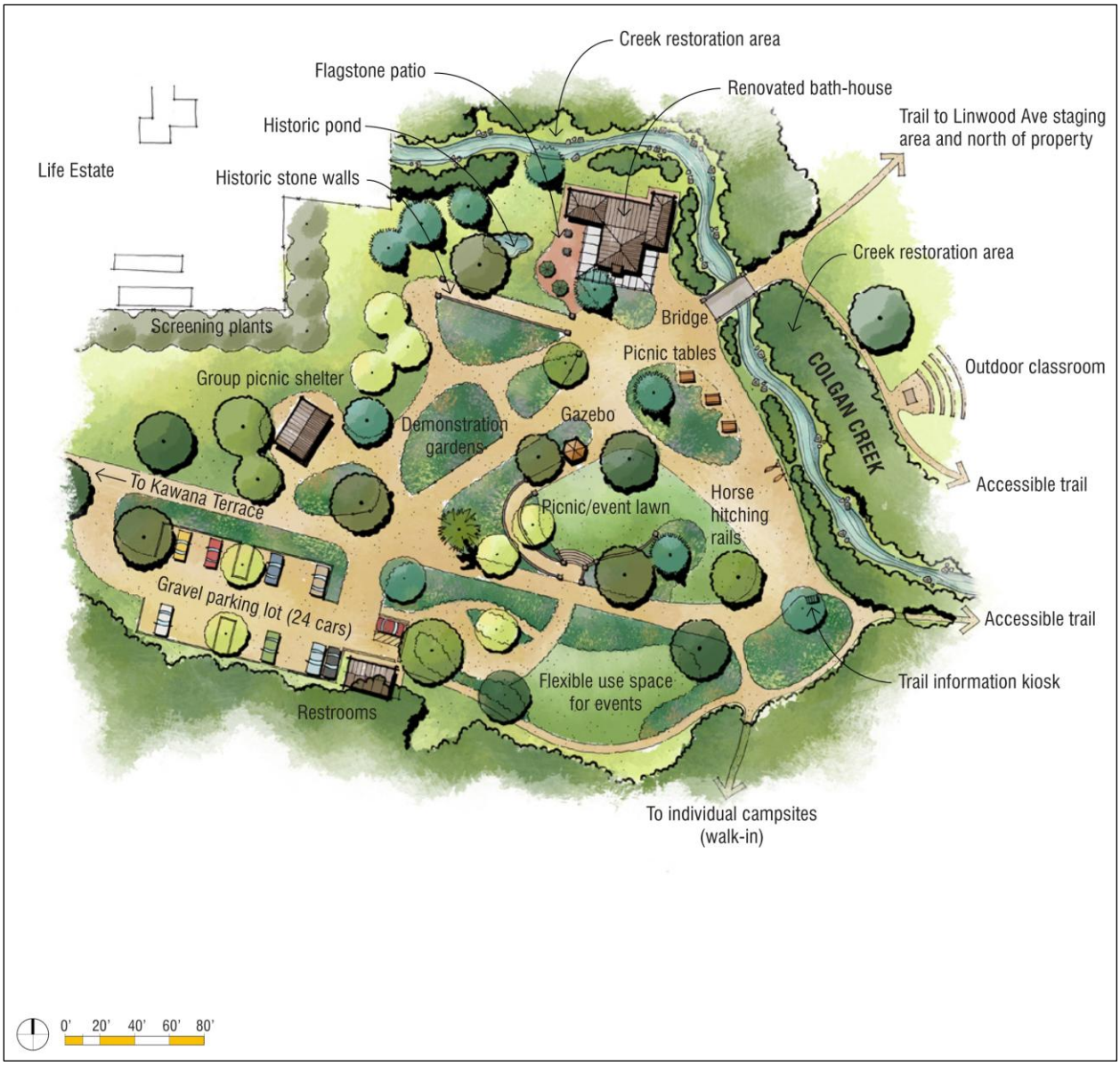

Figure B.1-7. Kawana Springs Resort Staging Area Conceptual Plan, Kawana Terrace Access – Short-term

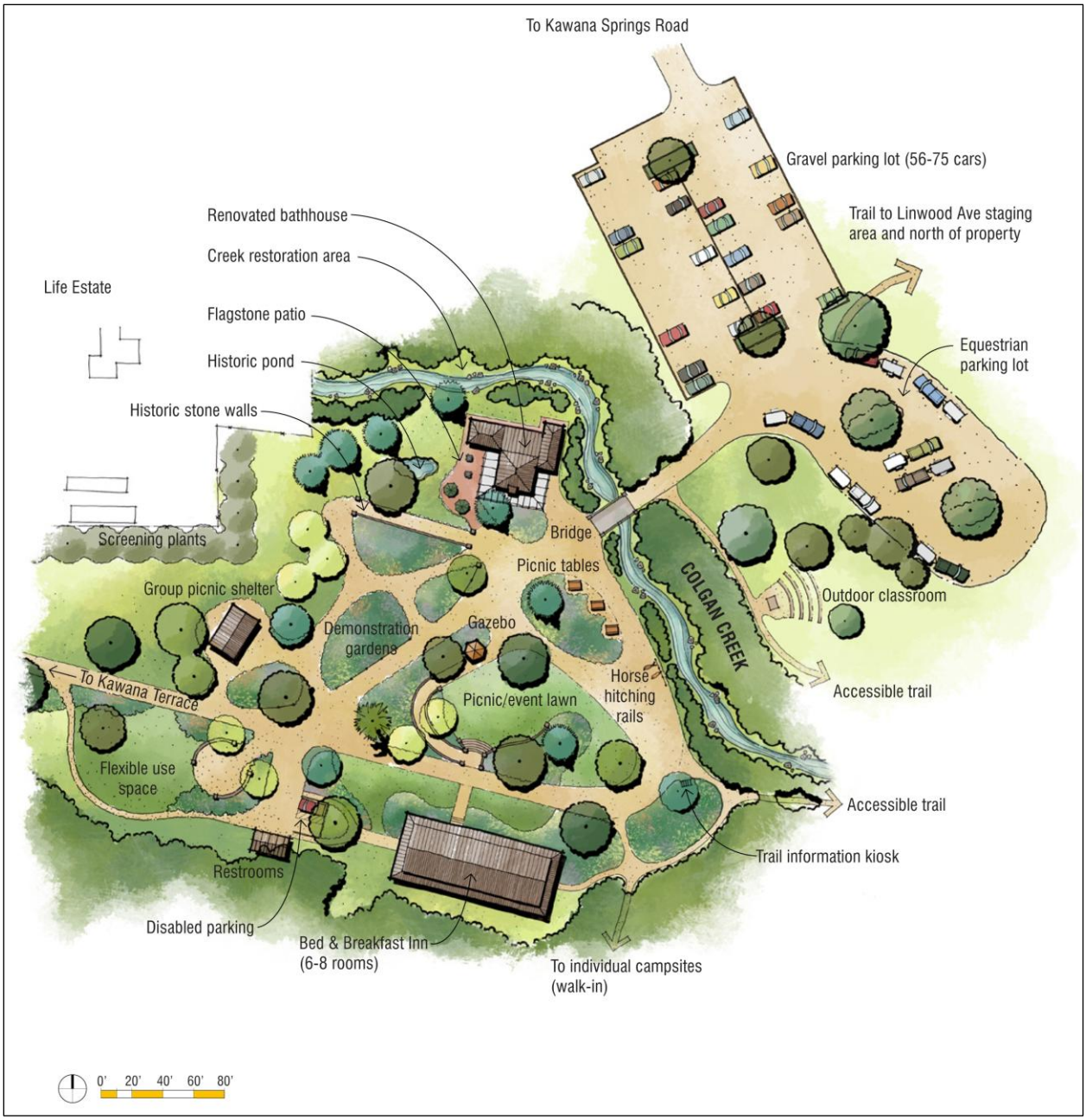

Figure B.1-8. Kawana Springs Resort Staging Area Conceptual Plan, Kawana Springs Road Access - Long-term

5. *Linwood Avenue* – The location at the end of Linwood Avenue provides access to the northwest quadrant of the property (see Figure B.1-9). This site would provide a secondary access point for hikers, mountain bikers, and equestrians from the neighborhood and surrounding area. A small parking lot for about 20 cars would be provided when Linwood Avenue is improved to applicable public roadway standards. Until the street is improved, this location would provide access to pedestrians and cyclists with a walk-in/bike-in gate.

6. *Bath-Watt (Panorama Drive)* – This staging area would be reached from a driveway that starts at the end of Panorama Drive (see Figure B.1-10). It is the highest-elevation planned access point and would provide a limited access point to Taylor Mountain, emphasizing pedestrians and mountain bikers with a walk-in/bike-in gate. Vehicle access would be restricted by a key card gate. A small parking lot (maximum of 10 spaces) would be provided for vehicles with ADA placards and for groups and individuals with special use permits from Regional Parks. Service, emergency and other authorized vehicles could use this access point, but no other visitors would be allowed to park at the site. The Master Plan includes a provision for establishing a residential parking permit program to ensure that Preserve visitors do not park on Panorama Drive or the adjacent residential streets.

Natural Resource Restoration and Enhancement

The goals for natural resource management of the Preserve are to preserve and enhance its natural habitats, conserve native biodiversity, and protect ecological processes. Balancing recreational access and a variety of other human influences on the property with those goals is addressed through the strategies identified in the Master Plan. The Master Plan includes provisions for protecting and/or improving key physical and ecological processes, planning public access to minimize resource impacts, monitoring changes to the property where impacts may occur, and adjusting management strategies over time to incorporate new information gleaned from monitoring efforts or other relevant sources. Specific strategies include:

- Restoration, protection and monitoring of wetlands, forests, woodlands, and grasslands
- Protection of special-status plant and animal species
- Removal and prevention of invasive non-native species
- Reduction of fire hazards
- Planning for climate change
- Monitoring habitat changes, restoration success, Sudden Oak Death (SOD), and trail conditions
- Management of livestock grazing.

Individual resource standards and guidelines that reduce or avoid potential impacts are referenced throughout the impact analysis in Section B.3 of this IS/MND.

Figure B.1-9. Linwood Avenue Staging Area Conceptual Plan

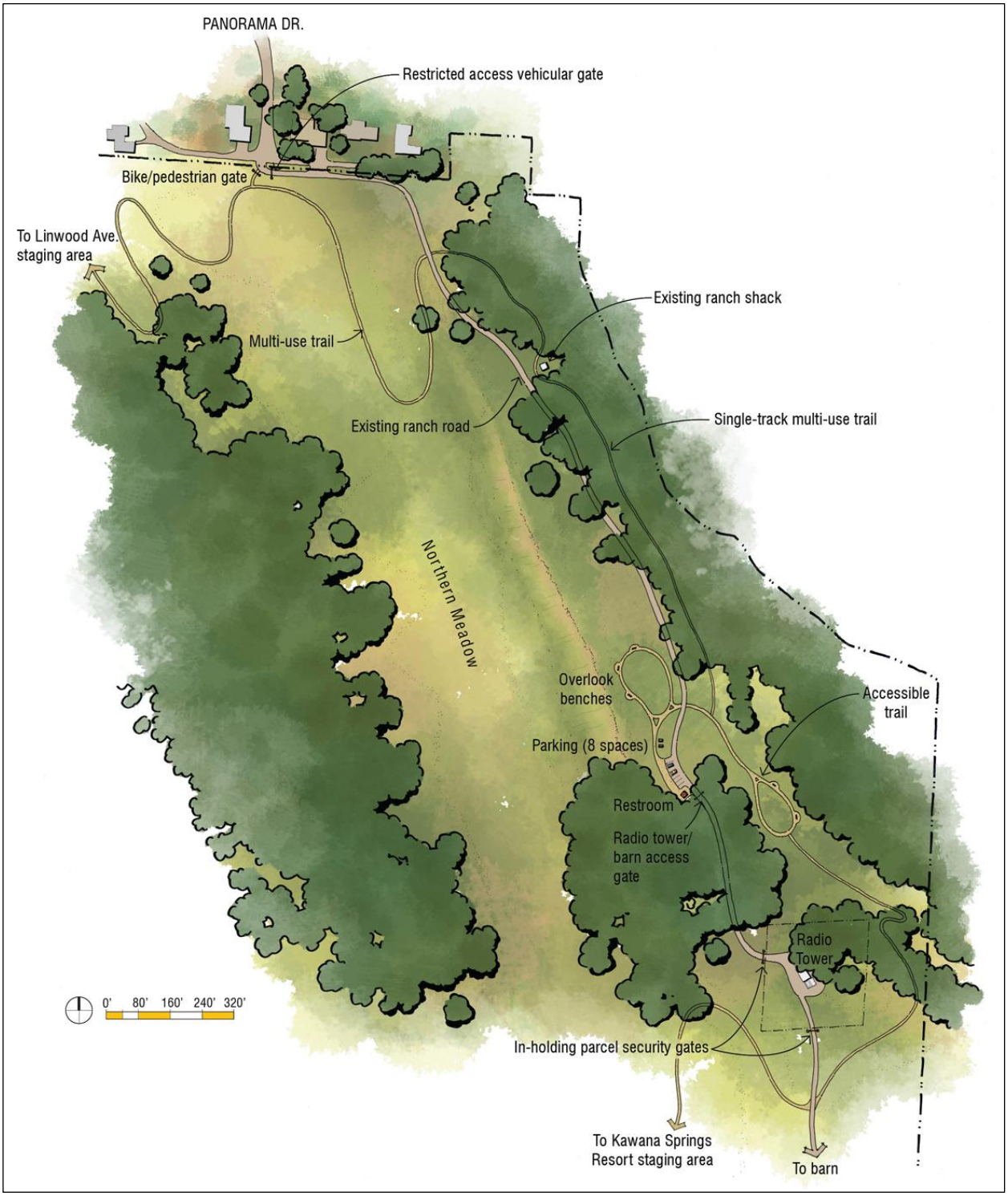

Figure B.1-10. Bath-Watt Staging Area Conceptual Plan

Cultural Resource Management

The Master Plan contains measures to preserve and protect historic and prehistoric resources on the property. These measures are based on recommendations from qualified cultural resources experts.

Guidelines and standards are proposed to ensure avoidance of archaeological resources, preservation of historic themes, and protection of significant resources that may be accidentally discovered during construction activities.

Trails

The proposed 17-mile trail system concept in the Master Plan is the principal means for providing comprehensive public access to the Park and Open Space Preserve. The six major trail loops and alignments were routed to allow users to experience a variety of native plant communities, degree of difficulty, trail length, and scenic vistas, while minimizing impacts on natural resources (see Figure B.1-11). The Master Plan includes trail design guidelines and standards for trail development to ensure natural resource protection and consistency with objectives and strategies in the resource management chapter of the Master Plan. Suitable trails for hikers, bicyclists and equestrians are identified in the Master Plan.

There are four proposed trail types:

- Multi-use trails, which can be narrow trails known as single-track or wider trails allowing two or three abreast
- Educational trails, which are pedestrian-only
- ADA-accessible trails
- Emergency access routes.

Although the Master Plan establishes a trail plan concept, actual location of the trails will be determined through additional design work and compliance with the trail development guidelines and standards. Some trails may be subject to closure during wet weather to minimize erosion and other potential environmental damage.

Emergency Response, Fire Protection and Security

The Master Plan includes routes designed to allow emergency vehicles and other authorized vehicles (such as County maintenance trucks) occasional access to some key areas of the mountain. These routes provide cross-property connections, primarily between the Petaluma Hill Road and Kawana Springs Resort staging areas. In the event of a true emergency, these roads would present a launching point for 4WD vehicles to access more remote areas. Guidelines and standards are provided in the Master Plan for emergency access road widths and surfaces.

No smoking would be allowed on Taylor Mountain. This prohibition would be listed in the rules and regulations, and included on the informational kiosks.

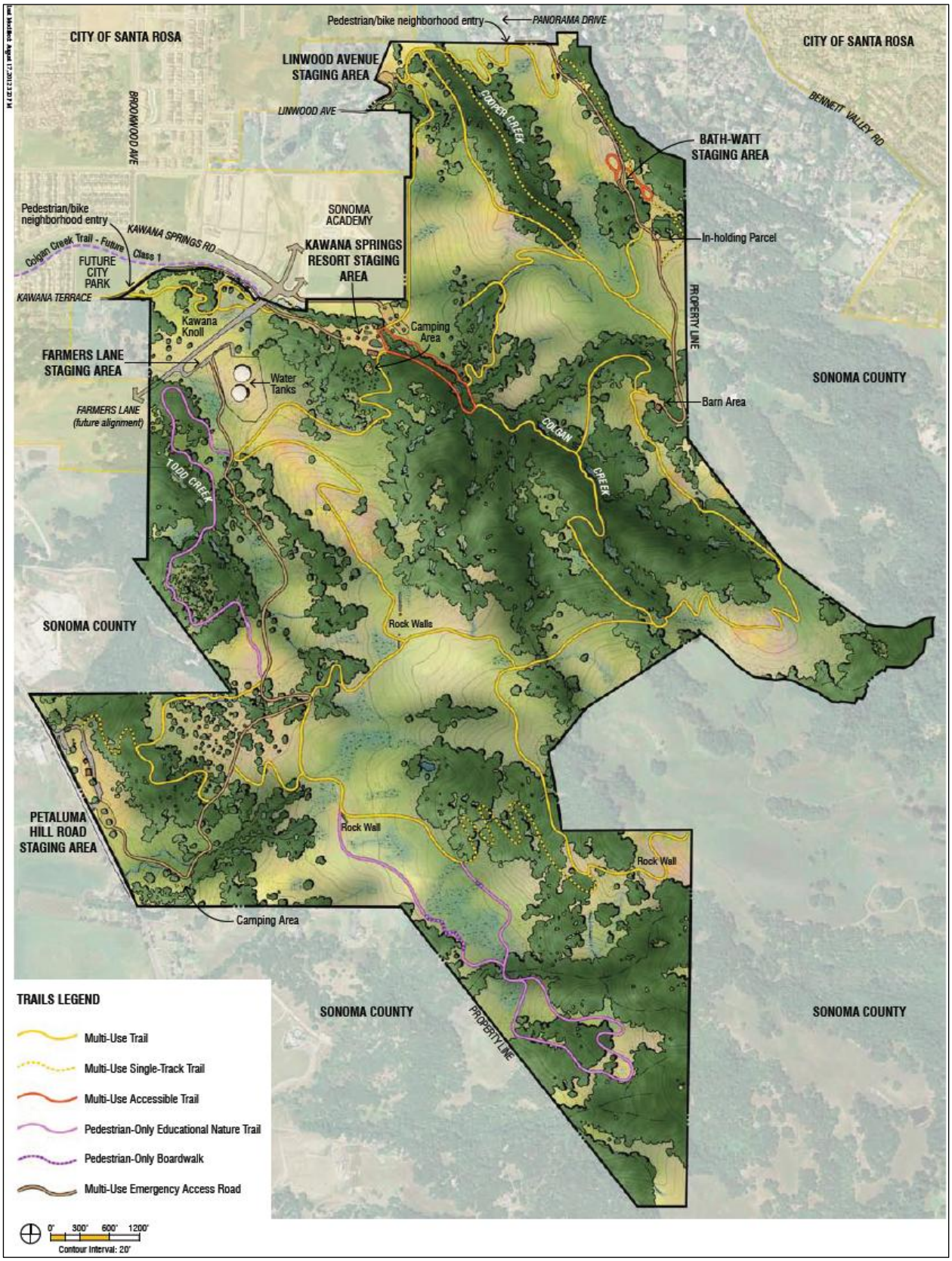

Figure B.1-11. Master Plan Trails Concept

As shown in Table B.1-1, BBQs and use of fire pits would be restricted to developed parts of the Kawana Springs Resort area, with sufficient vegetation clearance. Cook stoves would be allowed at the Petaluma Hill Road and Kawana Springs Resort staging areas. Use of BBQs and fire pits would not be allowed during high fire risk periods. The Sonoma County Regional Parks Department would patrol the property on a regular basis.

Emergency response would be provided on an as-needed basis by the County Sheriff's office. Although the property is located in the Bennett Valley and the Rincon Valley Fire Protection Districts, the City of Santa Rosa Fire Department would be the first responder, as it has the closest fire station. Since the project site is located within a State Responsibility Area, CalFIRE also provides wildland fire protection services.

B.1.6 Other Projects Proposed in the Vicinity

The City of Santa Rosa has started planning for the Kawana Community Park, located at the corner of Meda Avenue and Kawana Springs Road. This community park would be connected to the Taylor Mountain site by way of a path along Colgan Creek and/or along Kawana Terrace. It is anticipated that parking at the future community park site would also provide some parking for the Taylor Mountain Regional Park and Open Space Preserve. The planned Farmers Lane Extension would traverse the northwest portion of the Taylor Mountain property in the vicinity of the existing interim staging area. Additional residential development projects have been approved in the vicinity of Farmers Lane near Sonoma Academy, and along Tokay Street, Brookwood Avenue and Kawana Terrace. Some additional development will also take place at Sonoma Academy, which has a current enrollment of about 250 students and plans to accommodate an ultimate student enrollment of 450 to 650 students. All of these planned projects have been factored into the cumulative analysis conducted for this IS/MND.

B.1.7 Other Public Agencies Whose Approval is Required

The proposed Master Plan is a joint project of the District and Regional Parks and would require approval by the District Board of Directors and the Sonoma County Board of Supervisors. The County will act as a responsible agency, taking action after the District Board of Directors takes action as lead agency, under CEQA.

Roadway improvements and other work within City or County roads would require approval from the applicable transportation department at either the City of Santa Rosa or County of Sonoma. Development of staging areas and some proposed uses would require approval from the State Water Resources Control Board and North Coast Regional Water Quality Control Board. Trail improvements and work adjacent to water bodies would likely require permits from the U.S. Army Corps of Engineers, the North Coast Regional Water Quality Control Board, U.S. Fish and Wildlife Service and potentially the California Department of Fish and Game. Extension of public services would be subject to approval from local service providers. Development plans and roadway improvements will be subject to approval from local fire protection districts and building permits will be required from the County of Sonoma. Details on permit requirements are provided in the individual issue areas in Section B.3.

B.2 Environmental Determination

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.

☐ Aesthetics	☐ Agriculture Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology/Soils
☐ Hazards & Hazardous Materials	☐ Hydrology/Water Quality	☐ Land Use/Planning
☐ Mineral Resources	☐ Noise	☐ Population/Housing
☐ Public Services	☐ Recreation	☐ Transportation/Traffic
☐ Utilities & Service Systems	☐ Mandatory Findings of Significance	

☒ NONE

Environmental Determination

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 pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Christine Musset for William J. Keene — 6.12.12

William J. Keene, General Manager
Sonoma County Agricultural Preservation and
Open Space District

Date

B.3 Environmental Analysis and Mitigation

As described in Section B.1, the Master Plan would be developed over time, as funding becomes available. For purposes of CEQA compliance, the following impact analysis is based on the full development of the Preserve, as depicted in the Master Plan (see Table B.1-1 for a listing of allowable uses). The impact analysis compares proposed uses and development to existing conditions in the study area. Master Plan guidelines and standards are factored into the analyses, where relevant. Baseline information from the previous Initial Study/MND (2009) is utilized, to the extent it is still current. The analysis draws from the extensive resource information developed as part of the initial phase of the Master Plan preparation. These studies are cited in the relevant issue area analyses.

B.3.1 Aesthetics

AESTHETICS **Would the project:**	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	☐	☐	☒	☐
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Significance criteria established by CEQA Guidelines, Appendix G.

B.3.1.1 Setting

The property has been used as a ranch since the latter half of the 1880s when John Taylor first had a herd of dairy cows and planted one of the first vineyards in the area. The mountain thus has a number of unpaved ranch roads accessing all areas of the property, and over time, cattle have worn trails through the grassland. These roads and trails are only slightly visible from the U.S. Highway 101 corridor, State Route 12, and some of the surrounding neighborhoods.

The recent interim use of the property has resulted in development of a parking lot, access gate, trailhead signage and minor trail improvements. These minor developed features have not noticeably changed the overall scenic qualities of the property.

The Taylor Mountain property is part of a Scenic Landscape Unit (SLU), as identified in the Sonoma County General Plan 2020 (Sonoma County, 2008). The goal of this overlay designation, as stated in General Plan OSRC-2, is to "retain the largely open, scenic character of important SLUs." SLU objectives include:

- Retain a rural, scenic character in SLUs with very low intensities of development; avoid their inclusion within spheres of influence for public service providers.

- Protect the ridges and crests of prominent hills in SLUs from the silhouetting of structures against the skyline.
- Protect hills and ridges in SLUs from cuts and fills.

To implement these objectives, the General Plan Open Space Element contains a series of policies (Policies OSRC-2a through 2h), summarized as follows:

- OSRC-2a: Avoid amendments to increase residential density.
- OSRC-2b: Avoid commercial or industrial uses in SLUs other than those permitted by the agricultural or resource land use categories.
- OSRC-2c: Apply the Scenic Resources combining zone district to all lands within SLUs;
- OSRC-2d: Require the following criteria for new structures: site and design structures to take maximum advantage of existing topography and vegetation to screen them from view from public roads; minimize cuts and fills on hills and ridges; minimize tree and mature vegetation removal; install landscaping consisting of native vegetation to screen structures in areas where existing topography and vegetation would not sufficiently screen structures; use building materials and color schemes that blend with the natural landscape; avoid structures that project above the silhouette of hills or ridges and screen driveways from view; cluster structures within existing built areas and near existing natural features such as tree groupings.
- OSRC-2e: Implement standards for subdivisions in SLUs.
- OSRC-2f: Identify critical scenic areas within SLUs; consider requiring dedication of a permanent scenic or agricultural easement at the time of subdivision of properties in these critical scenic areas.
- OSRC-2g: Consider voluntary transfer of development rights.
- OSRC-2h: for parcels located both within SLUs and adjacent to Scenic Corridors, apply the more restrictive siting and setback policies to preserve visual quality.

To implement the SLU land use designation, the Scenic Resources (SR) overlay zone district is established on the entire property. The SR contains the following provisions, which mirror the policies of the SLU:

- Structures shall be sited below exposed ridgelines;
- Structures shall use natural landforms and existing vegetation to screen them from view from public roads. On exposed sites, screening with native, fire resistant plants may be required;
- Cuts and fills are discouraged, and where practical, driveways are screened from public view;
- Utilities are placed underground where economically practical;

Consistency with these policies and zoning provisions is addressed below in Item (a).

B.3.1.2 Environmental Impacts and Mitigation Measures

As outlined in Appendix G of the CEQA Guidelines, the degree of impact significance is a function of landscape visual sensitivity and project-induced visual change. While the interrelationships between sensitivity and change must be considered individually for each

project, lower visual sensitivity with lower visual change ratings will generally correlate with lower visual degrees of impact significance when viewed on site. Likewise, higher visual sensitivity ratings paired with higher visual change ratings will tend to result in higher degrees of visual impact.

Implicit in this rating methodology is the acknowledgement that, for a visual impact to be considered significant, two conditions generally exist:

- The existing landscape is of reasonably high quality and is highly valued by the public; and
- The perceived incompatibility of one or more proposed project elements or characteristics tends toward the high extreme, leading to a substantial reduction in visual quality.

Although portions of the existing landscape are of reasonably high quality, the low-intensity project components would not affect any scenic vistas or substantially degrade the visual quality or character of the site or its surroundings. According to CEQA Guidelines, it would have a less than significant visual impact. No new mitigation measures are required.

a. Would the project have a substantial adverse effect on a scenic vista?

LESS THAN SIGNIFICANT IMPACT. The trails developed for hikers, equestrians and bicyclists would result in minimal visual impact, as they would appear similar to the existing ranch roads and cattle trails as viewed from the highway corridors and surrounding neighborhood. Several existing trails on steep slopes that are visible would be removed, as part of the overall trail implementation. Some trails would be closed in wet weather, thus preventing potential visible scarring from bicycle tracks or horse hooves. Clear trail markings would identify which user groups are allowed on specific trails and ranch roads in order to avoid overuse of trails and creation of new routes. The Master Plan includes a specific standard (S85) that requires visual impacts of trails to be minimized in order to preserve the integrity of viewsheds into the property from the City of Santa Rosa and adjacent lands, and also from within the property.

One of the primary goals of the Master Plan is to preserve, protect, and enhance the scenic vistas of the property. Development of access driveways, parking areas, picnic facilities and limited infrastructure such as restrooms and trailhead signage would be limited to development footprints established in the Master Plan (see Figure B.1-3). These areas have been designed to utilize existing disturbed areas and to minimize visual intrusions into scenic landscapes. The development envelopes are designated primarily for lower elevation locations, further limiting their effects on scenic vistas of Taylor Mountain. With development envelopes, design guidelines and standards in the Master Plan and proposed low-intensity improvements, future development would be consistent with the County General Plan Scenic Landscape designation and associated applicable policies and SR overlay zone district (described above in the setting). Master Plan Standard (S) 142 requires landscaping of staging areas and structures to screen from public views; S85 addresses trail impacts (see above); Guidelines (G) 137 and 138 address visual effects of boardwalks; S153 requires screening of the Kawana Springs Resort staging area from the adjacent life estate property; and G211 establishes guidance for signage to avoid visual impacts. The conceptual design of structures in the Master Plan does not require cut and fill on hills or ridges, nor would it result in structures silhouetting against the skyline. Designs

are specifically tailored to minimize tree and vegetation removal and to protect scenic vistas of the Preserve. Therefore, low-intensity recreational use of Taylor Mountain would not have a substantial adverse effect on the scenic vistas of Taylor Mountain.

b. Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?

LESS THAN SIGNIFICANT IMPACT. As indicated above, most of the project area is identified as part of a Scenic Landscape Unit in the Sonoma County General Plan and is zoned with a Scenic Resources overlay district. However, the property does not fall within a State scenic highway corridor designation. Developing low level improvements at the proposed staging areas at the edges of the Preserve would minimize effects on the overall scenic resources of the property. Grading, tree removal or other alteration of the property's visual elements will be minimized according to design guidelines and standards in the Master Plan. As described in Item (a) the proposed trail system will be subject to visual resource protection provisions in the Master Plan (S85, G137 and G138) and will provide access to scenic areas of the mountain without adversely affecting scenic resources.

c. Would the project substantially degrade the existing visual character or quality of the site and its surroundings?

LESS THAN SIGNIFICANT IMPACT. Developing the Preserve would not result in degradation of the visual character of the site. Improvements would be limited to development envelopes that have been selected and designed to minimize the level of new construction on the property and to site structures in or adjacent to existing developed or disturbed areas at lower elevations of the property. The proposed maximum structure height is generally one story, except in the Kawana Springs Resort area where two stories may be allowed, in the event a bed and breakfast inn/hotel is developed. The architectural sketches of the proposed developed areas in the Kawana Springs Resort area are shown in Figure B.1-7 and Figure B.3.1-1. As reflected in these conceptual plans, the appearance of new structures would be consistent with the visual character of the area and would not substantially degrade the existing visual quality of the site and its surroundings. Furthermore, the proposed project would not obstruct any scenic views from public viewing areas. As described in Item (a), the Master Plan also includes provisions to ensure that structural improvements and staging areas are appropriately landscaped to minimize visual impacts (S142 and S153).

Some automobiles parked at the staging areas would be visible from off-site locations but would not be visually obtrusive, as the primary parking areas would be in or adjacent to previously developed areas at lower elevations that are screened by topography and vegetation. In the Bath-Watt area, Master Plan Guideline 180 states that improvements should be located out of view of the adjacent neighborhoods wherever possible. In the Linwood area, Master Plan S186 requires screening of the staging area from neighboring homes.

The vehicles at the staging areas would also be visible from some locations on the Taylor Mountain site, generally from above the staging areas, but this would not substantially degrade the visual character of the site or wider landscape. New fencing would be visible from off-site

locations; however, there is existing fencing along the property boundaries and within the site, and the proposed fencing would be of a style compatible with the agricultural setting.

d. Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

LESS THAN SIGNIFICANT IMPACT. Implementing the proposed uses on the Taylor Mountain Preserve would not result in substantial new light or glare. Only the following low-level security lighting would be provided at some of the staging areas, as the Preserve will be closed at night (with the exception of limited camping at designated sites):

- Petaluma Hill Road: Security lighting (motion-detected shielded lights) at restrooms in staging area (no lighting at portable toilets at camping area);
- Barn Area: Security lighting (motion-detected shielded lights) at restrooms and barn doorway;
- Kawana Springs Resort: Security lighting at restrooms and at building entrances and dark areas, wayfinding lights at parking area, along paths to visitor center, hotel, and camping (off at 10 pm). S162 requires that any special event lighting be minimized and limited to specific key areas.
- Farmers Lane: Low level security lighting at the parking lot.

Master Plan guidelines require lighting to be shielded to prevent nighttime lighting and glare effects on neighboring properties and to protect nighttime views. Some day time glare could occur from the additional automobiles visible from adjacent residences and roadways. Glare would generally occur as the afternoon sun hits the cars; however, views of the staging areas would be largely screened by existing topographic features and vegetation. Furthermore, parked cars are a common occurrence throughout the adjacent residential neighborhood and at Sonoma Academy. Therefore, this impact would be considered less than significant.

Kawana Springs Short Term Conceptual Plan

Kawana Springs Long Term Conceptual Plan

Figure B.3.1-1. Kawana Springs Resort Conceptual Plans

B.3.2 Agricultural Resources

AGRICULTURE AND FORESTRY RESOURCES **Would the project:**	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☐	☒
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
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))?	☐	☐	☐	☒
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Significance criteria established by CEQA Guidelines, Appendix G.

B.3.2.1 Setting

The property has been used in the past for agriculture and is currently used for cattle grazing. Existing grazing operations and planned grazing uses are described in detail in the proposed Master Plan.

B.3.2.2 Environmental Impacts and Mitigation Measures

a. Would the project 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 (FMMP) of the California Resources Agency, to Non-agricultural use?

NO IMPACT. The site is categorized as "Grazing Land" on the Sonoma County Important Farmlands Map (2008), and the proposed project would continue to allow grazing on the site. Therefore, implementation of the proposed project would not result in the conversion of prime agricultural land to other uses.

b. Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

NO IMPACT. A portion of the site is currently zoned Resource and Rural Development (Agricultural Preserve) (RRDWA). However, the County of Sonoma is in the process of revising the County Zoning Ordinance to remove zone districts that reference Agricultural Preserves or

the Williamson Act. Implementation of the Master Plan would not conflict with the zoning on the property and the property is not within a Williamson Act contract.

c. Would the project 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))?

NO IMPACT. The proposed project site does not include any designated forest or timberland.

d. Result in the loss of forest land or conversion of forest land to non-forest use?

NO IMPACT. The proposed project site does not include any designated forest or timberland. Therefore, there would be no loss or conversion.

e. Would the project 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?

NO IMPACT. Implementation of the proposed project would support continued active grazing on the site, and therefore, would not result in conversion of farmland to non-agricultural use. As noted in (d) above, the site does not contain any forest land that would be converted to non-forest use.

B.3.3 Air Quality and Greenhouse Gases

AIR QUALITY Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. **Would the project:**	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☒	☐	☐
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)?	☐	☐	☒	☐
d. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☒
e. Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☒
GREENHOUSE GASES Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. **Would the project:**				
f. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
g. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Significance criteria established by CEQA Guidelines, Appendix G.

B.3.3.1 Setting

Taylor Mountain is located on unincorporated land just south of Santa Rosa, California. Santa Rosa is in a subregion of the San Francisco Bay Area Air Basin, the Cotati Valley Basin, and falls under jurisdiction of the Bay Area Air Quality Management District (BAAQMD). Air quality in the Cotati Valley Basin is subject to the topography of the region and proximity to the Pacific Ocean. The Cotati Valley has higher pollution than neighboring regions due to its lack of access to the sea, population size, and natural barriers at the northern and eastern ends of the valley. Polluted air carried into the Cotati Valley by air currents, combined with local emissions, tends to be trapped against the mountains to the north and east. These characteristics are conducive to the formation and retention of air pollutants (BAAQMD, 2010).

Criteria Pollutants. Air quality is determined by measuring ambient concentrations of criteria pollutants. Criteria pollutants are those pollutants for which acceptable levels of exposure can be determined and for which standards have been set. The degree of air quality degradation is then compared to the current National and California Ambient Air Quality Standards (NAAQS and CAAQS). Unique meteorological conditions in California and differences of opinion by medical panels established by the California Air Resources Board (CARB) and the U.S. Environmental Protection Agency (U.S. EPA) have led to differences in the State and Federal standards currently in effect in California. In general, the CAAQS are more stringent than the

corresponding NAAQS. State and national ambient air quality standards have been established for the following pollutants: ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, fine particulate matter (PM_{10}) and lead. The State has also established ambient air quality standards for sulfates, hydrogen sulfide, vinyl chloride and visibility reducing particles.

Attainment Status. The U.S. EPA, CARB, and the local air district (BAAQMD) classify an area as attainment, unclassified, or nonattainment. The classification depends on whether the monitored ambient air quality data show compliance, insufficient data available, or non-compliance with the ambient air quality standards, respectively. Table B.3.3-1 summarizes attainment status for the criteria pollutants in the project region with both the federal and state standards.

Table B.3.3-1. Attainment Status of San Francisco Bay Area

Pollutants	Bay Area Air Basin Federal Classification	Bay Area Air Basin State Classification
Ozone	Nonattainment	Nonattainment
PM_{10}	Unclassified	Nonattainment
$PM_{2.5}$	Nonattainment	Nonattainment*
CO	Attainment	Attainment
NO_2	Attainment	Attainment**
SO_2	Attainment	Attainment

*For 24-hour standard; attainment for annual standard
**For annual standard; Unclassified for 1-hour standard
Source: BAAQMD, 2011

Air Quality Plans. The federal Clean Air Act requires non-attainment and maintenance areas to prepare air quality plans that include strategies for attaining and maintaining the federal standards. The California Clean Air Act also requires plans for state-level nonattainment areas for any pollutant except particulate matter.

In September 2010, the BAAQMD adopted the 2010 Clean Air Plan (CAP) and certified the Final Program Environmental Impact Report on the CAP, reaffirming and expanding the transportation management policies of the 2005 Ozone Strategy. In June 2010, the BAAQMD adopted updated CEQA Guidelines and thresholds of significance.[2]

Greenhouse Gases. The California Global Warming Solutions Act of 2006, Assembly Bill 32 (AB 32) requires that California's greenhouse gas (GHG) emissions be reduced to 1990 levels by 2020. The reduction is to be accomplished through an enforceable statewide cap on global warming emissions. AB 32 directs the CARB to develop regulations and a mandatory reporting

[2] On March 5, 2012, the Alameda County Superior Court overturned on CEQA grounds BAAQMD's adoption of its new CEQA Guidelines and thresholds (Alameda Superior Court Case No. RG10-548693). Although the Court's order prohibits BAAQMD from further dissemination of the thresholds as a BAAQMD-approved set of air quality thresholds, it does not prohibit a local lead agency from relying on these thresholds for purposes of evaluating a project's air quality emissions. The claims made in the case concerned the environmental impacts of adopting the thresholds, that is, how the thresholds would indirectly affect land use development patterns. Those issues are not relevant to the scientific soundness of the BAAQMD's analysis of what levels of pollutants should be deemed significant, or the threshold to use in assessing any health risk impact a project will have on the existing environment. Moreover, the thresholds will not cause any indirect impact in terms of land use development patterns insofar as this project is concerned, because the proposal to develop and implement the Taylor Mountain Regional Park and Preserve was not influenced by the BAAQMD guidelines. Accordingly, the analysis herein uses the updated thresholds and methodologies from BAAQMD's *CEQA Air Quality Guidelines* to determine the potential impacts of the project on the existing environment.

system to track and monitor global warming emissions levels (AB 32, Chapter 488, Statutes of 2006). The CARB Climate Change Scoping Plan, approved December 2008, provides the framework for achieving California's goals, including a 33 percent Renewables Portfolio Standard (RPS), aggressive energy efficiency targets, and a cap-and-trade system.

The CARB Scoping Plan strategies that provide the largest reductions focus on reducing consumption of petroleum across all areas of the California economy and improving forest management. Increasing transportation energy efficiency (through fuel economy, low carbon fuels, and reduced travel), building/energy efficiency, use of alternatives to petroleum-based fuels (use of renewable energy), controls on high global warming potential gases (like methane), and carbon storage in forests are all expected to contribute to substantial reductions by 2020 (CARB, 2008). In conjunction with State planning, BAAQMD's CAP addresses GHG as part of a "multi-pollutant plan" for the region.

B.3.3.2 Environmental Impacts and Mitigation Measures

Air quality impacts associated with construction and operation of the Taylor Mountain Regional Park and Open Space Preserve would be minimal due to the low level of proposed development and phasing of construction activities over time, as funding becomes available. Criteria pollutant significance thresholds established by the BAAQMD are shown in Table B.3.3-2. The BAAQMD also utilizes a set of screening criteria to determine if projects would have the potential to exceed thresholds. The Air District developed screening criteria to provide lead agencies and project applicants with a conservative indication of whether the proposed project could result in potentially significant air quality impacts. If all of the screening criteria are met by a proposed project, then the lead agency need not perform a detailed air quality assessment of their project's air pollutant emissions. These screening levels are generally representative of new development on greenfield sites without any form of mitigation measures taken into consideration. In addition, the screening criteria in this section do not account for project design features, or local development requirements that could also result in lower emissions.

Table B.3.3-2. BAAQMD Project Level Significance Thresholds

Pollutant	**Construction-Related Threshold**	**Operational-Related Threshold**	
Criteria Air Pollutants and Precursors (Regional)	**Average Daily Emissions (lb/day)**	**Average Daily Emissions (lb/day)**	**Maximum Annual Emissions (tons per year)**
ROG	54	54	10
NO_X	54	54	10
PM_{10}	82 (exhaust)	82	15
$PM_{2.5}$	54 (exhaust)	54	10
$PM_{10}/PM_{2.5}$ (fugitive dust)	Best Management Practices	None	
Local CO	None	9.0 ppm (8-hour avg.), 20.0 ppm (1-hour avg.)	
GHGs – Projects other than Stationary Sources	None	Compliance with Qualified GHG Reduction Strategy OR 1,100 MT of CO_2e/yr OR 4.6 MT CO_2e/SP/yr (residents+employees)	
GHGs –Stationary Sources	None	10,000 MT of CO_2e/yr	

BAAQMD does not have an adopted threshold of significance for construction-related GHG emissions. However, lead agencies should disclose GHG emissions that would occur during construction, and make a determination on the significance of these construction-generated GHG emission impacts in relation to meeting AB 32 GHG reduction goals.

a. Would the project conflict with or obstruct implementation of the applicable air quality plan?

NO IMPACT. Development allowed in the Master Plan would not interfere with or obstruct implementation of any applicable air quality plans. While the proposed park improvements would result in nominal construction and operation (vehicle) emissions, overall emissions would have a negligible effect on criteria pollutants because of the low level of overall development and phasing of the construction activities over several years.

The Clean Air Plan includes a series of transportation control measures (TCMs) that are designed to achieve air quality standards. The Master Plan incorporates many of these measures by addressing bicycle and pedestrian access, increasing vehicle accessibility from different parts of the project area and providing an open space area close to urban centers, thereby reducing vehicle miles traveled for recreation experiences.

b. Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED. In the long-term, the project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. No permanent stationary sources of emissions[3] would be associated with implementation of the Master Plan. Temporary use of a small generator for a mobile food vendor at one of the staging areas would not create emissions in violation of any air quality standard.

During the construction period, limited grading of the staging areas and access driveways would result in increased dust from travel on unpaved surfaces and from site earthwork, resulting in PM_{10} emissions. Vehicle and equipment exhaust emissions would also increase during construction (e.g., ozone precursors [volatile organic compounds or VOC and NOx], CO and PM_{10} and $PM_{2.5}$). Heavy-duty diesel and gasoline-powered construction equipment at the work sites would likely include loaders, graders, backhoes, and numerous trucks for lifts, delivery, water and crew. However, implementation of Mitigation Measure 3-1 (see below) would reduce potential impacts of grading and use of construction vehicles and equipment to a less-than-significant level. These measures are consistent with BAAQMD recommendations for all construction projects.

[3] A stationary source consists of a single emission source with an identified emission point, such as a stack at a facility. Major stationary sources are typically associated with industrial processes, such as refineries or power plants. Minor stationary sources are typically land uses that may require air district permits, such as gasoline dispensing stations, and dry cleaning establishments (BAAQMD, 2011).

During operations, the primary emissions would be from vehicle trips. The Preserve would generate an estimated daily total of 378 vehicle trips on weekdays and 640 trips on weekend days in the near term, and 739 trips on weekdays and 1022 trips on weekend days at full buildout of the Master Plan. Regional air quality plans anticipate and allow for population and infrastructure growth in the region. Furthermore, these vehicle trips would not necessarily be new trips added to the region. It is likely that many future park users currently travel by vehicle to other recreational destinations within the county. This level of vehicle activity would not result in any violations of air quality standards or contribute substantially to an existing or projected violation.

To confirm that there is no potential for a significant impact, the BAAQMD screening criteria (BAAQMD, 2011) were reviewed. Although a regional park is not listed in the criteria, a similar use is City Park, which would likely involve a higher intensity and density of development than the Taylor Mountain Preserve. The proposed project falls well below the City Park screening criteria of 67 acres of park construction and 2,600 acres of park operations.

3-1 The following measures shall be implemented during grading and construction:

- Water all active construction areas at least twice daily.
- Cover all trucks hauling soil, gravel, crushed rock and/or other loose materials, or require trucks to maintain at least two feet of freeboard.
- Sweep daily (with water sweepers) all paved access roads, parking areas and staging areas at construction sites.
- Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets.
- Operate all construction vehicles and equipment with emission levels that meet current air quality standards.
- Minimize idling times either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
- Limit vehicle speeds to 15 mph on unpaved surfaces.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Replant disturbed areas as quickly as possible, and always prior to the winter rains.
- Post a publicly-visible sign with the telephone number and person to contact at Regional Parks regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

c. Would the project 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. As stated above, the Bay Area Air Basin is a nonattainment area for State and federal ozone standards and the national particulate matter standard (PM_{10}). Construction of the staging areas and allowed visitor-serving development would temporarily increase air emissions, but given the phased approach to development of the property, emission levels are not expected to result in a cumulatively considerable net increase in any criteria pollutant.

Construction. During construction, emissions would be generated by vehicles and equipment at the proposed staging areas and along roadways used to access the property. These emissions would create precursors to ozone, and dust contributing to regional PM_{10} levels. These emissions, however, would be relatively minor and not cumulatively considerable. Furthermore, the use of air quality BMPs, as recommended by the BAAQMD would minimize construction emissions.

Operations. Emissions from operation of the Preserve would be associated with park user and employee vehicles and to a very limited extent, BBQs and campfires. BBQ and firepit use would be limited to one location in the Preserve, so emissions from these sources would be very low. In addition, Master Plan Standard S231 prohibits camping and cooking fires on Spare the Air days. The park visitor trips would not necessarily be new trips in the region. It is likely that some of these trips would have previously occurred at other recreational facilities in the county. In fact, vehicle miles travelled may decrease in the region with the addition of this publicly-accessible open space near the cities of Santa Rosa and Rohnert Park. Furthermore, the Master Plan includes guidelines to encourage bus, pedestrian and bicyclist access to the park, thereby minimizing automobile travel and associated emissions, and reducing greenhouse gases over the long-term. In particular, residents living within ½ mile of a Taylor Mountain trailhead, unless disabled, would be strongly encouraged to use alternative modes of transportation to access the project site. Given the close proximity of the Taylor Mountain Preserve to urban areas and the Master Plan's guidelines encouraging the use of alternative forms of transportation to access the Preserve, the overall operational emissions would not result in a cumulatively considerable net increase in criteria pollutants.

d. Would the project expose sensitive receptors to substantial pollutant concentrations?

NO IMPACT. Sensitive receptors are members of the population that are most vulnerable to potential impacts, which are generally children and the elderly but can include residents near project areas. Implementation of the Master Plan would not result in generation of substantial pollutant concentrations and would therefore result in no impacts on sensitive receptors. Furthermore, there are no sensitive receptors in close proximity to the primary access points and staging areas. Nearby offsite residential uses and the Sonoma Academy are greater than 500 feet away from any proposed staging area.

e. Would the project create objectionable odors affecting a substantial number of people?

NO IMPACT. Implementation of the Master Plan does not involve practices or facilities that would create objectionable odors.

f. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

LESS THAN SIGNIFICANT. The proposed project would generate GHG emissions through construction activities; however, the period of construction at any one staging area would be short-term. The primary sources of GHGs during construction would be those associated with the daily commute of construction workers and construction vehicle exhaust. Although construction GHG emissions would not be substantial, they could be further minimized by Best Management Practices, as identified in Mitigation Measure 3-1 (above). Also, Master Plan S89 calls for use of recycled materials for trail construction.

During park operations, vehicle trips to and from the site would generate GHG emissions. However, as noted in Items (c) and (g), it is likely that not all of the vehicle trips will be new in the region. The Preserve's location adjacent to a populated urban area serves to draw visitors from nearby areas that currently travel by vehicle to other regional park facilities. The provision of pedestrian and bicycle facilities will encourage park users to access the site without the use of vehicles.

g. Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?

LESS THAN SIGNIFICANT. The proposed project would generate GHG emissions during construction activities and operation; however, the overall project would allow for accessible recreational uses in close proximity to urban centers, which would have the potential to reduce vehicle recreational trip lengths. Furthermore, the Master Plan includes guidelines for facilitating alternative access (e.g., transit and bicycle) to the Preserve, which would serve to reduce GHG emissions. In doing so, the Master Plan would be consistent with AB 32 GHG reduction goals.

B.3.4 Biological Resources

BIOLOGICAL RESOURCES **Would the project:**	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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 U.S. Fish and Wildlife Service?	☐	☐	☒	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree 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?	☐	☐	☐	☒

Significance criteria based on CEQA Guidelines, Appendix G.

The biological resources impact analysis utilized the Ecological Resources Report, Taylor Mountain Master Plan (Prunuske Chatham, Inc. 2011a), which is based on a total of 11 biological surveys conducted by WRA during March, May and July of 2010 and April 2011 that include mapping of wetlands, waters, biological communities, populations of invasive species, erosion features, and occurrences of sudden oak death.

The Taylor Mountain Regional Park and Open Space Preserve Master Plan includes detailed biological resources protection measures that are referenced throughout the impact analysis.

B.3.4.1 Setting

The Taylor Mountain property encompasses mixed grassland, scrub, riparian, and oak woodland habitats. The site is contiguous with native habitats to the east, west and south and provides valuable corridors for wildlife movement, plant dispersal, and the transport of water into the Laguna de Santa Rosa. Biological communities, aquatic features, and special-status plant and wildlife species at the site are summarized below.

Biological Communities

Twenty-eight vegetation alliances (Sawyer et al., 2009) in 14 biological community types (Holland, 1986) have been identified at the site. Sensitive biological communities include habitats that fulfill special functions or have special values, such as wetlands, streams, or

riparian habitat. These habitats are protected under federal regulations such as the Clean Water Act; state regulations such as the Porter-Cologne Act, the CDFG Streambed Alteration Program, and CEQA; or local ordinances or policies such as city or county tree ordinances, Special Habitat Management Areas, and General Plan Elements. Sensitive communities at the site include valley needlegrass grassland, wildflower field, freshwater seep, coastal and valley freshwater marsh, vernal marsh, open waters, riparian woodland, North Coast riparian scrub, and Oregon white oak woodland. Non-sensitive biological communities at the site include non-native grassland, coyote brush scrub, coast live oak woodland, eucalyptus grove, and ruderal and disturbed habitats. Non-native grassland and coast live oak woodland comprise the majority of the site. Biological communities at the site are described and illustrated in Prunuske and Chatham, Inc. [herein referred to as "PCI"] Ecological Resources Report (2011a).

As described below, the Taylor Mountain property contains small vernal marshes and seeps scattered throughout the grasslands and one natural pond fringed by perennial freshwater marsh. These wetlands provide important hydrologic functions, storing water from winter storms, trapping sediment, and filtering nutrients and contaminants. They also support a distinctive set of plant species, dominated by natives, and provide green forage for livestock and other herbivores in summer months when the surrounding grasslands are dry. Wetlands provide a crucial water source for wildlife and breeding habitat for amphibians. The natural pond on Taylor Mountain is one of the most unique and valuable wildlife resources on the property. These wetlands support a healthy population of California red-legged frog (*Rana draytonii*), a special-status species, and common amphibians like the California newt and Sierran treefrog.

Sensitive Biological Communities

The following sensitive biological communities located on the Preserve are illustrated in Figure B.3.4-1.

Valley Needlegrass Grassland. Valley needlegrass grassland, dominated by native perennial grass species, occurs on approximately 100 acres of the property. This community type is generally found on drier, steeper slopes and less nutrient-rich soils where the growth of non-native annual grasses is limited. The rocky outcrops scattered throughout the Taylor Mountain property also tend to support more native grassland species. This community type, believed to be one of the most abundant grassland types across the state historically, has been greatly reduced in extent statewide and is considered sensitive habitat. The needlegrass grassland community blends and often co-occurs with the wildflower fields and non-native grassland described below.

Wildflower Fields. Wildflower fields occur in patches within grasslands on the property and total approximately 22 acres (including seven acres where wildflower fields co-occur with purple needlegrass (*Nassella pulchra*)). Like valley needlegrass grassland, with which it intergrades, this habitat type has been greatly reduced from its historic extent across California. Remnant wildflower fields are considered sensitive.

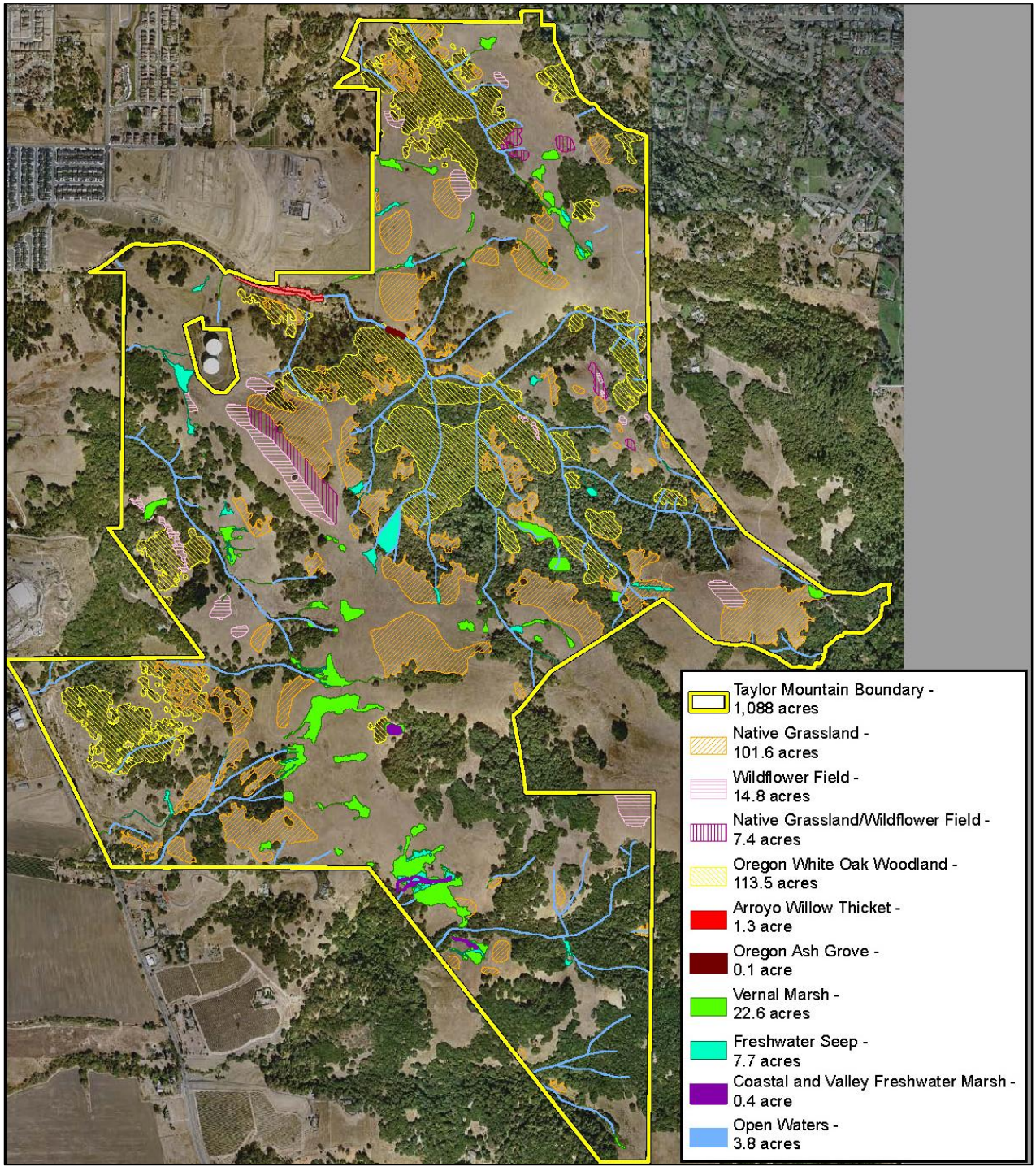

Figure B.3.4-1. Sensitive Biological Communities

Freshwater Seep. Freshwater seeps occur primarily on slopes, may remain saturated or inundated perennially, and receive hydrologic input primarily from groundwater discharge. Approximately eight acres of seep habitat occur on the property. Vegetation is dominated by common perennial herbaceous species, especially rushes and sedges.

Coastal and Valley Freshwater Marsh. Freshwater marsh habitat is perennially saturated or inundated. Water input may be from rainfall, overland flow, and/or groundwater discharge. On the Taylor Mountain property, this habitat occurs around the freshwater pond in the central portion of the property, comprising approximately 0.4 acres.

Vernal Marsh. Numerous vernal marshes occur throughout the property, primarily at lower elevations within grasslands. These wetlands comprise approximately 23 acres of habitat. Vernal marshes have formed where slow-draining clay soils collect water from rainfall, overland sheet flow, and/or groundwater discharge to produce seasonally wet habitat. Some marsh habitat, including the areas west and downslope of the pond, is high in native plant diversity, with varied topography and hydrology offering niches for many species.

Open Waters/Stream Channels. Approximately two acres of open waters occur on the property, including stream channels and a pond. Streams on the property generally have ephemeral to strongly seasonal hydrology. Although the larger creeks do not flow perennially, water may remain in deeper pools in Colgan Creek and the larger drainages in normal to wetter-than-normal rain years. The substrate ranges from silts to sorted sands and gravels to bedrock. Although open waters are characterized as areas devoid of vegetation, some areas contain in-channel and fringe vegetation including chain fern (*Woodwardia fimbriata*), water cress (*Rorippa nasturtium-aquaticum*), sneezeweed (*Helenium puberlulum*), rushes (*Juncaceae*), sedges (*Cyperaceae*), and horsetails (such as *Equisetum arvense*, *E. hyemale*, *E. telmateia*).

Riparian Woodland and North Coast Riparian Scrub. Two riparian plant communities, riparian woodland and North Coast riparian scrub, have been mapped on just over one acre of the property. Riparian woodland includes a small grove of Oregon ash (*Fraxinus latifolia*); riparian scrub is composed of a dense growth of arroyo willows (*Salix lasiolepis*). These habitats occur along Colgan Creek adjacent to, and just upstream of, the Kawana Springs Resort area. Some bigleaf maple (*Acer macrophyllum*) and valley oak (*Quercus lobata*) trees are also present. The understory is minimal due to dense tree growth. For the same reason, invasive species are not prevalent, but in some locations invasive Himalayan blackberry (*Rubus armeniacus)* occurs. Arroyo willow thickets are abundant along riparian corridors throughout California and are not considered sensitive. Oregon ash groves are more limited in distribution and are considered sensitive habitat. In addition to these two specific stream-dependent communities, the property also supports riparian-influenced oak woodland along Colgan Creek and other drainages.

Oregon White Oak Woodland. Approximately 113 acres of Oregon white oak woodland occur on the Taylor Mountain property. It is found on slopes of various aspects and often intergrades with coast live oak woodland. Oregon oak woodland is considered sensitive because it has declined throughout the state as a result of development, over-grazing, and fire exclusion practices (Sawyer et al., 2009).

Oregon oak woodland on the property, like the coast live oak woodland, ranges from dense woodland to open-canopied habitats. Oregon oak (*Q. garryana*) is always the dominant tree, but other trees including coast live oak (*Q. agrifolia*), black oak (*Q. kelloggii*), buckeye (*Aesculus californica*), and California bay (*Umbellularia californica*) are typically also present. The understory is relatively open and dominated by grasses, including native perennial fescues (*Festuca californica, F. idahoensis*, and *F. rubra*). Invasive species are not widespread in Oregon oak woodland, but the same species found in live oak woodland and savanna have potential to spread into this habitat as well.

Other Biological Communities

There are several native habitats that are not considered sensitive such as coyote scrub brush (*Baccharis pilularis*) and coast live oak woodland, which is the most extensive habitat type on the Taylor Mountain property, encompassing slightly over one third of the landscape (406 acres). Oak woodland provides extensive wildlife habitat and other important ecosystem services such as soil development, watershed protection, carbon sequestration, and air quality improvement.

Another prominent community is non-native grassland, which covers approximately one third of the property (381 acres). On the project site and across California, the composition of annual grassland reflects the influence of livestock grazing since historic times. Non-native grass seed was brought to California by early settlers and sown to provide forage for livestock. Many of these grasses have awns (bristles) that attach to animal fur, which exacerbates their spread.

One grove of blue gum eucalyptus (*Eucalyptus globulus*) occurs on the property. The grove covers approximately five acres and is located just south of the Kawana Springs Resort area. Eucalyptus is an invasive species in California. Eucalyptuses produce allelopathic chemicals as well as high quantities of leaf and bark litter, all of which inhibit the establishment of other species. Native plants and wildlife are largely excluded from dense groves like the stand on the property. Eucalyptus debris is also highly flammable and dense groves are generally considered high fire hazards. This grove appears to be slowly expanding; young saplings are evident on the perimeter of the grove. However, young eucalyptus trees were not observed elsewhere on the property, indicating that longer-distance spread is minimal.

Approximately 12 acres of the property are ruderal; they occur in areas where soils have been disturbed by human activities such as grading, tilling, and intensive livestock use. Ruderal habitat is found primarily along the road to the Kawana Springs Resort area and at the proposed western entrance on Petaluma Hill Road, where a dairy was historically located. This is an area of high concern for invasive species. In addition to the ruderal habitat, adjacent to the Kawana Springs Resort are approximately five acres of disturbed habitat where historic ornamental landscaping or other plantings have become weedy and overgrown. This is also an area of very high concern for invasive species.

Special-status Plant Species

Special-status species include those listed as threatened or endangered under the federal or State Endangered Species Acts, species proposed for listing, California species of special concern, and

other species that have been identified by the USFWS or the California Department of Fish and Game (CDFG) or another relevant agency as unique or rare.

An extensive literature review identified 25 special-status plant species with moderate to high potential to occur at the site based on known occurrences in the region and the presence of suitable habitat at the site. Two species, big-scale balsamroot (*Balsamorhiza macrolepis* var. *macrolepis*) and fragrant fritillary (*Fritillaria liliacea*), have known occurrences on or near Taylor Mountain. Both of these species are listed by the California Native Plant Society (CNPS) as rare or endangered in California and elsewhere (List 1B.2) (CDFG, 2011). Descriptions of these two species are provided in the Ecological Resources Report (Prunuske and Chatham, Inc. 2011a). However, neither these species nor any of the other indentified special-status plant species were observed at the site during protocol-level rare plant surveys conducted in March, May, and July 2010. A list of the special-status plant species with known occurrences or the potential to occur within the greater vicinity of the Taylor Mountain property as well as their potential to occur at the site is provided in Appendix C of PCI's Ecological Resources Report (2011a).

Special-status Wildlife Species

An extensive literature review identified 11 special-status wildlife species with moderate to high potential to occur at the site based on known occurrences in the region and the presence of suitable habitat at the site. These species include California tiger salamander (*Ambystoma californiense*), California red-legged frog (*Rana draytonii*), Western pond turtle (*Emys marmorata*), Grasshopper sparrow (*Ammodramus savannarum*), Golden eagle (*Aquila chrysaetos*), Burrowing owl (*Athene cunicularia*), Yellow warbler (*Dendroica petechia*), White-tailed kite (*Elanus leucurus*), Loggerhead shrike (*Lanius ludovicianus*), American badger (*Taxidea taxus*), and several species of bat. Of these species, only California red-legged frog, Grasshopper sparrow, and Golden eagle were observed during surveys conducted during March, May, and July 2010 and April 2011.

A list of the special-status wildlife species with known occurrences or the potential to occur within the greater vicinity of the Taylor Mountain property as well as their potential to occur at the site is provided in Appendix C of the PCI Ecological Resources Report (2011a). A description of the observed species is provided below; additional information is provided in the Ecological Resources Report (Prunuske and Chatham, Inc. 2011a).

California red-legged frog. The California red-legged frog (CRLF) is the largest native frog in the western U.S. with females reaching up to 5¼ inches in length and males being slightly smaller. They are most common in marshes, streams, lakes, reservoirs, ponds, and other water sources with plant cover. Breeding occurs in deep, slow-moving waters and ponds (greater than three feet in depth) with dense shrubby or emergent vegetation from late November through April. Floating egg masses are attached to emergent vegetation (e.g., *Typha sp.* or *Scirpus sp.*) near the water's surface. Tadpoles require 3½ to 7 months to attain metamorphosis. During the non-breeding season, CRLF can remain at the breeding site (in the presence or absence of water) or move into surrounding non-breeding habitats. Radio tracking of frogs in Marin County by Fellers and Kleeman (2007 in Prunuske and Chatham, Inc., 2011a) noted the dispersal of frogs at a median distance of 500 feet from breeding sites (range of 100 to 4,600 feet). They

also noted year-round small-scale (<100-foot) movements around breeding sites. These results indicate the importance of uplands for non-breeding season and migratory corridor habitat. Aquatic sampling of the freshwater pond on the Taylor Mountain Preserve occurred in May 2010. During a single survey, approximately 40 larvae were netted and 15 adults flushed from the shoreline, indicating a healthy breeding population.

Grasshopper sparrow. The grasshopper sparrow is a native, small, open-country sparrow named for its buzzy, insect-like song. Breeding habitat preferences include grasslands of intermediate height mixed with clumped vegetation and interspersed with bare ground (Dechant et al. 2003 in Prunuske and Chatham, Inc. 2011a). Nests are constructed on the ground and are vulnerable to predation and trampling. Breeding occurs from early-April through mid-July. In California, grasshopper sparrows breed in foothills and lowlands along the coast and Central Valley. Threats to this species include urbanization, vineyard development, and fire suppression resulting in the conversion of grasslands to scrub communities (Shuford and Gardali 2008 in Prunuske and Chatham, Inc. 2011a). This species was observed in grasslands in the center of the site.

Golden Eagle. The golden eagle is a native, large, predatory raptor that is a permanent resident and migrant species in foothill, mountainous, deserts, and flatland habitats throughout California. Open habitats are used for foraging. Golden eagles nest in tall trees and on cliffs. Nests are often reused and consist of a large platform of sticks, twigs, and other plant material. Breeding occurs from late January to August with peak activity from March to July. This species was observed soaring over the higher ridgelines of the site.

Regulatory Setting

Special-status and other sensitive biological communities, plants, and wildlife are protected under an array of federal, State, and local regulations. In summary, the project may be subject to permits under the provisions of Section 404 of the federal Clean Water Act, as regulated by the U.S. Army Corps of Engineers. At the State level, several project components may be subject to the Regional Water Quality Certification Program which regulates discharges of fill and dredged material under Section 401 of the Clean Water Act and the Porter-Cologne Water Quality Control Act and CDFG Code Section 1602 Lake and Streambed Alteration Agreement. The protection of special status species is established in the federal Endangered Species Act (ESA) and California Endangered Species Act (CESA). These acts afford protection to both listed and proposed species. Most birds in the United States, including non-status species, are protected by the Migratory Bird Treaty Act of 1918 and the Bald and Golden Eagle Protection Act of 1940. Under this legislation, destroying active nests, eggs, and young is illegal. The Bald and Golden Eagle Protection Act (16 U.S.C. 668) was passed in 1940 to protect bald eagles and was later amended to include golden eagles.

The Native Plant Protection Act (NPPA) of 1977 gave the California Fish and Game Commission the power to designate native plants as "endangered" or "rare" and protects endangered and rare plants. The California Native Plant Society (CNPS) publishes and maintains an Inventory of Rare and Endangered Vascular Plants of California.

At the local level, the Sonoma County General Plan 2020 (General Plan; SCPRMD, 2008) regulates the use of land in unincorporated Sonoma County. Several elements of the General Plan apply to potential future development of the site, including, but not limited to, the Open Space and Resource Conservation Element and the Water Resources Element. The former element addresses the preservation of special-status species, aquatic habitats, sensitive natural communities, and wildlife corridors. The latter element addresses water resources including elements related to water quality, groundwater, water conservation and re-use, and watershed management. Other county ordinances provide protections for critical habitat areas, riparian corridors, and native trees.

B.3.4.2 Environmental Impacts and Mitigation Measures

The proposed Master Plan includes the development of trails, roadway access, parking areas and the restoration or construction of accessory buildings, as identified in the Project Description (Section B.1.5). The development of infrastructure and the implementation of the allowable uses would occur over time, as funding becomes available. Potential project impact areas have been categorized by development and/or use type and include: access and parking, buildings and infrastructure, camping, and trails. Biological resources potentially affected by the proposed Master Plan uses are illustrated in Figure B.3.4-2, Potential Biological Resource Impacts.

Quantification of potential impacts is based on review of conceptual designs in the proposed Master Plan and assumptions regarding development footprints. For example, for trail impacts, it was assumed that all trails would be developed at the maximum width of six feet. The Master Plan includes provisions to refine designs and further protect biological resources from both direct and indirect impacts, so these estimates are considered conservative and may overstate the actual impact. The Master Plan also recommends restoring habitats on the Preserve. Master Plan standards that serve to reduce or avoid impacts are referenced and summarized below. Resource protection guidelines and specific details of standards are outlined in the Master Plan.

a. Would the project 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 U.S. Fish and Wildlife Service?

LESS THAN SIGNIFICANT. Although special-status wildlife species are found on the property, impacts from implementation of the Master Plan would be less than significant due to the low level of proposed development, avoidance of habitat areas and requirements for resource protection and restoration.

Plants

As described in the setting, no special-status plant species that have potential to occur were observed at the site during protocol-level rare plant surveys conducted in March, May, and July 2010. Therefore no impacts on special-status plant species are expected and no mitigation is required.

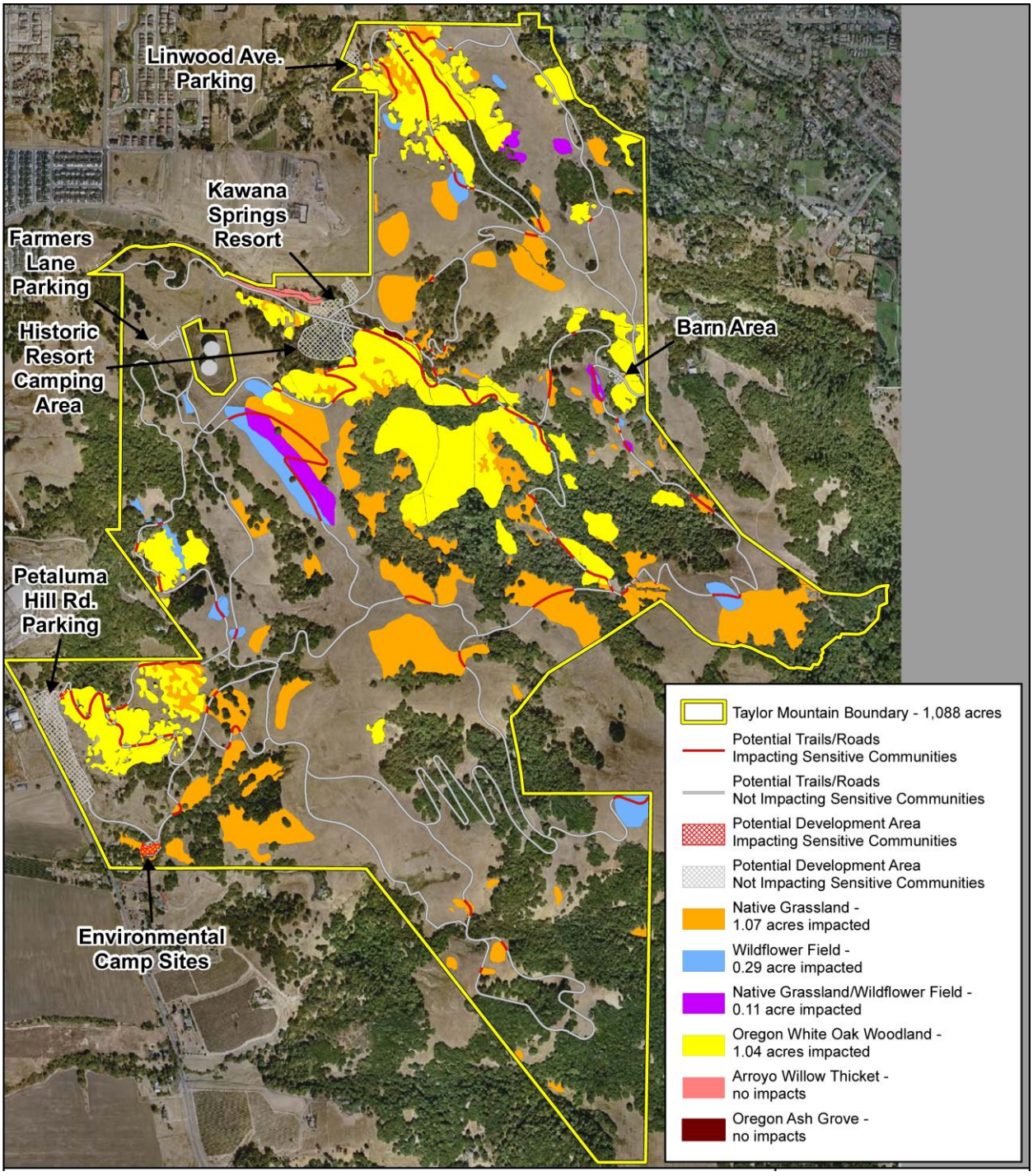

Figure B.3.4-2. Potential Biological Resource Impacts

Wildlife

Special-status species California red-legged frog, Grasshopper sparrow, and Golden eagle were observed during surveys conducted during March, May, and July 2010 and April 2011. In addition, several other special-status species are likely to occur and warrant protection.

California Red-legged Frog. CRLF have been observed in the pond and within seasonal wetlands occurring adjacent to or within close proximity to the pond. Overall, the property supports 0.2 acres of breeding habitat within the existing freshwater pond and 11.8 acres of non-breeding aquatic habitat in many of the drainages and seasonal wetlands (Figure B.3.4-3). The large expanse of upland habitat on the property and proximity to potential breeding sites is important for maintenance of a genetically-diverse CRLF population. The Ecological Resources Report described the entire Taylor Mountain property as suitable CRLF upland habitat. Upland habitat for the CRLF is generally defined by the USFWS to be all grassland, woodland, and scrub that is within 1.7 miles of potential breeding habitat. Given the central location of the known CRLF breeding pond on the property – the entire property is within 1.7 miles of it – the development of trails and boardwalks within the property has the potential to impact CRLF aquatic non-breeding and upland habitat (Figure B.3.4-3). Additionally, the development of access and parking and environmental camping sites has the potential to impact upland dispersal habitat. However, Master Plan construction and operation measures to protect CRLF and other herpetofauna would ensure that impacts are less than significant; these provisions are summarized below.

Construction Phase(s)

Master Plan standards require the following:

- S44 – Site new trails at least 500 feet from the existing freshwater pond with no new trails leading directly toward the pond;
- S45 – Place educational signage along the pond to inform visitors about the importance of the habitat and why the pond is off limits to humans and dogs.
- S46 – Preconstruction surveys, pre-construction training sessions for construction personnel and temporary wildlife exclusionary fencing (e.g., silt fence, which is a piece of synthetic filter fabric [also called geotextile] around work areas);
- S47 – Consultation with USFWS and CDFG during project development to identify and implement any additional specific resource protection measures required by these agencies.

Operational Phase

During operations, Master Plan standards specific to CRLF and herpetofauna would apply, summarized as follows:

- S42 – Require seasonal trail closures in critical areas.
- S43 – Monitor human and dog use of the pond for visitors who go off designated trails, as input to making adjustments in park use and/or access to this area.

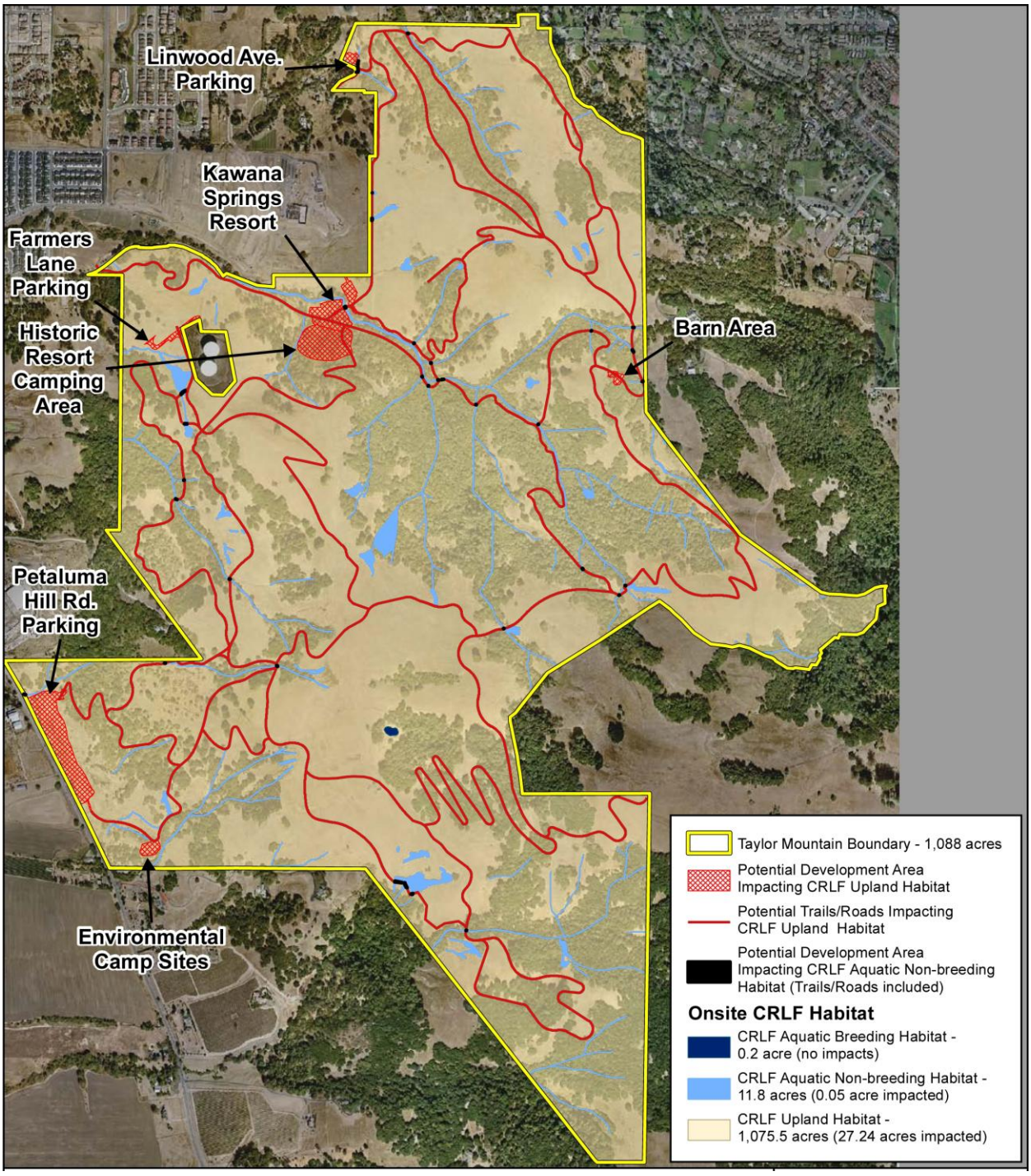

Figure B.3.4-3. California Red-Legged Frog Habitat and Potential Impacts

- S48 – Implement a pathogen control policy to prevent the spread of pathogens that affect CRLF.
- S49 – Conduct vegetation removal activities (i.e., for fire fuel reduction) within 300 feet of the pond or riparian/wetland areas where sensitive herpetofauna are potentially present outside of sensitive herpetofauna dispersal periods (typically October 15 – April 15).

In addition to these standards, numerous guidelines in the Master Plan would provide protection:

- G16 – Monitor existing CRLF habitats for establishment of introduced species and cattle usage and impacts.
- G17 – Implement a comprehensive monitoring program for CRLF.
- G18 – If necessary, implement a CRLF management plan to allow for adjustments in park uses and/or livestock exclusion in known habitats and other areas with high potential for occurrence of frogs.

California Tiger Salamander. A very small portion of the northwestern corner of the Taylor Mountain property (Kawana knoll area and northern tip of site that fronts Petaluma Hill Road) is included in the Santa Rosa Plain Conservation Strategy study area (Goude et al., 2005 in PCI, 2011). The portion of the Taylor Mountain property included in the Conservation Strategy study area notes that "the Presence of CTS is not likely and there are no listed plants in this area." The map that accompanies the USFWS Programmatic Biological Opinion for the Santa Rosa Plain CTS designates this same area as "No Effect" and no consultation or mitigation is required according to the PBO (USFWS, 2007b). Additionally, the USFWS does not designate that portion of the property as CTS Critical Habitat (USFWS, 2011a) and no CTS have been sighted on the property. The U.S. Fish and Wildlife Service's PBO (USFWS, 2007b) notes that areas above approximately 300 feet in elevation and characterized by oak woodland, or adjacent to or surrounded by significant urban areas, generally have been excluded from the boundaries of the conservation areas. The portion of the Kawana knoll included in the Conservation strategy is primarily oak woodland at or above 300 feet in elevation and includes the existing graded staging area. This area is where the future Farmers Lane Extension will be developed. Proposed uses in the Kawana knoll area would be low intensity and would not result in a substantial direct or indirect adverse effect on CTS. Avoidance and minimization measures included for sensitive herpetofauna above (S49) and preconstruction biological resource surveys required in S69 would ensure avoidance of any indirect offsite effects on California tiger salamander and no additional measures are required. The tip of property on Petaluma Hill Road within the Conservation Strategy will not be affected by proposed development of the Preserve.

Western Pond Turtle. Although Western pond turtle has not been documented on the property, it is known from the surrounding lands and there is suitable habitat for the species in the pond and in some streams on Taylor Mountain. Trail and infrastructure development has the potential to impact the species and its upland nesting habitat. Biological resources avoidance and minimization measures in Master Plan Standard 69 (preconstruction surveys)

and S71 (construction exclusionary fencing) and S67 (training of construction personnel) would serve to protect Western pond turtle and therefore no additional measures are required.

Special-Status and Common Bird Species. Nesting birds protected by the Migratory Bird Treaty Act and other regulations may be impacted if construction occurs during the bird breeding season from February through August. Measures to protect birds and avoid breeding season construction are included as part of the proposed project and would ensure that impacts are less than significant. These measures are in the Master Plan, summarized as follows:

Construction Phase(s)

- S53 – Birds shall be protected through appropriate site development within native habitats.
- S56 – Consult with CDFG and USFWS during project development to identify and implement any additional protection measures specific to breeding birds.
- S68 – Construction or maintenance shall occur work shall occur outside of the critical breeding bird period (mid-March through mid-August) as much as possible. If these activities cannot be done in the non-breeding season, a qualified biologist shall perform pre-construction breeding bird surveys. If breeding birds are found, their nests must be avoided until the young fledge. Exclusion buffers shall be established a minimum of 50 feet around the nest site for small birds and 250 feet for large birds.

Operational Phase

- S55 – Prohibit dogs off leash and off trail.
- S68 – Complete on-going park management activities that have potential to impact breeding birds or their nests outside of the breeding bird period (see above).

The following guidelines in the Master Plan would provide additional protection:

- G23 – Monitor and manage for non-native birds and feral cats that pose a threat to native birds.
- G24 – Develop and implement a comprehensive monitoring program for birds.
- G25 – Implement a management plan to allow for adjustments in park uses, management, and/or enhancement of appropriate habitats if negative impacts on birds are detected.

Bats. Three bat species have reported occurrences within close proximity to the Taylor Mountain property (CDFG, 2011). These include pallid bat (*Antrozous pallidus*), a special-status species, hoary bat (*Lasiurus cinereus*) and fringed bat (*Myotis thysanodes*), identified as having moderate to high priority for conservation by the Western Bat Working Group, a local conservation organization comprised of agencies, organizations, and individuals. Because bats are highly susceptible to disturbance, protecting existing populations and habitat is critical to those bat species that depend on Taylor Mountain and the native habitats it supports. Habitats that support large, mature trees, snags and abandoned buildings have the potential to support roosting habitat for common and special-status bats. Additionally, several unidentified bats have been observed within the property and specifically in the barn. Bat roosts are protected by CDFG and removal of occupied roosts would be considered a significant impact. The fol-

lowing measures to protect bats are included in the proposed Master Plan and would avoid or reduce impacts to levels that are less than significant.

- S50– Requires preconstruction bat surveys and construction personnel training.
- S51 – Requires avoidance of active roosts, through appropriate species and roost specific avoidance and minimization measures such as postponing removal of trees, snags or structures until the end of the maternity roosting season, establishing buffers around roost sites, or construction of species appropriate replacement roosting habitat within, or adjacent to the proposed disturbance area.
- S52 – Consult with CDFG during project development to identify and implement any additional protection measures specific to special-status bats.

Implementation of the above avoidance and minimization measures would ensure that impacts on special-status species are less than significant.

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

LESS THAN SIGNIFICANT. Implementation of the Master Plan would minimize disturbance of riparian and other sensitive habitats through site design and adherence to the many resource protection guidelines and standards included in the Plan. Impacts would be less than significant in all cases as described below.

Riparian Woodland and North Coast Riparian Scrub

Riparian habitats, including both the vegetation along the stream corridor and the stream itself, are protected by existing regulations and policies, as described in the regulatory setting. In addition, specific riparian vegetation communities were observed onsite including Oregon ash groves and arroyo willow thicket which are considered sensitive habitats and subject to regulation. Agency approval will be needed for development in these areas.

Riparian habitats on the property have experienced varying degrees of alteration. Upstream reaches of Colgan Creek and small stream channels on the property support extensive native plant communities and are largely free from development. However, along Colgan Creek in the vicinity of the Kawana Springs Resort, riparian habitat has been impacted by many years of human use and cattle grazing. Generally, observed cattle impacts on riparian areas are minimal, due to the fact that most of the drainages are steep-sided and rocky, making cattle access difficult (Bush, 2012). Buildings, roads, a bridge, and other structures and domestic landscaping have encroached on riparian corridors, replaced native plant communities, and modified hydrology. Invasive species are abundant (PCI, 2011a).

The Master Plan does not include development that has the potential to impact sensitive riparian vegetation communities. However, the proposed Master Plan includes conceptual trail alignments that would potentially cross several riparian areas associated with creeks and streams on the property. These riparian areas that fringe creeks are not mapped and tabulated

because they are ill defined and amorphous. Avoidance and minimization measures to protect riparian habitat are included as part of the proposed project. Implementation of the following standards will guide Master Plan development and further reduce impacts on riparian corridors along creeks:

- S20 – Locate new development outside of riparian habitats to the maximum extent feasible.
- S21 – Utilize Low Impact Development (LID) techniques in landscaped or other developed areas, as required by the NCRWQCB MS4 Permit and as specified in the Storm Water Low Impact Design (LID) Technical Design Manual, to intercept flows and allow water to percolate into soil and reduce sediment delivery.
- S24 – Discourage livestock use on steep slopes and in fragile riparian areas by strategically placing livestock attractants including water and supplements.
- S25 – Develop and implement a restoration plan for any proposed trails that are unable to avoid riparian habitats.
- S26 and S66 – Requires setbacks from riparian areas and compliance with Master Plan Table 3 (in Master Plan Section 5.10.1), which establishes minimum vegetated buffers of 50 to 100 feet for all new development along riparian corridors.
- S27 – Use only bank stabilization methods that enhance instream and riparian habitat, such as biotechnical measures incorporating vegetation and/or large wood. (Large woody debris such as root wads are preferred as bank stabilization over hard armoring like rip-rap. Another option are soil wraps seeded with native herbaceous species and planted with willow poles. The roots from the willow trees act to anchor the soil as the natural coir (coconut fiber) wrap materials degrades over time.)
- S28 – Repair areas where concentrated flow is occurring from trails by re-grading slopes, revegetating, and installing flow dissipaters, as necessary.
- S29 – If fresh erosion is visible or if a headcut is moving rapidly upstream, seek consultation from an experienced and licensed landscape architect or civil engineer in collaboration with a riparian ecologist to evaluate and design a repair. Headcuts that are active or threaten road crossings should be stabilized with biotechnical methods. All treatments must be performed in a manner to protect sensitive ecological resources.
- S30 – Eradicate and/or reduce high-priority invasive plant species, especially near Colgan Creek adjacent to the Kawana Springs resort area.
- S31 – Prevent the spread of invasive plant populations in riparian habitats.
- S97 – Avoid developing new trail crossings over stream channels and through riparian vegetation as feasible. Locate trails on existing roads or trails wherever possible and appropriate.
- S98 – Site trails that do cross through riparian areas at stable stream crossings.

The Master Plan includes construction of boardwalks and trails over seeps and along the edges of wetlands on the property, as illustrated in Figure B.1-11 (Master Plan Trails Concept).

Implementation of the above avoidance and minimization measures and other measures included to protect sensitive species that utilize this habitat would lessen potentially significant impacts to a less-than-significant level.

Native Grassland

Although they are generally long-lived and tough once established, native perennial grassland species are typically slow to establish. In contrast, most of the non-native annual species that are so abundant on Taylor Mountain grow and germinate rapidly and are often well adapted to disturbance. Ground disturbance in native grasslands is likely to facilitate invasion by these non-native species. Fragmentation of habitat can further increase the risk of invasions by both non-native plant and animal species, which thrive in disturbed environments. Fragmented and non-native dominated grasslands are less valuable to wildlife than are more intact native grasslands.

Invasive species have potential to spread on the property, and can develop into dense stands that eliminate habitat for natives, reduce habitat complexity and diversity, and decrease forage and habitat value for livestock and wildlife. Some species can also increase fire hazards, with large accumulation of dry plant material. Well-managed livestock grazing may help suppress some non-native plant populations and facilitate some native species. Grazing can also be an effective grassland management tool for many species of wildlife, especially grassland birds (DiGaudio, 2010).

The development of access and parking, camping sites, and trails has the potential to impact sensitive native grassland (Figure B.3.4-2). Development of the proposed uses, as shown on conceptual plans, would have the potential to permanently remove approximately 1.07 acres of native grassland throughout the property. The impact estimates are provided in Table B.3.4-1.

Table B.3.4-1. Estimated Potential Impacts on Native Grassland

Land Use Type	Area Impacted(acres)
Access and Parking	0.09
Buildings and Infrastructure	—
Camping	0.33
Trails	0.65
Total	**1.07**

Measures to protect native grassland habitat are included in the Master Plan. These standards, which would guide final design and further reduce the amount of impacted area noted in Table B.3.4-1, are summarized as follows:

Construction Phase(s)

- S1 – Develop and implement a restoration plan for any proposed trail or other development that is unable to avoid native grasslands, including wildflower fields.
- S3 – Locate trails, visitor facilities, and other development-related disturbance outside of patches of native grassland and wildflower fields as feasible. Where ground disturbance is unavoidable, protection measures must be in place during and immediately following

construction. These measures may include protecting soil surfaces by seeding or planting promptly with appropriate native species and covering with weed-free straw mulch.

- S4 – Maintain buffers (setbacks) from native grasslands for all new development. (See Table 3 in Section 5.10.1 of the Master Plan.)

Operational Phase

- S2 – Develop and implement a long-term monitoring program to evaluate the effects of livestock grazing on plant species composition and wildlife usage within grasslands and wildflower fields. Use the results to guide grazing management.
- S5 – Maintain a moderate stocking rate, with livestock use well-distributed throughout the grasslands.
- S6 – In coordination with grazing lessee, prevent the introduction of noxious weeds through livestock feed.
- S7 – Prevent the spread of invasive plant populations in grasslands.
- S8 – Eradicate high-and medium-priority invasive species with populations that are currently limited in extent on the property. These currently include distaff thistle and Klamath weed.
- S9 – Reduce and control high-and medium-priority invasive species with populations that are already extensive on the property. These currently include black mustard, French and Scotch broom, Italian thistle, medusahead, milk thistle, purple starthistle, and yellow starthistle.
- S285 – Minimize the use of disking for fire hazard reduction. Where possible, use livestock grazing to reduce fuels, where needed. Remove only enough vegetation to accomplish fire hazard management goals.

Implementation of the above measures would ensure that impacts are less than significant.

Wildflower Fields

The largest expanse of wildflowers mapped on the property occurs just to the southeast of the existing water tanks. Because of the association of this plant community with thin-soiled areas that are difficult for non-native species to infiltrate, invasive species are not common. However, as in needlegrass grassland, wildflower fields are not immune to invasion by grassland weeds and annual grasses, especially if they are subject to ground disturbance.

The development of access, parking and trails has the potential to impact sensitive wildflower habitat (Figure B.3.4-2). Development of the proposed uses would have the potential to permanently remove approximately 0.29 acre of wildflower habitat throughout the property. The impact estimates are provided in Table B.3.4-2.

Avoidance and minimization measures included for native grasslands (described above) would serve to protect sensitive wildflower habitat and therefore additional mitigation measures are not required. As shown in the table, the majority of impact is related to potential trail development. Master Plan standards implemented during final trail design will serve to reduce

the area of potential impact by requiring alignment of trails to avoid sensitive vegetation communities (see S1, S2 and S3).

Table B.3.4-2. Estimated Potential Impacts on Wildflower Habitat

Land Use Type	Impact Area (acres)
Access and Parking	0.04
Buildings and Infrastructure	—
Camping	—
Trails	0.25
Total	**0.29**

Oregon White Oak Woodlands

Native oak trees and oak communities are one of the most significant resources on the property and provide both food and shelter for wildlife. Most of the forest and woodland habitats of Taylor Mountain are currently dominated by native plant species. Invasive species are not abundant in Taylor Mountain's oak woodlands, but there are patches of substantial infestations.

Native plant regeneration appears to be significant in the interior of woodlands but more limited on the edges of woodlands and in savanna settings. In these areas, livestock trampling and browsing, herbivory or seed predation by native wildlife, greater heat and drought stress, and other variables may reduce the germination and establishment of native species. The spread of Sudden Oak Death (SOD), caused by a water mold (*Phytophthora ramorum*), is also a concern in Taylor Mountain woodlands. Human visitors can spread *P. ramorum* by tracking infected mud along trails and between the park and other locations.

All of these forest and woodland health issues are influenced by the extent of fragmentation of habitat on the site. Fragmentation of forests and woodlands reduces the viability of local plant and wildlife populations by limiting genetic exchange and the number of individuals a habitat can support. Fragmentation also contributes to edge effects where microclimate changes alter the ecosystem and increases risk of invasions by exotic species that thrive in disturbed environments. Human activity on the property has the potential to fragment existing woodlands via roads and formal or informal trail use.

Implementation of the Master Plan will result in the enhancement of existing trails and the development of new trails over time (see conceptual trail plan in Figure B.3.4-2). Trails and roads have the potential to fragment habitats, increase edge effects and reduce the ability of woodland species to regenerate, thrive and support intact wildlife communities. Larger roads have a greater potential for these impacts than 'single-track' paths. Both roads and trails, although the most extensive development aspect of the Master Plan, will be sited and constructed in a manner to avoid removal of individual oak trees and to reduce habitat fragmentation and edge effects. The development of access, parking, buildings and infrastructure has the potential to remove a very limited number of individual oak trees and impact this sensitive community. Development of the proposed uses would have the potential to permanently remove approximately 1.41 acres of oak woodland throughout the property, as

shown in Table B.3.4-3. However, this is a conservative estimate based on development envelopes and conceptual design, including the assumption that a six-foot width would be required for all trails. In fact, only a portion of the areas within the development envelopes will be disturbed and in many areas, the trail width will be narrower, thus reducing the area of impact. Also, with implementation of Master Plan guidelines and standards (see below), the final design of facilities will reduce the overall acreage of impact. Trails can be designed to avoid trees and can be sited along the edges of habitat areas to minimize loss and fragmentation of habitat.

Table B.3.4-3. Estimated Potential Impacts on Oak Woodland

Land Use Type	Impact Area (acres)
Access and Parking	0.26
Buildings and Infrastructure	0.001
Trails	0.96
Total	**1.411**

Measures to protect oak woodland habitat and reduce potential impacts are included as part of the proposed project and are listed in the Master Plan, as follows:

Construction Phase

- S13 – Tree removal shall be limited to the greatest extent possible during project construction.
- S14 – Locate trails, visitor facilities, and other development-related disturbance outside of native forests and woodlands as feasible. Where ground disturbance is unavoidable, protection measures must be in place. These may include protecting soil surfaces by seeding or planting promptly with appropriate native species and covering with weed-free straw mulch.
- S15 – Develop and implement a restoration plan for any proposed trails and visitor facilities that are unable to avoid native forest and woodland habitats. The restoration plan will include habitat restoration measures, success criteria, and monitoring requirements. Tree replacement ratios will also be included in the plan.

Operational Phase

- S17 – Reduce and control French and Scotch broom. Remove small, isolated infestations that are scattered through oak woodlands. Pull by hand or with weed wrench. Minimize ground disturbance.
- S18 – Prevent the regeneration and/or spread of eucalyptus from the grove near the Kawana Springs Resort.
- S19 – Prevent the spread of invasive plant populations in forest and woodland habitats.

In addition to minimizing tree removal and disturbance of woodlands, the Master Plan's comprehensive set of SOD standards includes measures to prevent the introduction of SOD, as well as activities to limit the spread of SOD on the property. Implementation of Standards S16,

S72 and S73 would involve education, physical construction practices, equipment cleaning, staff training, monitoring and other miscellaneous provisions to ensure potential SOD impacts are minimized to the maximum extent feasible.

Implementation of the above measures would ensure that impacts on sensitive habitats are less than significant. As described above, with proper design and siting of facilities (primarily trails), impacts will be avoided or reduced to levels that are less than significant.

c. Would the project 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.) either individually or in combination with the known or probable impacts of other activities through direct removal, filling, hydrological interruption, or other means?

LESS THAN SIGNIFICANT. Potential jurisdictional wetlands, including vernal marsh, freshwater seeps, and coastal and valley freshwater marsh, occur at several locations within the project area (Figure B.3.4-4, Potential Impact on Wetlands and Waters). As described in the setting section, the Taylor Mountain property contains several different types of wetlands. Currently, wetlands are used extensively by cattle due to their proximity to existing water troughs and availability as forage. Several existing public trails follow the edges of wetlands. Most of the non-native plant species that are present in wetlands on Taylor Mountain are widely naturalized both across the property and throughout California. Protecting water quality, quantity, and native vegetation around wetlands will enable these special environments to continue to provide valuable hydrologic and habitat functions.

Currently, during periods of wet weather, livestock and human visitors trample wetlands, resulting in soil compaction, degraded water quality through elevated sedimentation and nutrient input from livestock waste, and impacts on native wildlife. Grazing is heaviest in the southwestern part of Taylor Mountain where water sources are most prevalent and topography is gentle (Bush, 2012). Erosion from trampling and runoff from trails around marshes and seeps can increase sediment delivery into wetland habitats and adjacent receiving waters. Impacts on wetlands are problematic year round because common amphibians use them in the winter for breeding but CRLF use them in the summer for non-breeding aquatic hydration habitat. Additionally, in-channel headcuts (vertical drops in the stream channel) have migrated upstream in several tributaries and have the potential to erode into and through some wetland habitats.

Implementation of improvements identified in the Master Plan will potentially have direct impacts on small areas of wetlands and has the potential to cause indirect impacts on wetlands as well. The proposed improvements have the potential to impact wetlands directly through ground disturbance and construction. These direct impacts would occur through road and infrastructure development and trail and boardwalk construction. Potential impacts on federally protected wetlands total 0.13 acres and are illustrated in Figure B.3.4-4 and described in Table B.3.4-4 below.

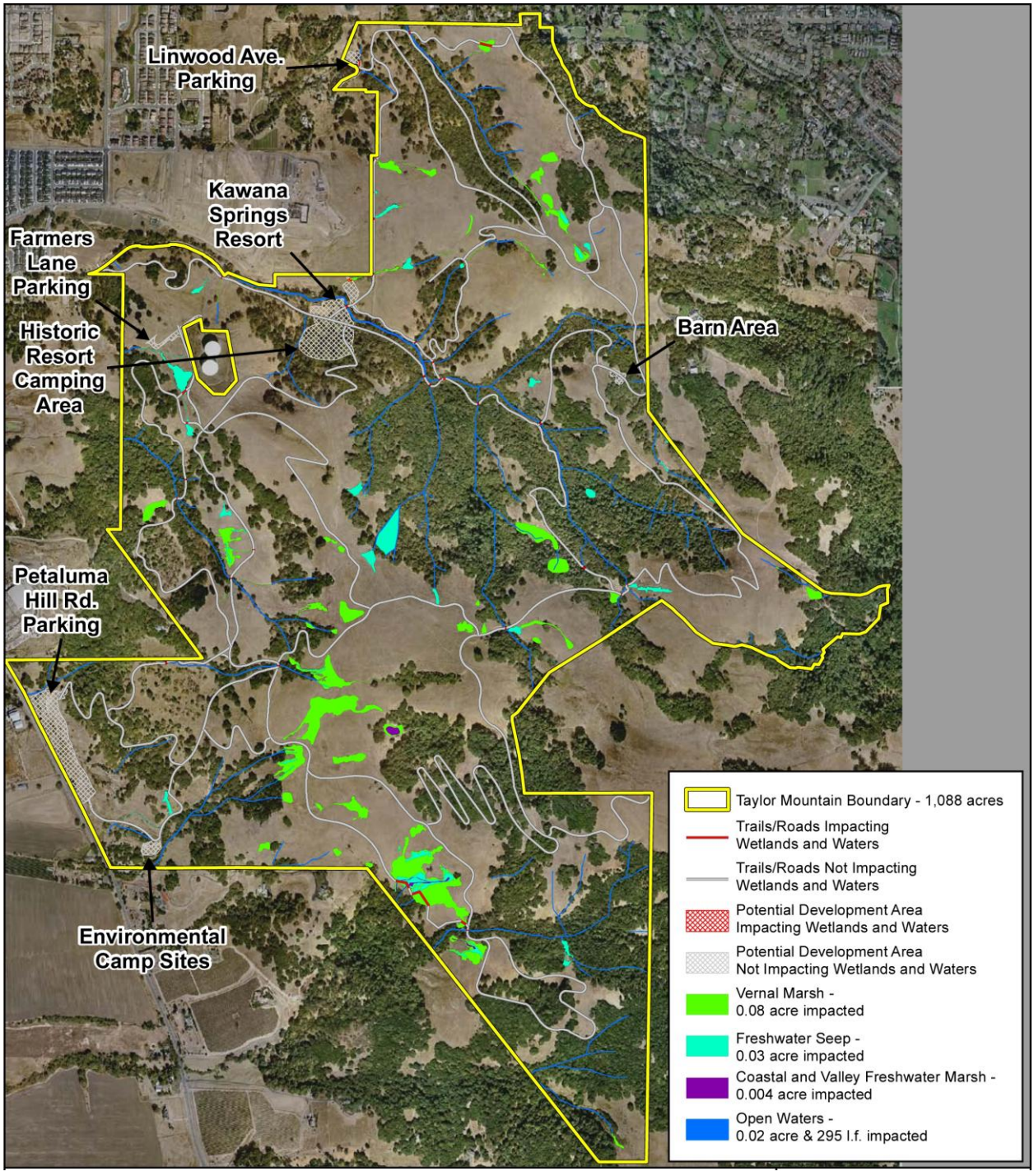

Figure B.3.4-4. Potential Impact on Wetlands and Waters

Table B.3.4-4. Estimated Potential Impacts on Wetlands

Land Use Type	Impact by Wetland Type (acres)			
	Freshwater Seep	Coastal and Freshwater Marsh	Vernal Marsh	Open Water
Access and Parking	—	—	0.01	0.01
Buildings and Infrastructure	—	—	—	—
Camping	—	—	—	—
Trails	0.03	0.004	0.07	0.01
Total	**0.03**	**0.004**	**0.08**	**0.02**

Indirect impacts on wetlands associated with the Master Plan could result from trails during rain events. Trails can concentrate runoff by acting as conduits for flow and diverting water into a single area. When overland flows concentrate they can cause soil erosion, gullying or landslides. Increased flows and erosion can lead to increased sediment loads in receiving waters that have the potential to travel downstream, potentially exacerbating flood and sedimentation issues on the Santa Rosa Plain. Increases to the amount of water delivered to the drainages on the Taylor Mountain property can exacerbate channel bank erosion and headcut movement. Channeling flows on trails and into creeks can also reduce the amount of rainfall that infiltrates the soil and that is available to recharge groundwater.

Measures to mitigate or compensate for the impacts on wetlands are included as part of the project. These measures, which are listed in the Master Plan, would guide final design and result in further reduction of impacts identified in the table. Applicable Master Plan standards include the following:

Construction Phase(s)

- S32 – Locate trails, visitor facilities, and other development-related disturbance outside wetlands to the greatest extent feasible. Existing trails within wetlands should be decommissioned.
- S33 – Where ground disturbance within wetlands is unavoidable, protection measures must be in place. These may include protecting soil surfaces by seeding or planting promptly with appropriate native species and covering with weed-free straw mulch.
- S34 – Develop and implement a restoration plan for any proposed trails that are unable to avoid wetland habitats. Restoration should consist of habitat enhancement activities that increase the functions and values of existing wetland habitats on the site. Examples of suitable restoration activities includes removal of non-native invasive plant species from wetlands, revegetating wetlands with native plant species, decommissioning existing trails that go through wetlands and re-routing them outside of wetlands, and protecting wetlands from excessive cattle use during the wet season when they are most vulnerable to impacts and erosion.
- S35 – If regulatory agencies determine that wetland restoration is not sufficient to mitigate for impacts on wetlands, wetland replacement may be necessary. This can be accomplished through creating wetland habitats onsite or through purchasing mitigation credits at an

approved bank. The wetland replacement ratio depends on the level of impact and quality of the impacted wetland. This will be determined by resource agencies during the permitting phase of the project.

- S36 – Maintain minimum setbacks from wetlands for all new development. Adequate vegetated buffers must be maintained or established for existing or new development. (See Table 3 in Section 5.10.1 of the Master Plan for specific setback requirements.)
- S37 – New trails shall be located well away from headcuts.

Operational Phase

- S38 – The spread of invasive plant populations in wetland habitats shall be prevented.
- S39 – Remove Himalayan blackberry in wetlands where opportunities to do so arise in conjunction with native plant restoration.
- S40 – Monitor high-priority wetland sites for non-native species, including pennyroyal and velvet grass (which are not listed as moderate or high priority for the property but are considered invasive in wetlands). If these are found to be increasing, remove by manual methods on an annual basis where they are encroaching on native plant populations.
- S78 – Water quality, quantity, and streamflow patterns shall be protected by providing adequate riparian buffers and minimizing instream disturbances from humans and livestock.
- S267 – Place seasonal limitations on trails through wetland habitats. Trails should be closed or their use restricted if during the wet season fresh erosion and/or vegetation trampling are visible.

Implementation of the Master Plan's avoidance and minimization measures would ensure that potential impacts on protected wetlands are less than significant.

d. Would the project 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 wildlife nursery sites?

LESS THAN SIGNIFICANT. Within the property, streams are intermittent, precluding the possibility of a migratory population of salmonids or resident trout. The ephemeral streams do not provide adequate habitat for fish during the warm summer months. Other wildlife such as deer, mountain lions, raccoons, opossums and skunks can use the seasonal drainages as movement corridors because water is available in some wet areas on the mountain and in troughs for cattle.

The Master Plan includes a provision (S76) to remove non-critical fencing on the property. Some additional cross fencing could be installed on the property as part of the Master Plan. Fencing has the potential to interfere with wildlife movement, unless it is constructed to wildlife-friendly fencing standards that would not prohibit wildlife movement. Wildlife-friendly fencing uses non-barbed wire for the upper and lower strands of fencing. This fencing would be used for any cross fencing installed. However, perimeter fencing is not of this type since smaller calves can escape underneath the fence without barbed wire. Since any perimeter fencing that

is replaced is already non-wildlife friendly there would be no change compared with the current conditions. While cattle would continue to graze on the property under the proposed project, dogs would be required to be leashed on the site. Thus, any potential impacts on fish or wildlife or their movement corridors would be less than significant. Additionally, the property does not contain habitat connectivity corridors as illustrated on Figure OCSRC-2 (Biotic Resource Areas) of the Sonoma County General Plan 2020 Open Space & Resource Conservation Element.

e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

NO IMPACT. The proposed project would not conflict with Sonoma County's Tree Protection Ordinance or other local policies protecting biological resources. The proposed project is not located within a Sonoma County General Plan 2020 designated biotic habitat. The project would be consistent with General Plan policies related to oak woodlands, wetlands, stream corridors, and wildlife. The proposed project includes avoidance and minimization measures. Additionally, Regional Parks would adhere to additional protection measures provided in USFWS, Corps, RWQCB, and CDFG permits that may be issued.

The Sonoma County General Plan 2020 supports protection and enhancement of valley oak habitat, which has been identified in pockets throughout the property. Low-impact recreational use of the site under the proposed project would be consistent with protection of these resources; tree removal and oak woodland habitat disturbance would be minimized through Master Plan standards described above in (b).

f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other approved local, regional, or state habitat conservation plan?

NO IMPACT. The Santa Rosa Plain Conservation Strategy, which has not been adopted or implemented by Sonoma County, addresses California tiger salamander (CTS), which is generally found on the Santa Rosa Plain. Only a very small portion of the Taylor Mountain property is located within the Conservation Strategy Study Area, as described above in Item (a). This area is designated as "No Effect." The proposed uses would not conflict with the Santa Rosa Plain Conservation Strategy, and biological resource protection standards included in the Master Plan would ensure avoidance of indirect effects on the Conservation Strategy area.

Colgan Creek is a tributary to the Russian River where the Central California Coast Steelhead Distinct Population Segment (DPS) and Evolutionarily Significant Unit of Central California Coast Coho occur. No recovery plan has been completed for the steelhead DPS at this time. However, the Taylor Mountain property is located within the Recovery Plan for the Coho salmon. Avoidance and minimization measures included in the proposed project would prevent indirect impacts downstream of the project and would be consistent with the Recovery Plan for the Coho salmon. In addition, the County does not have a formal habitat conservation plan for this area.

B.3.5 Cultural Resources

CULTURAL RESOURCES **Would the project:**	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☒	☐
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☒	☐
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐
d. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

Significance criteria established by CEQA Guidelines, Appendix G.

B.3.5.1 Setting

The cultural resources setting and regulatory framework for evaluation and protection of cultural resources are described in the following documents:

- A Cultural Resources Survey for the Taylor Mountain Regional Park Project, Sonoma County, California (Orriger, 2001) (confidential report)
- A Cultural Resources Survey for the Taylor Mountain Site Assessment – Russell Property, Sonoma County, California (Orriger and Steen, 2006) (confidential report)
- Taylor Mountain Master Plan Historical Resources (Architectural Resources Group (ARG), 2012)

Archival research was conducted in conjunction with previous studies and cultural resources field surveys of the site were conducted in 2001, 2006, 2010 and 2011. Native American consultation for the proposed project occurred during the previous cultural resources investigations and Native American tribes were contacted during development of the Master Plan process. The following discussion summarizes the findings in both the historic and archaeological resources reports.

Prehistoric (Archaeological) Resources

At the time of European settlement, the Taylor Mountain property was included in the territory controlled by the Southern Pomo. The Southern Pomo were hunter-gatherers who lived in environments rich with food sources, which allowed for dense populations that developed complex social structures. They settled in large, permanent villages about which were distributed seasonal camps and task-specific sites. Primary village sites were occupied continually throughout the year and other sites were visited in order to procure particular resources that were especially abundant or available only during certain seasons. Sites were often situated near freshwater sources and in ecotones where plant and animal life was diverse and abundant. The Laguna de Santa Rosa's wetlands and open waters were a significant resource. There are several reported Southern Pomo village sites a few miles to the north of the Taylor Mountain property, but no known village sites on the property itself.

Archaeological resources have been identified on the Taylor Mountain property, however none of these resources are located within proposed staging or trail development areas. These include scatters of obsidian flakes, a midden and rocky outcrops containing cupules, a type of petroglyph (Origer and Steen, 2006). Four prehistoric sites have been recorded with the State Office of Historical Preservation and the locations remain confidential. No burial sites are known to exist on the property. Consultation with Native American tribes indicates that no sacred sites are known to be located on the property; however there may be sacred sites in the study area vicinity (Tipon, 2006).

Historic Resources

The proposed Kawana Springs Resort area contains a complex of historic resources that was developed in the 1860s through the turn of the twentieth century. Although the main building of the resort does not survive, elements of the complex remain that add to our understanding of the recreational and tourism history of Sonoma County. The structures in the Kawana Springs Resort area, including the bathhouse, gazebo and garage, were evaluated to determine their historic resource significance; however, none of the structures are eligible for inclusion in the California Register of Historical Resources (CRHR) (ARG, 2012). To be included in the CRHR, the California Code of Regulations Title 14, Chapter 11.5, Section 4850 states that a historic resource must retain sufficient integrity to convey its significance[4] and must meet one or more of the following criteria:

1. Resource is associated with events or patterns of events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States; or
2. Resource is associated with the lives of persons important to local, California, or national history; or
3. Resource embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master, or possesses high artistic values; or
4. Resource has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California or the nation.

Overall, the ARG study (2012) determined that the Kawana Springs Resort site retains low integrity and therefore does not appear to be eligible for listing in either the National Register of Historic Places or the California Register of Historical Resources.

Five historic stone fences have been recorded on the property (Origer and Steen, 2006) and would remain in place with implementation of the Master Plan. One additional, partially recorded historic site is in the vicinity of the proposed Petaluma Hill Road staging area. However, the building (a residence) no longer exists.

[4] The California Register requires that a resource retain enough of its historic character or appearance to be recognizable as a historical resource and to convey the reasons for its significance. Integrity is evaluated in regard to retention of location, design, setting, materials, workmanship, feeling and association.

B.3.5.2 Environmental Impacts and Mitigation Measures

a. Would the project cause a substantial adverse change in the significance of an historical resource as defined in §15064.5 [§15064.5 generally defines* historical resource *under CEQA]?

LESS THAN SIGNIFICANT IMPACT. There are no recorded historical cultural resources within or adjacent to the proposed development areas on the property. As described in the setting section, none of the existing structures in the Kawana Springs Resort area would qualify for inclusion in the California Register of Historical Resources. The Master Plan contains guidelines and standards for preservation of the historic setting of the Kawana Springs Resort area and use of materials compatible with the historic setting.

Five historic, dry-laid stone fences are located on the property and could be subject to damage from Preserve visitors (Origer and Steen, 2006). The existing trails are located in proximity to two of the fence locations and future trails could be developed near these existing fences. Use of the trails could result in potential impacts on these fences. According to Master Plan Standard 258, trailhead signage would emphasize the need to maintain appropriate distances from the fences so that they are not degraded or destabilized over time. In addition, the Master Plan includes a guideline (G146) to inspect stone fences and implement protective measures if vandalism becomes an issue. With these measures, impacts on historic resources would be less than significant.

b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

LESS THAN SIGNIFICANT IMPACT. Master Plan designs for trail development and staging area improvements avoid known archaeological resources on the property. Although the trail plans are conceptual, Guideline 121 in the Master Plan calls for a 500-foot setback from known archaeological sites and Guideline 122 provides for installation of trailhead educational signage that includes general information about the archaeological significance of the property and the need to respect resources on the property. Therefore, impacts on known archaeological resources would be avoided.

Because of Sonoma County's rich prehistoric background, there is the potential for discovery of prehistoric resources during construction activities that involve subsurface excavation or grading. The Master Plan includes the following standard (S82) to ensure avoidance of impacts on buried archaeological resources:

- If any potentially-significant archaeological sites are uncovered, all work in the immediate vicinity of the discovery shall be halted immediately until a qualified archaeologist assesses the significance of the resource. The archaeologist would recommend appropriate measures to record, preserve, or recover any significant resources.

With these Master Plan provisions, potential impacts on archaeological resources would be less than significant.

c. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

LESS THAN SIGNIFICANT IMPACT. There are no known unique geologic features on the property. Paleontological remains (fossils of plants, animals, and other organisms), are fairly common in Sonoma County. No fossils have been identified on the site or adjacent areas. Given the lack of known paleontological resources in the area, and the limited ground disturbance associated with the project, the probability of encountering rare fossils is low. Master Plan Standard 140 establishes protective measures in the event a paleontological resource is discovered during construction. Therefore, any discovered paleontological resources would not be destroyed and impacts would be less than significant.

d. Would the project disturb any human remains, including those interred outside of formal cemeteries?

LESS THAN SIGNIFICANT. No human remains have been identified on the property. However, there is always some possibility that unmarked burials may be unearthed during construction. The Master Plan contains a standard (S83) to ensure no impacts occur on buried human remains, consistent with CEQA provisions:

- If human remains are encountered, excavation or disturbance of the location shall be halted and the county coroner contacted. If the coroner determines the remains are Native American, the coroner will contact the Native American Heritage Commission. The Native American Heritage Commission will identify the person or persons believed to be the most likely descendant from the deceased Native American. The most likely descendant will make recommendations regarding the treatment of the remains with appropriate dignity.

B.3.6 Geology, Soils, and Minerals

GEOLOGY, SOILS, AND MINERALS **Would the project:**	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
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 Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b. Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐
c. Be located on geologic units 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?	☐	☐	☒	☐
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒	☐
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☒	☐
f. Would the project 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?	☐	☐	☐	☒
g. Would the project 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?	☐	☐	☐	☒

Significance criteria established by CEQA Guidelines, Appendix G.

B.3.6.1 Setting

Geologic Setting

Taylor Mountain is the northern extent of the Sonoma Mountains. It is underlain largely by layered lava flows composed of andesitic and basaltic rocks of the Sonoma Volcanics unit (Grayner et al., 2007). These flows were laid down approximately 5 to 10 million years ago in the Miocene-Pliocene age. Subsequent to their deposition, the lava flows have been uplifted, tilted to the northeast, and faulted.

Soils

The soils on Taylor Mountain consist primarily of the Goulding and Toomes series, which are well-drained clay loams composed of weathered volcanic material that are considered suitable for non-irrigated land uses (NRCS, 2010). These soils are commonly on mountainous uplands with slopes ranging from five to 50 percent. Runoff of Goulding soil is generally rapid and the

hazard of erosion is high. Grazing is common on Goulding soils. Other soils on the project site include the Raynor series (NRCS, 2010), which is commonly found on slopes of nine to 15 percent. These soils are well-drained clays and are found on rolling hills. Sheep and cattle grazing commonly occur on Raynor soils. The soil types vary in location by slope, depth to bedrock, and amount of clays, loams, and gravelly/cobbly material present. Bedrock outcrops occur along ridgelines and in scattered hillslope locations. Sporadic intrusions of ultramafic rocks and associated serpentine soils also occur at the site.

B.3.6.2 Environmental Impacts and Mitigation Measures

a. Seismicity

LESS THAN SIGNIFICANT. The Bay Area, in general, is considered seismically active (Seismic Zone 4). The faults in Sonoma County are part of the San Andreas Fault system. A recently active fault, the Rodgers Creek Fault, runs through the northeastern section of the property along a northwest/southeast trend. The Rodgers Creek Fault, (Maximum Credible Earthquake 7.0) is thought to be a northern extension of the Hayward Fault and is responsible for the 1969 Santa Rosa earthquakes (magnitudes 5.6 and 5.7) (Blake et al., 2000). The epicenter of the 1969 earthquake was located on the southwestern slopes of Taylor Mountain (City of Santa Rosa, 2002). The San Andreas Fault (Maximum Credible Earthquake 8) is located about 20 miles to the southwest (Sonoma County, 2008).

Fault Rupture. The Rodgers Creek and San Andreas faults are the two principally active Bay Area "strike-slip" faults and have both experienced movement within the last 150 years. Strike-slip faults are those that primarily exhibit displacement in a horizontal direction (City of Santa Rosa, 2002). The area along the Rodgers Creek Fault through the property is designated as an Alquist-Priolo zone. The Alquist-Priolo Earthquake Fault Zoning Act (P.R.C Section 2621 et seq.) prohibits the location of most types of structures for human occupancy across the active traces of faults in earthquake fault zones. Portions of trails in the eastern area of the park would cross the Rodgers Creek Fault Zone, but no structures are proposed within the Alquist-Priolo zone.

Groundshaking. Taylor Mountain is very likely to be affected by future earthquakes and strong ground-shaking can be expected on the project site (Miller Pacific, 2010). The intensity of shaking depends on distance to fault rupture zone, earthquake magnitude, earthquake duration, and the specific geology of the site. The Sonoma County General Plan Public Safety Element identifies the slopes of Taylor Mountain as being subject to Very Strong (XIII) and Violent (IX) ground-shaking in the event of an earthquake on the Rodgers Creek Fault. Visitors to the Preserve would be subject to violent ground-shaking during an earthquake. However, for the most part, visitors would be on open land, resulting in minor exposure to adverse seismic conditions.

Although strong ground shaking could potentially damage structures on the site and pose a potential hazard to the public, these impacts would be reduced to the extent possible through appropriate engineering and construction. Project facilities would be engineered to withstand expected ground shaking without substantial adverse impacts. Structural design for allowed uses

would be in accordance with the California Building Code; by law, all project improvements must meet the requirements of the California Uniform Building Code (CUBC) for Seismic Zone 4.

Liquefaction. Sonoma County Hazard Mitigation Plan mapping (Figure 8.1) of hazard areas indicates that the site is not within a zone of liquefaction susceptibility.

Landslides. Several Quaternary landslide deposits are located in the northeast portion of the property along the fault zone. In the Sonoma County General Plan, most of Taylor Mountain is characterized by areas of relatively unstable rock on slopes greater than 15 percent, with a portion of the mountain also characterized as "Landslide Complex," where previous slope failure has occurred. Additionally, most of the site is identified as an area with high or moderate potential for landslides (Sonoma County, 2008). The Master Plan does not propose any structural development in these areas and development of new public trails through these areas would be avoided, as required by Standard 99.

b. Would the project result in substantial soil erosion or the loss of topsoil?

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED. Development and use of the Taylor Mountain Preserve has the potential to result in erosion, particularly due to the steepness of some of the trails and ranch roads. In particular, the Goulding soil series are prone to erosion. Trail development will be required to implement measures to avoid erosion, as specified in Standard 23. Master Plan Standard 66 references Master Plan Table 3 with recommended vegetated setbacks which would minimize erosion. Closures of the trails would be put into place during wet weather periods to minimize erosion, as required by Master Plan S267.

Grading of the staging areas has the potential to result in erosion; however, staging areas are proposed on relatively level ground. The Master Plan contains many guidelines and standards to minimize soil disturbance and erosion (see Section B.3.8, Hydrology). Both temporary methods, such as laying down straw for trails (S3, S10, S14) and longer-term methods, such as laying down gravel for trails (S108) and staging areas (shown on site plans in Section B.1, Project Description), would limit the potential for soil erosion. Implementation of the Master Plan standards and the following mitigation measure would reduce this potential impact to a less-than-significant level:

6-1 Best Management Practices such as preservation of existing vegetation and use of sediment catch basins and silt fencing shall be used to minimize erosion during construction, as required by the Construction General Permit (CGP). The staging areas and access driveways shall be improved between April 15 and October 15, prior to the winter rains, or Regional Water Quality Control Board (RWQCB) Best Management Practices for wet-weather construction will be utilized.

With proper construction practices in accordance with the Master Plan and Mitigation Measure 6-1, there should be no notable erosion or transport of sediment from the site.

c. Would the project be located on geologic units 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?

LESS THAN SIGNIFICANT. The potential for landslide and liquefaction impacts is addressed above in Item (a). The staging areas will be located on relatively flat, stable ground that is not susceptible to spreading, subsidence or liquefaction. Some trails will be developed across sloped areas, but the Master Plan includes several measures to ensure slope stability, such as: S98, which requires that new riparian and creek crossings be developed on stable sites (i.e., low slopes in channel and banks) and constructed to minimize, to the greatest extent possible, streambank and bed erosion; and S101, which establishes an average trail slope of 10%. Therefore, the impact is less than significant.

d. Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

LESS THAN SIGNIFICANT. The proposed project site is characterized by expansive soils (Sonoma County, 2008); these soils contain clay minerals that greatly increase in volume when they absorb water, and shrink when they are dry. As a result, they exhibit cracks in some locations. While cracks in the soil present some tripping hazard, use of the trails and ranch roads by hikers, bicyclists and equestrians would not create substantial risk to life or property. In addition, information at the staging area kiosks would alert users to the uneven surface conditions along portions of the trail and urge caution when hiking, bicycling or riding in areas characterized by these conditions.

e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

LESS THAN SIGNIFICANT. Implementation of the Master Plan will rely on limited septic systems to support permanent restrooms at the staging areas and visitor services at the Kawana Springs Resort staging area. The property is currently served by a septic system for the existing residence in the life estate area. There are several soil types in the Kawana Springs Resort area that have the potential to accommodate a standard septic system. Due to 100' minimum setbacks to water sources (wells and springs), streams and wetlands, there may be a need to include the use of a mound type system if onsite soils in close proximity to the developed compound are not conducive to standard septic / leach field design.

County permit requirements include provisions to ensure that soils are adequate for septic systems. Both a pre-perc test and perc test will be required to confirm soil suitability prior to issuing septic system permits. Furthermore, the Master Plan includes S143, which requires soil studies in advance of septic system design work. The Master Plan states that waterless toilets will be installed, if septic systems are not practical.

f. Would the project 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?

NO IMPACT. There are no known important mineral resources that would be impacted by the project. There are no designated Mineral Resource Zones in the project vicinity (DOC/DMG, 1987). In the late 1800s, the Taylor Mountain Coal Mining Company opened a small mine for lignites on the property. However, the mine was later abandoned due to the fact that the strata were too fractured (California State Mining Bureau, 1926).

g. Would the project 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?

NO IMPACT. There are no known locally important mineral resources that would be impacted by the project. There are no designated areas containing important mineral resources at the site or in the project vicinity (Sonoma County, 2010). Therefore, the project would have no impact on any locally important mineral resource recovery sites.

B.3.7 Hazards and Hazardous Materials

HAZARDS AND HAZARDOUS MATERIALS **Would the project:**	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
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?	☐	☐	☒	☐

Significance criteria based on CEQA Guidelines, Appendix G.

B.3.7.1 Setting

This section addresses issues related to existing environmental contamination on the proposed project site, and existing laws and regulations governing the use of hazardous materials and waste. The soils on the project site may have been contaminated by historical use of pesticides and herbicides.

Regulatory Setting

The use and disposal of hazardous materials is heavily regulated by federal, State and County laws. Regulations applicable to hazardous materials and wastes are summarized below.

Federal Regulations

Hazardous materials, including their use and remediation, are regulated by a number of federal laws including:

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLA provides a process and some funding to clean up uncontrolled or abandoned hazardous waste

sites as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment.

Resource Conservation Recovery Act (RCRA). RCRA gave the Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also sets forth a framework for the management of non-hazardous wastes.

Federal Clean Water Act. The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States (U.S.) and has given EPA the authority to implement pollution control programs. The CWA also contains requirements that set water quality standards for all contaminants in surface waters. The CWA makes it unlawful for any person to discharge any pollutant from a point source into navigable waters, unless a permit is obtained under the provision. A point source of pollution is one that can be easily identified such as pipe leading from industrial and wastewater treatment plants.

State Regulations

California's regulations for hazardous substances, including discovery during subsurface construction and disposal and cleanup of contaminated materials (i.e., soil, groundwater, building materials), incorporate most federal hazardous materials regulations. California's regulations and statutes for hazardous materials are contained in Health and Safety Code Section 25130 et seq. and Title 22 C.C.R, which contains regulations adopted and administered by the California Department of Toxic Substance Control (DTSC). State regulations addressing worker exposure to safety and health hazards are cited in Title 8 C.C.R. and regulated and enforced by the State Occupational Safety and Health Administration (OSHA).

Sonoma County

The Hazardous Materials Management Services branch of the Sonoma County Health Department's Environmental Health Division is the Certified Unified Program Agency (CUPA) for Sonoma County. It is responsible for enforcement of numerous hazardous materials and waste programs.

B.3.7.2 Environmental Impacts and Mitigation Measures

a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

LESS THAN SIGNIFICANT. Hazards associated with the proposed project would be limited to petroleum products used in the machinery and vehicles during grading of the staging areas and driveways. The use of such products is highly regulated by federal and State laws. Safe handling, in compliance with existing regulations would ensure that impacts are minor and less than significant. There would be no long-term hazard-related impacts associated with the project.

b. Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

LESS THAN SIGNIFICANT. Implementation of the Master Plan would not involve the use or storage of hazardous materials other than very small amounts of pesticides or herbicides. As noted above, the use of such products is highly regulated by federal and state laws, ensuring safe handling and minimization of potential hazards to the public or the environment.

c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

NO IMPACT. The Sonoma Academy property is within ¼ mile of the Preserve, however allowed uses on the Taylor Mountain Preserve would not have the potential to result in hazardous emissions or involve the handling of hazardous materials, other than extremely limited use of pesticides and herbicides.

d. Would the project be located on a site that 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?

NO IMPACT. Review of existing database sources indicates that there are no sites in the project vicinity listed on the Department of Toxic Substances Control Hazardous Waste and Substances List (Cortese List).

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?

NO IMPACT. The project site is not located within two miles of a public airport or within an airport land use plan. The Charles M. Schulz Sonoma County Airport is more than nine miles from the proposed project site.

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?

NO IMPACT. The property is not located within the vicinity of a private airstrip.

g. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

LESS THAN SIGNIFICANT. Implementation of the Master Plan would not interfere with adopted emergency response or evacuation plans for the area. Accesses to the Preserve will be distributed around the property's perimeter, facilitating the movement of vehicles and minimizing effects on surrounding land uses. For emergency response on the property itself, emergency responders would have access through all gates. Staging areas would meet the Sonoma County Fire Safe Standards related to driveway width, slope and access gates. The Master Plan includes provision and maintenance of emergency routes across the park property. See Section B.3.14, Transportation, for additional details on emergency access to and within the project site.

h. Would the project 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?

LESS THAN SIGNIFICANT. Portions of the Taylor Mountain property are near urban areas that include residential uses and two schools (Kawana Elementary and Sonoma Academy). Similar to other regional parks, there is a risk of wildland fire from illegal smoking or illegal campfires, as well as from natural causes such as lightning strikes. Potential fire hazards was an issue raised by the public during development of the Master Plan. Taylor Mountain is located in an area characterized by "High" and "Very High" Fire Hazard on the Sonoma County Hazard Mitigation Plan (Sonoma County, 2006). It is identified as "Moderate" on the CalFIRE – Fire Hazard Severity Zones on its State Responsibility Areas (SRA) map (CalFIRE, 2007).

Expanded use of the site could result in an increase in fire hazards. Cumulatively, climate change may contribute to increased fire hazards. The Master Plan includes provisions for fire prevention, including:

- S280 – Development and maintenance of emergency access routes through the property;
- S281 – Installing barriers to prevent non-authorized vehicle use on trails and at access points;
- S282 – Prohibition of smoking within the park (this is a Countywide ordinance);
- S230 and S283 – Limited use of barbecues and firepits in designated developed areas that are clear of vegetation;
- S285 – Continued grazing and trail mowing to reduce fire fuel levels;
- S286 – Prevent the establishment or control invasive plant species that can increase the risk for fire.
- S287 – Prohibition of use of power tools during periods of high and very high fire hazard; and
- S288 – During periods of high and very high fire hazard, prohibition of driving maintenance vehicles into undeveloped areas of the property except for emergencies.

Prohibition of smoking and other fire restrictions would be clearly displayed at the informational kiosks. With increased use of the park and additional "eyes on the site," illegal fire use would likely decrease.

With these Master Plan measures, the potential impact would be less than significant.

B.3.8 Hydrology and Water Quality

HYDROLOGY AND WATER QUALITY **Would the project:**	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
a. Violate Regional Water Quality Control Board water quality standards or waste discharge requirements?	☐	☒	☐	☐
b. Substantially deplete groundwater supplies or interfere substantially with groundwater discharge such that there would be a net deficit in the aquifer volume or a lowering of the local groundwater table level (i.e., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c. 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 that would result in substantial erosion or siltation on or off site?	☐	☐	☒	☐
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 that would result in flooding on or off site?	☐	☐	☒	☐
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?	☐	☐	☒	☐
f. Otherwise substantially degrade water quality?	☐	☐	☒	☐
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 hazard delineation map?	☐	☐	☐	☒
h. Place within 100-year flood hazard area structures that would impede or redirect flood flows?	☐	☐	☐	☒
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.	☐	☐	☐	☒
j. Cause inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

Significance criteria based on CEQA Guidelines, Appendix G.

B.3.8.1 Setting

Existing Conditions

The Taylor Mountain property is perched above the Santa Rosa Plain and encompasses the headwaters for Colgan Creek, Todd Creek, and a portion of Matanzas Creek. Streamflows originating on Taylor Mountain provide cool, clean water to these creeks as they traverse through the urban areas of the Santa Rosa Plain. For some wildlife species, the creeks and their associated riparian vegetation may provide marginal movement corridors from the Laguna de Santa Rosa through the cities of Santa Rosa and Rohnert Park to the uplands of Taylor Mountain. The Santa Rosa Citywide Creek Master Plan (City of Santa Rosa, 2007) includes the goals of improving creek conditions and habitat value in the urban reaches, as well as providing recreational access and transportation corridors.

All of the streams traversing the property are intermittent, as described in Section B.3.4 (Biological Resources). However some deeper pools in the creeks with larger watersheds may sustain perennial water in years with average or above average rainfall. The most prominent stream channel on the property is Colgan Creek, sometimes referred to as Kawana Springs Creek. The headwaters include the oak woodlands of Taylor Mountain in the central portion of the property. From here, the creek flows in a westerly direction adjacent to the resort and then along the northern property boundary before heading west to the Laguna de Santa Rosa. Within the property, this reach is characterized as being natural and meandering, narrow, and relatively rocky with a steep gradient. Riparian trees shade the channel and provide moderate canopy cover. Further downstream, the creek has been channelized into a flood control channel. Much of the lower reaches are grass or concrete-lined, or are underground with little vegetative cover (City of Santa Rosa, 2007). Because of these features, this creek is not considered a critical migration corridor.

Additional noteworthy stream channels on the property include a small portion of the headwaters of Todd Creek and East Fork Todd Creek, originating in the western portion of the property and flowing southwesterly to the Laguna de Santa Rosa. Colgan Creek originates in the northern portion of the property and flows directly to Santa Rosa Creek through a series of modified channels. All of these channels are highly disturbed, with the likely exception of the upper headwaters on Taylor Mountain.

Originating on the northern slopes of Sonoma Mountain and the Taylor Mountain property, Matanzas Creek flows a short distance through the property's southeastern corner. This section of creek flows to the northeast towards Galvin Community Park. This upper reach is characterized as being fairly natural with intact instream habitat and good canopy coverage. However, several fish barriers downstream preclude natural runs of native fish.

On the Sonoma County groundwater availability map (Sonoma County, 2004), the entire property is shown as Zone 3 – limited groundwater area. However, the grasslands and forests of Taylor Mountain serve as a groundwater recharge and storage area. Structurally complex vegetative cover promotes rainfall infiltration through interception and absorption. The multitude of springs, their associated wetlands, and the grassland swales slowly release water stored in the shallow groundwater aquifer. These hydrologic processes help support the diverse array of vegetation communities and associated wildlife found on the property and buffer nearby urban areas from higher stormwater flows.

There is a large, freshwater pond in the central portion of the property. Persistent springs with water into late summer are also critical watering holes. The property also contains seasonal wetlands, which are described in Section B.3.4, Biological Resources.

Applicable water quality regulations are described below. Development of the site will be subject to several approvals and permits related to water quality and stormwater runoff. The regulations establishing these approvals contain requirements to ensure protection of water quality.

Regulatory Setting

Clean Water Act. The Clean Water Act establishes the basic structure for regulating discharges of pollutants into the waters of the United States and has given the Environmental Protection Agency (EPA) the authority to implement pollution control programs. The Clean Water Act also contains requirements that set water quality standards for all contaminants in surface waters.

National Pollution Discharge Elimination System. The National Pollution Discharge Elimination System (NPDES) Nonpoint Source Program (established through the Clean Water Act) regulates runoff water quality; the objective is to control and reduce pollutants to water bodies from nonpoint discharges. Nonpoint source (NPS) pollution, unlike pollution from industrial and sewage treatment plants, comes from many different sources. NPS pollution is caused by rainfall moving over and through the ground. As the runoff moves, it picks up and carries away natural and human-made pollutants, finally depositing them into lakes, rivers, wetlands, coastal waters, and even our underground sources of drinking water. The program is administered by the North Coast Regional Water Quality Control Board (NCRWQCB). The Municipal Separate Stormwater Sewer System (MS4) Permit is issued by the NCRWQCB to the City of Santa Rosa, County of Sonoma and Sonoma County Water Agency. The MS4 Permit requires the use of LID type stormwater features as part of applicable new development. The statewide Construction General Permit (CGP) is issued by the State Water Quality Control Board. The CGP regulates construction related discharges. Coverage under the CGP is required for any construction activity that will, or is part of, a "common plan" of development that will disturb one or more acres and has the potential to have a discharge of stormwater to a water body of the United States.

Section 404 and 401 Permits. Section 404 of the Clean Water Act establishes programs to regulate the discharge of dredged and fill material in waters of the U.S., including wetlands. When an application for a Section 404 permit is made the applicant must show it has:

- Taken steps to avoid wetland impacts where practicable;
- Minimized potential impacts on wetlands; and
- Provided compensation for any remaining unavoidable impacts through activities to restore or create wetlands.

Wetlands are addressed in Section B.3.4 of this IS/MND. In order for any work to be completed around the various surface water bodies, Section 401 of the Clean Water Act would be applicable. Section 401 requires any applicant for a federal permit that conducts any activity that may result in a discharge of pollutants to first obtain a Water Quality Certification (WQC) from the NCRWQCB.

State Water Resources Control Board (SWRCB). The SWRCB and the nine RWQCBs throughout California regulate water quality in surface and groundwater bodies. The SWRCB regulates water quality through the Porter-Cologne Water Quality Act of 1969. Porter-Cologne contains a complete framework for the regulation of waste discharges to both surface waters and groundwaters of the state.

On the regional level, Taylor Mountain is within the North Coast Regional Water Quality Control Board jurisdiction, which is responsible for the implementation of State and federal water quality protection statutes, regulations and guidelines, as described above in the NPDES subsection.

Lake or Streambed Alteration Agreement. Since some work for the implementation of the proposed Master Plan would be completed along the banks of various surface water bodies, an application for a Lake or Streambed Alteration Agreement (LSAA) may be required. Section 1602 of the California Department of Fish and Game Code requires any person who proposes a project that will substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank or any river, stream, or lake or use materials from a streambed, to obtain an LSAA from the Department before beginning the project.

CALGreen. Beginning January 1, 2011 the 2010 California Green Building Standards Code (CALGreen) became effective throughout California and the County of Sonoma adopted CALGreen, with amendments, to replace previously existing green building regulations. CALGreen requirements apply to new buildings and establish standards for stormwater runoff control and water conservation.

Sonoma County Water Efficient Landscape Ordinance. A County Water Efficient Landscape Ordinance went into effect on January 15, 2010. The ordinance requires a landscape plan check for certain projects, as described in the ordinance. It includes requirements for landscape water budgets, landscape and irrigation design, and irrigation scheduling. The ordinance is located in Section 7D3 of the Sonoma County Code (Building Regulations) and supersedes the existing Low Water Use Landscaping Ordinance located in Zoning Code Section 26-88-110. Both public water users and ground water users are subject to the ordinance.

B.3.8.2 Environmental Impacts and Mitigation Measures

Implementation of the Master Plan would require several trail crossings over streams, development of staging areas that include drainage improvements, and installation of a new replacement bridge over Colgan Creek to allow for pedestrian, bicyclist, equestrian and vehicle access. All of these proposed uses are accompanied by guidelines and standards, as outlined below, to minimize hydrology and water quality impacts.

a. Would the project violate any water quality standards or waste discharge requirements?

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED. During construction of the various improvements, land would be cleared and graded for access, parking areas, picnic facilities and other low-intensity visitor services. Exposure of surface soils during construction activities could lead to increased erosion, runoff, and sedimentation of on-site water features. Construction equipment and vehicles could accidentally discharge oil or other construction-related contaminants into surface water bodies on the site. In addition, trail development may necessitate stream crossings, which have the potential to contribute to erosion and sedimentation. However, several existing trails/dirt roads on steep slopes would be decommissioned and revegetated to minimize erosion. Project construction will be required to comply with the Construction General Permit and prepare a site-spcific Stormwater Pollution

Prevention Plan (SWPPP) that includes detailed erosion and sedimentation controls and BMPs for controlling runoff, construction practices, vehicle fueling and maintenance and other measures to protect water quality (Master Plan Standard 141).

Operation of the Preserve would have the potential to result in impacts on water quality due to run off. Operation of private vehicles on the site could result in the deposition of oil and grease on surface parking lots that could subsequently be carried to surface water on the site. Impervious surfaces could result in increased runoff. However, the amount of impervious area would be very limited, as the staging areas would be primarily unpaved pervious surfaces, as shown on the Master Plan conceptual design figures. Staging areas and visitor development would contain features to achieve Low Impact Development (LID), as required by the NCRWQCB MS4 Permit. These design features would capture onsite runoff and prevent increased discharge to nearby water sources. Reuse of the existing bathhouse would further limit the amount of new impervious features.

The proposed project would allow hikers, bicyclists and equestrians to use Taylor Mountain on a regular basis. While equestrian use and dogs would result in some additional urine and feces being deposited on the site, park information would emphasize minimizing the amount of urine and fecal matter that enters the drainage. Any potential increase would not be substantial in relation to the existing use of the site for cattle grazing.

One of the Master Plan's objectives is to protect upland hydrology to maintain existing stormwater and sediment delivery levels to creeks. The Master Plan includes numerous standards to minimize erosion and sedimentation during construction and operation, summarized as follows:

- S21 – Utilize Low Impact Development (LID) techniques in landscaped or other developed areas, as required by the NCRWQCB MS4 Permit and as specified in the in the Storm Water Low Impact Design (LID) Technical Design Manual, to intercept flows and allow water to percolate into soil and reduce sediment delivery.
- S26 and S66 – Maintain vegetated buffers from creeks. (Table 3 in the Master Plan lists buffer requirements for various types of proposed development.)
- S37 – Locate new trails well away from headcuts.
- S44 – Site new trails at least 500' from the existing freshwater pond.
- S86 – Avoid and minimize erosion in trail routing and construction.
- S87 – Use full bench construction for trails where feasible. This means the full tread width is supported by undisturbed soil without the need for fill on the downhill side. This technique results in more stable trails that are less susceptible to erosion.
- S93 – Use rolling dips to direct water off the trail for minor seasonal drainage crossings and at appropriate intervals based on trail slope.
- S94 – Use armored rolling dips at moderate seasonal drainage crossings to minimize erosion and sediment impacts and provide all weather access for trail users.

- S95 – Use log causeways, armored crossings, or drainage lenses at seasonally wet areas (not identified as wetlands) to minimize erosion and sediment impacts and provide all weather access for trail users.
- S97 – Avoid new trail crossings over stream channels to the greatest extent feasible. Locate trails on existing roads or trails wherever possible and appropriate.
- S98 – Locate new riparian/creek crossings on geomorphically stable sites (i.e., low slopes in channel and banks) and construct to minimize, to the greatest extent possible, streambank and bed erosion.

Implementation of these Master Plan standards and the following mitigation measure would reduce this potential impact to a less-than-significant level:

6-1 Best Management Practices to minimize erosion during construction, as required by the Construction General Permit (CGP). (See Section B.3.6, Geology, for full text of this measure.)

b. Would the project 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?

LESS THAN SIGNIFICANT. As stated in the setting, the project area is identified as a Marginal Groundwater Availability Area in the Sonoma County General Plan 2020. As noted in Item (a), development of staging areas and allowed visitor facilities would not substantially increase the amount of impervious surfaces, as parking areas would be maintained with permeable surfaces to the extent feasible. Also, stormwater runoff would be contained onsite through LID features. Therefore, the project would not interfere with groundwater recharge on this 1100 acre property.

Onsite water sources would be used for low-level recreational uses, but this would not substantially deplete groundwater supplies as these uses generally require low amounts of water. The Master Plan sets guidelines and standards for water supply development at the various staging areas. Proposed water sources include existing onsite springs, wells and/or a potential new well at one or more of the staging areas. The existing springs at the Kawana Springs Resort area was used in the past for previous residential and commercial recreational uses. This source would be used for potable water, which will require a State water system permit. The springs at Petaluma Hill Road staging area could be used as a water supply for restrooms.

Estimated peak water demand at full build out of the Kawana Springs Resort area would be approximately 12 Equivalent Single Family Dwellings (ESD) (Cleveland, 2012). This estimate of water requirements includes 4 ESDs for the 8-room hotel/B & B, 2 ESDs for the café, 4 ESDs for the campground and host site, and 2 ESDs for day use and special events. The estimated peak water demand at the Petaluma Hill Road trailhead restroom would be less than 1 ESD. The City of Santa Rosa uses 110,000 gallons per year per ESD. New buildings would be subject to the CALGreen requirements regarding water use, efficiency and conservation. Landscaping would

comply with the County Water Efficient Landscape Ordinance and utilize native plants that require low amounts of water, which will help minimize onsite water demand. If testing of the springs determines that supplies are insufficient to meet this demand, a new well may be developed. Given the presence of springs and associated wetlands, and historic water use, the low level demand for this 1,100-acre property would not result in a substantial depletion of groundwater supplies.

c. Would the project 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 erosion or siltation on or off site?

LESS THAN SIGNIFICANT. As described in the setting section, Colgan Creek and several intermittent streams flow through the Taylor Mountain property. None of the proposed improvements would substantially alter the drainage patterns of the site. Master Plan erosion and sedimentation guidelines and standards noted in Item (a) would ensure that erosion and siltation are minimized. Stabilizing creek crossings, likely through armoring, would help to maintain the integrity of the drainage courses, and thereby not alter the drainage patterns or create additional runoff or flooding. In addition, staging area development will be required to comply with MS4 LID requirements and Construction General Permit program and pollution control regulations. The project will also comply with regulations by preparing and implementing a Stormwater Pollution Prevention Plan (SWPPP) that includes detailed erosion and sedimentation controls and BMPs for controlling stormwater runoff (Master Plan Standard 141). Compliance with these requirements is emphasized in Master Plan Standards S141 and S151.

d. Would the project 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 that would result in flooding on or off site?

LESS THAN SIGNIFICANT. See Items (a) and (c). Implementation of the Master Plan would not result in substantial alterations of the site's existing drainage patterns and would not contribute to flooding on or off site.

e. Would the project create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems to provide substantial additional sources of polluted runoff?

LESS THAN SIGNIFICANT. Development of staging areas and allowed uses in the Master Plan would incorporate design features to contain and filter runoff onsite, through the use of LID features. The Master Plan includes additional guidelines to minimize runoff such as the use of permeable surfaces. Therefore, the proposed project would not create runoff that exceeds stormwater drainage system capacity or substantially increases pollutant loads.

f. Would the project otherwise substantially degrade water quality?

LESS THAN SIGNIFICANT. As discussed above in Items (a) and (c), the Master Plan design guidelines and standards include numerous provisions to reduce and avoid potential water quality impacts during construction and operation. With implementation of these measures, as outlined in the Master Plan, the project would prevent substantial degradation of water quality.

g. Would the project place housing within a 100-year floodplain, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

NO IMPACT. The Master Plan does not include housing; none of the allowed uses are within a 100-year floodplain (FEMA, 2012).

h. Would the project place within a 100-year floodplain structures that would impede or redirect flood flows?

NO IMPACT. Development areas are not located within a 100-year floodplain. Review of updated FEMA maps for Colgan Creek indicates that a very narrow strip of land adjacent to the creek is designated as floodplain (FEMA, 2012). Master Plan Standard 152 requires that new development near Colgan Creek be located in such a way that it would not create or contribute to flood hazards.

i. Would the project 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?

NO IMPACT. The proposed project would not be within or near a dam failure inundation area.

j. Would the project cause inundation by seiche, tsunami, or mudflow?

NO IMPACT. The project area is not located in an area that would be subject to inundation by seiche, tsunami, or mudflow.

B.3.9 Land Use and Planning

LAND USE PLANNING Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
a. Physically divide an established community?	☐	☐	☐	☒
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

Significance criteria established by CEQA Guidelines, Appendix G.

B.3.9.1 Setting

The project site is located on unincorporated land in Sonoma County, south of the City of Santa Rosa. Existing land uses on the project site and surrounding properties are described in Section B.1, Project Description.

B.3.9.2 Environmental Impacts and Mitigation Measures

a. Would the project physically divide an established community?

NO IMPACT. Taylor Mountain is located within the unincorporated lands of the County of Sonoma, and adjacent to the city limits of the City of Santa Rosa. It is located at the edge of an established community, which is continuing to build out with a number of pending residential developments in the vicinity. The topography of the site already separates the project area from the neighborhoods. Implementation of the Master Plan would connect rather than divide the surrounding community, by providing multi-use trails on the property between neighborhoods.

b. Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

NO IMPACT. The Master Plan would adhere to all applicable federal, State and regional plans and regulations. The Master Plan guidelines and standards reference many of the resource agency requirements.

The Master Plan is consistent with the District's goals of developing an open space, agricultural buffer and scenic greenbelt around cities in Sonoma County. The District and Regional Parks propose to change the County General Plan land use designations on the property from Resource and Rural Development (RRD) and Diverse Agriculture (DA) to Public/Quasi Public. This land use category is intended for sites that "serve the community or public need and are owned or operated by government agencies, non profit entities, or public utilities" (Sonoma County, 2009). Permitted uses within this designation include schools, places of religious

worship, parks, libraries, governmental administration centers, fire stations, cemeteries, airports, hospitals, sewage treatment plants, waste disposal sites, etc. Policies for public facilities are established in the County General Plan Public Facilities and Services Element. According to the General Plan Land Use Element, amendments to place the Public/Quasi Public land use designation on property must meet all of the following criteria:

(1) Ownership or long term lease by a government agency, other non-profit entity or public utility,
(2) Adequate road access,
(3) Lands are not suitable for and will not adversely affect resource production activities, and
(4) Any applicable Land Use Policies for the Planning Area.

The proposed project would meet all of the above criteria. Regarding Item (4), the General Plan contains policies for the unincorporated areas around Santa Rosa. None of these policies specifically apply to the Taylor Mountain property and the proposed project would be consistent with general policies regarding this area. In addition, Sonoma County General Plan Objective OSRC-17.1 provides for adequate parklands and trails primarily in locations that are convenient to urban areas, while not negatively impacting agricultural uses.

As part of the proposed project, the existing zoning would be changed to Public Facility (PF) for all parcels within the property. The purpose of the PF district is to provide sites which serve the community or public need and to protect these sites from encroachment of incompatible uses. The proposed Master Plan uses would be consistent with this zone district, as the PF zone permits any uses owned and operated by a City or County. The proposed uses in the Master Plan are consistent with zone district provisions regarding building height and setbacks.

The existing overlay land use designations and zone districts, as listed in Section B.1.4, would remain in place. Consistency with the scenic overlay provisions is addressed in Section B.3.1 (Aesthetics). A portion of the property is designated with the Valley Oak Habitat (VOH) overlay zone district, which is intended to protect Valley Oaks and Valley Oak woodland habitat. This overlay district sets mitigation requirements for oak tree removal. Removal of Valley Oaks is not proposed as part of the Master Plan implementation. Furthermore, design guidelines and standards emphasize avoidance of tree removal. See Section B.3.4 (Biological Resources) for additional discussion of oak woodlands and summary of relevant Master Plan standards.

The Master Plan is also consistent with the City of Santa Rosa General Plan, which identifies Taylor Mountain as part of the complex of recreation and open space lands surrounding the City of Santa Rosa. In addition, Santa Rosa General Plan 2020 Policy UD-E-2 provides for an open space network that is linked by pedestrian and bicycle paths, and that preserves and enhances Santa Rosa's visual and natural resources.

The proposed accesses and staging areas identified in the Master Plan have incorporated the City of Santa Rosa's future plan to develop the Farmers Lane Extension. The existing interim staging area, which is within the alignment of the approved Farmers Lane Extension project, would be removed and alternative access to the park would be developed off of the Farmers

Lane Extension (see Section B.3.14, Transportation). Therefore, the proposed Master Plan is consistent with the City of Santa Rosa's plans.

c. Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?

NO IMPACT. See Section B.3.4, Biology, Item (f). A very small portion of the property is located within the Santa Rosa Plain Conservation Strategy for California tiger salamander (CTS), which has not been adopted or implemented by Sonoma County. The portion of the Taylor Mountain property included in the Conservation Strategy study area notes that "the Presence of CTS is not likely and there are no listed plants in this area" (CDFG, 2007). The map that accompanies the USFWS Programmatic Biological Opinion designates this same area as "No Effect" (USFWS, 2007b). Furthermore, the proposed uses would not conflict with the Santa Rosa Plain Conservation Strategy and numerous standards have been incorporated into the Master Plan to prevent direct and indirect impacts on special status species.

B.3.10 Noise

NOISE **Would the project:**	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Significance criteria established by CEQA Guidelines, Appendix G.

B.3.10.1 Setting

Community noise levels are usually closely related to the intensity of human activity. Surrounding land uses dictate what noise levels would be considered acceptable or unacceptable. Environmental noise is composed of many frequencies, each occurring simultaneously at its own sound pressure level. Frequency weighting combines the overall sound frequency into one sound level that simulates how an average person hears sounds. The commonly used frequency weighting for environmental noise is an A-weighted decibel (dBA). Noise levels are generally considered low when below 45 dBA, moderate in the 45 to 60 dBA range, and high above 60 dBA. Levels around 75 dBA are more common in busy urban areas, and levels up to 85 dBA occur near major freeways and airports. Noise levels above 45 dBA at night can result in the onset of sleep interference. At 70 dBA, sleep interference effects become considerable (U.S. EPA, 1974). The following setting focuses on specific noise conditions in the Taylor Mountain Preserve area.

Existing Conditions

The majority of the Taylor Mountain Preserve is rural and physically separated from nearby urban uses. Existing ambient noise levels are low, due to the current type and level of use at the site. The northern area is near a residential neighborhood. The primary existing noise sources in the vicinity are the roadways around the perimeter of the property.

Noise sensitive receptors are residences, schools, religious facilities, hospitals, and parks. The nearest residences are over 200 feet from the area of the project site where staging areas may be

developed. The closest school building, Sonoma Academy, is more than 500 feet from any proposed development area on the project site.

Applicable Regulations

Although the Preserve is outside of the City of Santa Rosa limits, it is adjacent to several properties within the city. The Noise and Safety Element of the Santa Rosa General Plan outlines the policies, programs, and guidelines the City follows to control noise. The City of Santa Rosa also maintains a Noise Ordinance. According to the City Land Use Compatibility Standards (City of Santa Rosa, 2009), a noise level of 60 dBA Ldn is acceptable at low-density residential areas and 70 dBA is acceptable at schools.

The Sonoma County General Plan Noise Element provides guidelines for non-transportation and transportation-related noise. Maximum allowable non-transportation exterior noise exposure levels are listed in Table NE-2 of the County Noise Element (see below).

County of Sonoma General Plan Table NE-2

Maximum Allowable Exterior Noise Exposures for Non-transportation Noise Sources Hourly Noise Metric* dBA	Daytime (7 a.m. to 10 p.m.)	Nighttime (10 p.m. to 7 a.m.)
L50 (30 minutes in any hour)	50	45
L25 (15 minutes in any hour)	55	50
L08 (5 minutes in any hour)	60	55
L02 (1 minute in any hour)	65	60

* The sound level exceeded n% of the time in any hour. For example, the L50 is the value exceeded 50% of the time or 30 minutes in any hour; this is the median noise level. The L02 is the sound level exceeded 1 minute in any hour.

According to Sonoma County General Plan Noise Element Policy NE-1b, transportation-related noise is subject to noise control measures when total exterior noise levels increase above 60 dBA Ldn near sensitive receptors (Sonoma County, 2008).

B.3.10.2 Environmental Impacts and Mitigation Measures

a. Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED. Implementation of the Master Plan would result in both short-term and long-term noise generation. Although operation of the Park and Preserve would not cause noise levels to exceed local standards, noise levels could exceed standards during construction activities.

Construction. Project construction of the staging areas and other facilities would be phased over time. Short-term use of trucks and other equipment at or around the proposed staging area sites would create both intermittent and continuous noises. Intermittent noise would result from periodic, short-term equipment operation. Continuous noise would result from steady equipment operation over longer periods. Construction activities with feasible noise control typically generate noise levels of 75 to 80 dBA, as measured from approximately 50 feet

(City of Santa Rosa, 2009). Sound from stationary sources decreases by 6 dBA with every doubling of distance from the source. The nearest residence (other than the life estate residence that is within the Preserve) is 250 feet from the Linwood staging area. At this distance, construction noise levels would be less than 60 dBA. Although noise from equipment would attenuate with distance, equipment on the construction site could result in intermittent peak noise levels that exceed standards at the nearest residences, including the onsite life estate.

With the implementation of Mitigation Measure 10-1, construction-related noise would not result in a noticeable or extended increase in noise levels in excess of federal, State, or local standards during construction.

10-1 (a) Noise-generating construction activities, including truck traffic coming to and from the site for any purpose shall be limited to daytime, weekday, non-holiday hours (8:00 a.m. to 5:00 p.m.).

(b) Construction equipment shall be properly outfitted and maintained with noise reduction devices to minimize construction-generated noise, i.e., fit motorized equipment with proper mufflers in good working order. Unnecessary idling of internal combustion engines shall be prohibited; equipment shall be turned off during prolonged periods of non-use.

(c) The contractor shall locate stationary noise sources such as air compressors as far as practical from existing nearby residences, including the onsite life estate residence.

Operation. Use of the Preserve would generate noise from vehicle traffic along the access routes, loading and unloading activities at the staging areas, potential commercial deliveries to the café and Bed and Breakfast establishment and voices of people hiking, bicycling, horseback riding, and picnicking on Taylor Mountain. Public use of the Preserve, with the exception of limited camping and the Bed and Breakfast facility, would be restricted to daylight hours. The projected level of use of the staging areas and park trails would be limited primarily to day time hours and would not exceed the standard of 60 dBA daytime outdoor noise levels that are normally acceptable in single-family residential areas. The staging areas are separated sufficiently from nearby neighborhoods so that sounds from vehicles and people would attenuate to acceptable levels at nearby sensitive receptors. For example, voices audible at 100 feet are generally 50 to 60 dBA, which would be compatible with County and City noise standards.

b. Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

LESS THAN SIGNIFICANT. The impact from construction-related groundborne vibration would be short-term and confined to only the immediate area around the activity (within about 25 feet). All proposed construction and operations activities would be more than 25 feet from structures and receptors. Furthermore, the proposed project would not involve significant ground-borne vibration or ground-borne noise, as jack-hammers or blasting would not likely be

needed for the proposed development of the staging areas, trails or picnic areas. Therefore, impacts from groundborne vibration and noise would be less than significant.

c. Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

LESS THAN SIGNIFICANT. Operation of the Taylor Mountain Park and Open Space Preserve would introduce a permanent noise source to the area in the vicinity of the new staging areas and other new visitor facilities; however, the overall increase in noise levels would not be substantial, given the low intensity recreational uses allowed in the Master Plan, the restrictions on nighttime use and the distance to sensitive receptors. As described in Item (a) above, noise would attenuate to less than significant levels for neighboring sensitive receptors.

In the future, with implementation of the Farmers Lane Extension, ambient noise levels will increase in the vicinity of the Kawana Knoll and in nearby residential areas to the north of Kawana Terrace. The Taylor Mountain Preserve's contribution to overall future cumulative noise levels in these areas would not be substantial because only low-density day-time recreational uses are planned and these uses are not adjacent to residences.

d. Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED. Item (a) provides details regarding construction noise levels, which are determined to be less than significant with mitigation incorporated. As described in Item (a), construction activities would produce a temporary phase of intermittent noise over the duration of construction, varying with the time of day and stage of construction. Developing the staging areas would result in some temporary noise that could be audible from nearby residences. Contractors would be required to comply with applicable local sound control and noise level rules, regulations and ordinances. Implementation of Mitigation Measure 10-1 would ensure that any periodic increases in ambient noise levels are not substantial:

10-1 Construction noise limits (see Item (a) above for full text.)

Use of Taylor Mountain by individuals and small groups could result in temporary and sporadic increases in ambient noise levels. Residences are the most noise-sensitive receptors in the project area. Operational noise would be limited, as described in Item (a). Noise-sensitive land uses are not adjacent to the primary staging areas. In the case of the Kawana Springs Resort staging area, intervening topography and vegetation separates it from the Sonoma Academy, which is at least 500 feet away. At the proposed Petaluma Hill Road entrance, ambient noise levels are higher than at other staging areas because of the major arterial roadway traffic. Noise generated by park users at this location would not be discernible over ambient roadway noise levels. The future Farmers Lane Extension access would not be located near any noise sensitive land uses. At the proposed Bath-Watt staging area off of Panorama Drive, very limited parking would be provided for ADA vehicles and for special groups. This parking area would be within the Preserve and not adjacent to the neighborhood. The limitations on access would further minimize noise-generating activities at this location. The Linwood Avenue access would

be a secondary access with a small parking lot. Given the size of this staging area, level of anticipated vehicle use (see Section B.3.14, Transportation) and the distance to the nearest sensitive receptor (200 feet), noise levels are not expected to substantially increase over existing ambient noise levels. Therefore, noise associated with park use would not substantially deviate from ambient noise levels in this area.

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?

NO IMPACT. The project site is not located within two miles of a public airport or within an airport land use plan.

f. For a project within the vicinity of a private air strip, would the project expose people residing or working in the project area to excessive noise levels?

NO IMPACT. The project site is not located within the vicinity of a private airstrip.

B.3.11 Population and Housing

POPULATION AND HOUSING **Would the project:**	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c. Displace substantial numbers of people necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Significance criteria established by CEQA Guidelines, Appendix G.

B.3.11.1 Setting

The proposed project would be located in unincorporated Sonoma County just south of the City of Santa Rosa. There is one occupied residence on the project site.

B.3.11.2 Environmental Impacts and Mitigation Measures

a. Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

NO IMPACT. The proposed Master Plan allows low-intensity recreational use of Taylor Mountain; it would not result in population growth or create pressure for new population growth. Development of the Preserve would potentially create a very limited number of jobs, which would likely be filled by the local labor pool. The only extension of roads or other infrastructure would be the driveway accesses for the Preserve and provision of electricity to the property. These improvements would not directly or indirectly induce population growth.

b. Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

NO IMPACT. Implementation of the Master Plan would not result in the displacement of any housing, including affordable housing, nor would it necessitate the construction of replacement housing. The one residence on the property would remain, pursuant to a life-estate agreement.

c. Would the project displace substantial numbers of people necessitating the construction of replacement housing elsewhere?

NO IMPACT. The proposed project would not result in the displacement of people, nor would it necessitate the construction of replacement housing elsewhere.

B.3.12 Public Services

PUBLIC SERVICES

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Fire protection?	☐	☐	☒	☐
b) Police protection?	☐	☐	☒	☐
c) Schools?	☐	☐	☐	☒
d) Parks?	☐	☐	☐	☒
e) Other public facilities?	☐	☐	☐	☒

Significance criteria established by CEQA Guidelines, Appendix G.

B.3.12.1 Setting

Fire protection regulations are established in both the State and County codes. Sonoma County has adopted the California Fire Code (California Code of Regulations, Title 24, 2007 Edition) as its primary fire safety document. The code has been modified to be specific to Sonoma County. The issue of fire hazards was raised by the public during the scoping meeting for the Master Plan and is addressed in Section B.3.7 of this document.

The nearest school is Sonoma Academy, near the north-western boundary of the property.

B.3.12.2 Environmental Impacts and Mitigation Measures

a) Fire protection

LESS THAN SIGNIFICANT. Fire hazards are addressed in Section B.3.7. The property is located in the Bennett Valley and the Rincon Valley Fire Protection Districts, who respond to calls requiring first-aid, and to any structure and/or vehicle fires within the project area (Williams, 2009). The City of Santa Rosa Fire Department would likely be the first responder, however, under mutual aid agreements, as it has the closest fire station, Station 1, at 955 Sonoma Avenue (Jones, 2009). Independent of the proposed project, an additional fire station is proposed for the future at Kawana Terrace and Franz Kafka Avenue. Wildland fire protection services would be provided by CalFIRE as needed. Regional Parks staff and volunteers would also patrol the property on a regular basis.

With incorporation of the Master Plan measures listed In Section B.3.7, Item (h) (see S230, S280, S281, S282, S283, S285, S286, S287, S288), the potential impact on fire protection would be less than significant. The project would not result in the need for new or physically altered fire protection facilities.

b) Police Protection

LESS THAN SIGNIFICANT. The City of Santa Rosa Police Department currently patrols City-owned Kawana Terrace to its termination at the existing property entrance. The County

Sheriff's Department responds to incidents, providing search and rescue, and law enforcement on the Taylor Mountain property since the project site is located within an unincorporated area. With the anticipated level of use, limitations on nighttime activities and security measures incorporated into the Master Plan (e.g., security lighting, locked entrance gates at night,[5] volunteer patrols), the increase in demand for law enforcement should not be substantial and therefore no new or physically altered law enforcement facilities would be required.

Kiosks at the Preserve access points would provide specific information about permitted and prohibited activities as well as the protocol for reporting problematic activities. Regional Parks staff and volunteers would patrol the property on a regular basis. With these measures in place, potential impacts related to police protection would be less than significant.

c) Schools

NO IMPACT. Since the proposed project would not cause an increase in the local population, there would be no increase in demand for school facilities and no new school facilities would be required. The Taylor Mountain Preserve would benefit schools by providing opportunities for field trips and outdoor class activities for the study of science and nature.

d) Parks

BENEFICIAL IMPACT. Implementation of the Master Plan would increase the inventory of public recreational facilities in the region. At the same time the resource management provisions of the Master Plan would ensure long-term public resource preservation.

e) Other Public Facilities

NO IMPACT. Implementation of the Master Plan would have no impact on other public facilities.

[5] There will be provisions for campers to arrive after hours.

B.3.13 Recreation

RECREATION	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a. Would the project 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?	☐	☐	☐	☒
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☐	☒	☐	☐

Significance criteria established by CEQA Guidelines, Appendix G.

B.3.13.1 Setting

The Taylor Mountain Park and Preserve property is currently used for limited permit-controlled recreational activities, including hiking, bicycling and horseback riding. The property was specifically acquired for recreational and open space preserve uses.

B.3.13.2 Environmental Impacts and Mitigation Measures

a. Would the project 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?

NO IMPACT. Implementing the Master Plan would potentially decrease use of other existing recreational facilities rather than increase use, as it would provide an additional recreational resource in the region. As described in Section B.3.12, Population and Housing, the proposed project is not expected to induce either short-term or long-term population growth, either during project construction or operation. Therefore, there would be no impact on existing facilities. Implementing the Master Plan would likely increase the use of the Taylor Mountain Preserve property, but that is the intention of the Master Plan and improvements and resource protection measures are proposed to ensure that there is no physical deterioration of the Taylor Mountain recreational facility.

b. Would the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED. The Master Plan calls for limited improvements to accommodate low intensity recreational use of the Taylor Mountain Regional Park and Open Space Preserve. The potential adverse physical effects of implementing the proposed Master Plan are fully analyzed throughout this IS/MND. As documented in other issue areas, all potential impacts are less than significant, with implementation of recommended mitigation measures identified within individual resource issue areas.

B.3.14 Transportation/Traffic

TRANSPORTATION AND TRAFFIC **Would the project:**	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☒	☐
b. Conflict with an applicable congestion management program, including, but not limited to a level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
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?	☐	☐	☐	☒
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
e. Result in inadequate emergency access?	☐	☐	☒	☐
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?	☐	☐	☐	☒

Significance criteria established by CEQA Guidelines, Appendix G.

This section incorporates the analysis and findings of the traffic study prepared by Whitlock & Weinberger Transportation, Inc. Calculations and traffic volume figures associated with the traffic impact analysis are included in a separately bound appendix that is available at District and Regional Parks offices and online at: www.sonoma-county.org/parks/mt_taylor.htm.

Since the project site is adjacent to the City of Santa Rosa, and would therefore have the potential to impact both City and County facilities, the traffic study was completed in accordance with the impact significance criteria established by both the City of Santa Rosa and the County of Sonoma, and is consistent with standard traffic engineering techniques.

B.3.14.1 Setting

Study Area and Periods

The study area consists of Petaluma Hill Road fronting the project site from Yolanda Avenue to Snyder Lane and the following intersections, which were analyzed for safety and operations (see Figure B.3.14-1):

1. Petaluma Hill Road/Kawana Springs Road
2. Kawana Springs Road/Franz Kafka Road

3. Kawana Terrace/Meda Avenue (near term conditions only)
4. Farmers Lane Extension-Sonoma Academy Entrance/Kawana Springs Road (future conditions only)

Additionally, access at the following proposed new Preserve driveways was studied for near-term and cumulative conditions with the project:

5. Petaluma Hill Road/Northern Park Entrance
6. Petaluma Hill Road/Southern Park Entrance

A qualitative discussion is presented for the other access locations at Linwood Avenue and Bath-Watt (via Panorama Drive). Given the low traffic volume of these locations, a full quantitative analysis was not appropriate or necessary.

The weekday p.m. and weekend midday peak periods were selected as the peak time periods for the analysis since they reflect the highest traffic volumes area-wide and for the proposed project. The evening peak hour occurs between 4:00 and 6:00 p.m. and typically reflects the highest level of congestion of the day during the homeward bound commute, while the weekend midday peak occurs between 11:30 a.m. and 1:30 p.m., typically on a Saturday.

A traffic impact study (TIS) was not conducted for US 101 and State Route (SR) 12 because the projected level of traffic from the Preserve does not meet the threshold for requiring a TIS, according to the *Caltrans Guide for the Preparation of Traffic Impact Studies* (TIS Guide). Considering the low potential volume of traffic destined to US 101 and SR 12, the project would have a negligible impact on traffic operations on these two routes.

Study Intersections

Petaluma Hill Road/Kawana Springs Road is a signalized, four-legged intersection with left-turn lanes operating under protected-permitted left-turn signal phasing on all approaches. Marked crosswalks and pedestrian signal phasing are provided across all approaches except the southern leg where signs are present indicating that crossing is prohibited.

Kawana Springs Road/Franz Kafka Road is a tee-intersection with stop controls on the terminating northbound approach. Marked crosswalks are not provided at the intersection, but since there are no signs prohibiting pedestrian crossing, an unmarked pedestrian crossing is provided across all approaches of the intersection.

Kawana Terrace/Meda Avenue is a minor, uncontrolled tee-intersection that connects the rural residential areas along Kawana Terrace to a residential subdivision on Meda Avenue and the existing interim park access driveway on Kawana Terrace to the east. The Interim Public Access Permit Program Initial Study/Mitigated Negative Declaration (IS/MND) evaluated changing a segment of Kawana Terrace (a City street) to a park driveway, which is still the District's intention.[6]

[6] This would require accepting vacation of City of Santa Rosa street Kawana Terrace from east of Meda Avenue to the terminus of Kawana Terrace, which would add this portion of the road to the Taylor Mountain Preserve property. The District will submit an application to the City of Santa Rosa to allow for vacating Kawana Terrace.

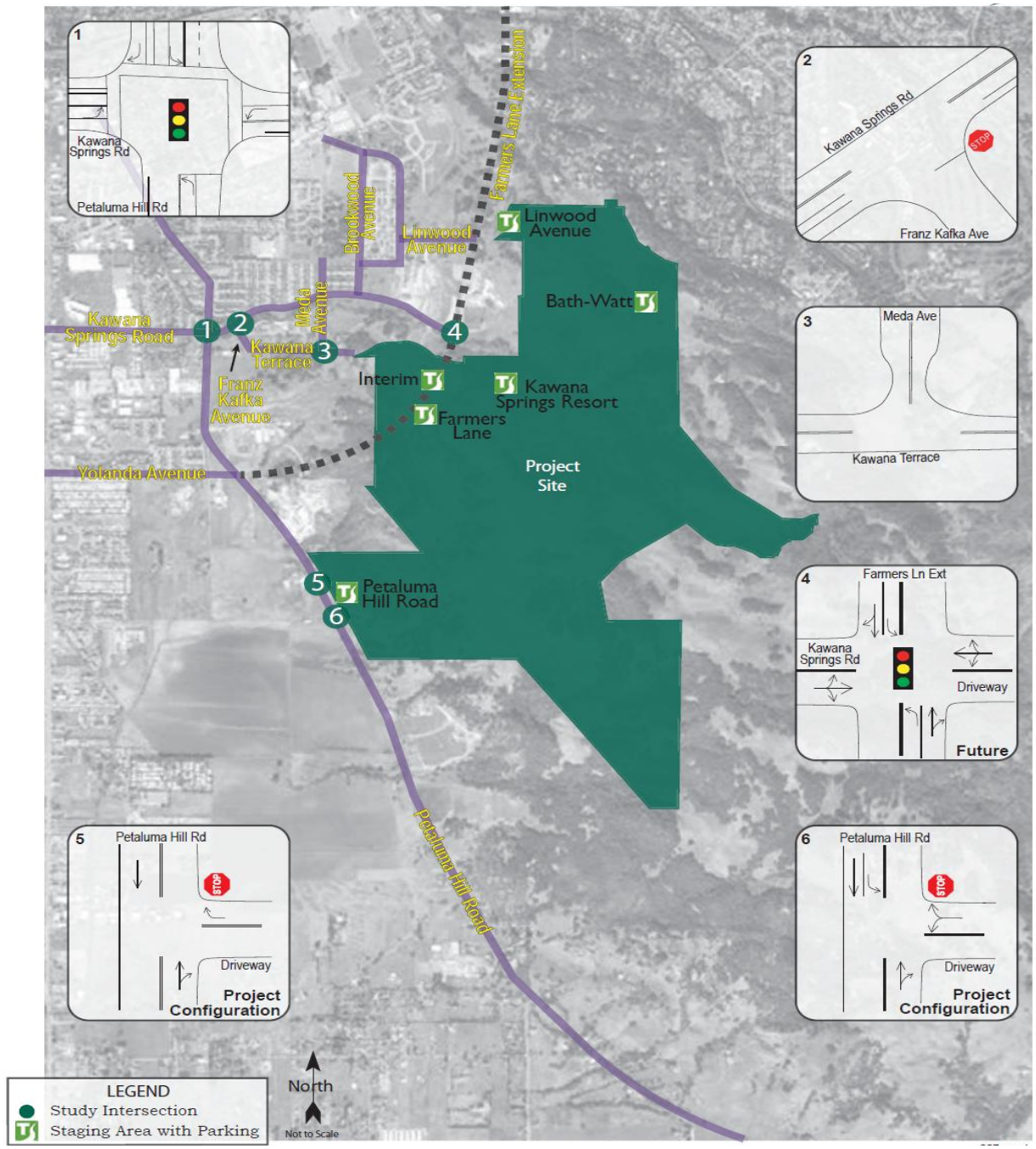

Figure B.3.14-1. Study Area and Lane Configurations

The locations of the study intersections and the existing lane configurations and controls are shown in Figure B.3.14-1.

Study Roadway

Petaluma Hill Road fronting the project site was studied from Yolanda Avenue to Snyder Lane. This two-lane street has paved eight-foot shoulders, but no turn lanes in the area of the future Preserve access driveways.

Farmers Lane Extension

The City of Santa Rosa is planning to extend Farmers Lane to connect the Bennett Valley area with the southern part of the city, ultimately to Yolanda Avenue at Petaluma Hill Road. This connection would be aligned through the northwest corner of the Preserve, across the existing interim parking lot, thereby resulting in the need to modify access in this area of the property. Completion of the Farmers Lane Extension would potentially provide alternative routes for visitors, either from Kawana Springs Road or directly from the Farmers Lane Extension. For the purpose of this analysis, it is assumed that the connection would be completed under future conditions only.

Intersection Level of Service Methodologies

Level of Service (LOS) is used to rank traffic operation on various types of facilities based on traffic volumes and roadway capacity using a series of letter designations ranging from A to F. Generally, Level of Service A represents free flow conditions and Level of Service F represents forced flow or breakdown conditions. A unit of measure that indicates a level of delay generally accompanies the LOS designation. The ranges of delay associated with the various levels of service are indicated in Table B.3.14-1.

The study intersections were analyzed using methodologies published in the *Highway Capacity Manual* (HCM), Transportation Research Board, 2000. This source contains methodologies for various types of intersection control, all of which are related to a measurement of delay in average number of seconds per vehicle.

The Levels of Service for the intersections with side street stop controls, or those which are unsignalized and have one or two approaches stop-controlled, were analyzed using the "Two-Way Stop-Controlled" intersection capacity method from the HCM. This methodology determines a level of service for each minor turning movement by estimating the level of average delay in seconds per vehicle. Results are presented for individual movements together with the weighted overall average delay for the intersection.

The study intersections that are currently controlled by a traffic signal, or may be in the future, were evaluated using the signalized methodology from the HCM. This includes the planned signalized intersection of Kawana Springs Road/Farmers Lane which is to be signalized as part of the Farmers Lane Extension project. This methodology is based on factors including traffic volumes, green time for each movement, phasing, whether or not the signals are coordinated, truck traffic, and pedestrian activity. Average stopped delay per vehicle in seconds is used as

the basis for evaluation in this LOS methodology. Since the signalized intersections studied are equipped with vehicle detection abilities allowing signal timing to adjust based on traffic flows, delays were calculated using this optimized signal timing.

Table B.3.14-1. Intersection Level of Service Criteria

LOS	Two-Way Stop-Controlled	Signalized
A	Delay of 0 to 10 seconds. Gaps in traffic are readily available for drivers exiting the minor street.	Delay of 0 to 10 seconds. Most vehicles arrive during the green phase, so do not stop at all.
B	Delay of 10 to 15 seconds. Gaps in traffic are somewhat less readily available than with LOS A, but no queuing occurs on the minor street.	Delay of 10 to 20 seconds. More vehicles stop than with LOS A, but many drivers still do not have to stop.
C	Delay of 15 to 25 seconds. Acceptable gaps in traffic are less frequent, and drivers may approach while another vehicle is already waiting to exit the side street.	Delay of 20 to 35 seconds. The number of vehicles stopping is significant, although many still pass through without stopping.
D	Delay of 25 to 35 seconds. There are fewer acceptable gaps in traffic, and drivers may enter a queue of one or two vehicles on the side street.	Delay of 35 to 55 seconds. The influence of congestion is noticeable, and most vehicles have to stop.
E	Delay of 35 to 50 seconds. Few acceptable gaps in traffic are available, and longer queues may form on the side street.	Delay of 55 to 80 seconds. Most, if not all, vehicles must stop and drivers consider the delay excessive.
F	Delay of more than 50 seconds. Drivers may wait for long periods before there is an acceptable gap in traffic for exiting the side streets, creating long queues.	Delay of more than 80 seconds. Vehicles may wait through more than one cycle to clear the intersection.

Reference: *Highway Capacity Manual,* Transportation Research Board, 2000

Roadway Segment Level of Service Methodology

The roadway segment Level of Service methodology found in Chapter 15, "Two-Lane Highways," of the *Highway Capacity Manual* is the basis of the LOS analysis. This method does not address the capacity of a facility, but rather determines a Level of Service based on the calculated percentage of time spent following, which “represents the freedom to maneuver and comfort and convenience of travel. It is the average percent of time that vehicles must travel in platoons behind slower vehicles due to the inability to pass.” In essence, as congestion occurs due to increases in traffic volumes, the percent of time spent following will increase resulting in less freedom to maneuver and therefore increased delay. Therefore, the higher the percent of time spent following, the lower the Level of Service. The exception is the determination of LOS F, which is defined as occurring any time the volume to capacity ratio exceeds 1.0. The relationship between Level of Service and percentages of time spent following is presented in Table B.3.14-2.

Table B.3.14-2. Automobile Level of Service Criteria

Level of Service	Percent of Time Spent Following (%)
LOS A	≤40
LOS B	>40-55
LOS C	>55-70
LOS D	>70-85
LOS E	>85
LOS F	When v/c ≥ 1.0

Note: v/c = volume to capacity ratio
Reference: *Highway Capacity Manual*, Transportation Research Board, 2010

Existing Conditions

The Existing Conditions scenario represents an evaluation of current operations based on existing traffic volumes during the weekday p.m. and weekend midday peak periods. Volume data were collected within the last three years except at Petaluma Hill Road/Kawana Springs Road where counts were collected in 2007. General regional trends have shown that traffic volumes have decreased in the last three to five years due to the change in economic conditions.[7] Because of this trend, the 2007 counts are likely similar to or higher than current traffic volumes, so these data were used without adjustments.

Under existing conditions, all of the study intersections are operating acceptably at LOS A or B. The segment of Petaluma Hill Road fronting the Preserve is operating at LOS D or better and with a volume to capacity ratio of 0.55 or less, which the County considers to be acceptable operations (see Significance Criteria below).

Future No Project Conditions

The future No Project conditions are presented as the basis for comparing future cumulative conditions in the project area with and without the traffic from the Preserve. Roadway segment volumes for the horizon year of 2035 were obtained from the Sonoma County Transportation Authority's (SCTA) gravity demand model and translated to turning movement volumes at each of the study intersections using a combination of the "Furness" method (which estimates future intersection turning movement counts using existing traffic volumes and future model volumes) and factoring, depending on how the model was configured at each intersection. Since few of the study intersections are contained within the SCTA model, an

[7] In order to test the adequacy of the count data used in this study, and address the concern that the counts may not reflect current conditions, the historical trend of traffic volumes were reviewed. The Traffic Data Branch of Caltrans produces a monthly Vehicle Miles Traveled (VMT) report that provides estimates of the number of vehicle miles that motorists traveled on California State Highways during that month. Based on reports dating back to 1972, there was a trend of strong and steady growth in VMT from 1972 to 2007. However, in 2008 annual VMT dropped for the first time since such data began being recorded. Yearly total estimates of VMT between 2008 and 2011 are below the levels seen between 2004 and 2007.

overall growth rate of 1.44, or 1.22 percent per year for 30 years, was applied to all study intersections and segments based on a review of projected traffic volumes in the vicinity of the project site, except that for the intersection of Kawana Springs Road/Farmers Lane the full Furness methodology was applied. The Furness methodology was applied to only this intersection because it was the only study intersection with data for all legs of the intersection available in the SCTA model.

Under the anticipated future No Project traffic volumes, and with the addition of the planned Farmers Lane Extension, the study intersections are expected to continue to operate acceptably at LOS C or better. The roadway study segments are expected to operate at LOS E or better with a volume to capacity ratio of 0.80 or less. This is consistent with projected operations contained within the County's General Plan Figure CT-3, indicating that operation of LOS F is acceptable at this location as long as the volume to capacity ratio is less than 1.20.

Proposed Transportation Improvements

As described in Section B.1 (Project Description), access to the Taylor Mountain Preserve would be provided through staging areas along the northern and western perimeters of the park. The staging areas are where parking would be provided as well as other user amenities such as information kiosks, picnic areas and restrooms.

Existing access for interim use of the park is from Kawana Terrace, with a driveway near its eastern terminus. The development of the Master Plan would include additional access and staging areas at the following locations (see Figure B.3.14-1):

- Petaluma Hill Road
- Kawana Springs Resort (via either Kawana Terrace or Kawana Springs Road)
- Linwood Avenue
- Bath-Watt (off of Panorama Drive)
- Farmers Lane Extension

Upon development of the Kawana Springs Resort staging area for the Preserve, the Master Plan calls for Kawana Terrace to be vacated as a public street where the property begins and turned into a Regional Parks driveway. As stated previously, this was analyzed in the Interim Public Access Permit Program IS/MND.

B.3.14.2 Environmental Impacts and Mitigation Measures

Trip Generation

An estimated total of 425 visitors are expected on weekdays and 720 visitors on weekend days in the near term (prior to completion of the Farmers Lane Extension (FLE)). At full buildout (after FLE), a total of about 830 weekday and 1150 weekend day visitors are projected. The basis for these projections and associated vehicle trips are described in the following paragraphs.

Methodology. The anticipated trip generation for a proposed project is generally estimated using standard rates published by the Institute of Transportation Engineers (ITE) in *Trip Generation*, 8th Edition, 2008. This publication includes information for a County Park (ITE LU #412) and a State Park (ITE LU #413) which would be the closest land use categories to the proposed Taylor Mountain Park and Preserve. Although Taylor Mountain would be a regional park, the description for State Park best fits the proposed use; however, despite the State Park being the closest match, the descriptions provided for both land uses did not appropriately fit the proposed Taylor Mountain Park and Preserve. Due to limitations of this data, other data sources from the County of Sonoma were researched.

The trip generation was based on visitor information collected by Sonoma County Regional Parks staff as part of their ongoing operation of numerous County parks. Specifically, the trip generation potential was assumed to occur at the same rate as a comparable regional park, Shiloh Ranch Regional Park, which is located near northwest Windsor. Shiloh Ranch Regional Park is slightly smaller than Taylor Mountain, with 847 acres, and like the project site, is located close to urban areas and provides equestrian access.

Visitor information for Shiloh Ranch Regional Park included counts of visitors who entered the park, which requires paying a park user fee, as well as visitors who walked in and avoided the fee. Records for the 2008 calendar year indicate that the park had between 3,107 and 7,347 visitors per month, which translates to an annual average of 0.19 visitors per day per acre. Applying a standard assumption of 2.25 visitors per vehicle, and two trip ends per vehicle (to make one roundtrip), this results in approximately 0.16 vehicle trips per day per acre. However, Taylor Mountain is proposed to provide a larger network of trails than Shiloh Ranch Regional Park and would provide multiple parking and access locations where only one is provided at Shiloh Ranch Regional Park, creating a potential for higher generation of visitor traffic at Taylor Mountain. To account for this, trip generation rates were increased by a factor of approximately 2.6 based on a review of seasonal distribution of traffic and traffic levels at other Regional Parks in Sonoma County. This results in a total trip generation potential of 0.41 daily vehicle trips per acre.

This data is based upon an annual average and does not take into account differences in weekday and weekend trip generation patterns. For this distinction, the State Park Land Use in the ITE publication was consulted to determine the ratio of the total weekday trip generation to the weekend trip generation. It was determined that a typical weekday represents 83 percent of annual average daily trip generation and a typical weekend day represents 141 percent of the annual daily average.

Trip Generation Prior to FLE. Based on these assumptions, it is projected that the park will generate 0.34 weekday vehicle trips per day per acre, or 378 vehicle trips (189 roundtrips) on a typical weekday, and 0.58 weekend trips per day per acre, or 640 vehicle trips (320 roundtrips) on a typical weekend day (see Table B.3.14-3). It is assumed that this level of trips would occur prior to the completion of Farmers Lane Extension while access to the park is more limited. The actual vehicle trips may be less because this methodology does not factor in the percentage of visitors who would travel to the Preserve by foot, bicycle or bus.

Generally, a park does not have as dominant a peak hour for vehicle trip generation as some other land uses (such as retail or office space), which typically result in 10 to 15 percent of traffic occurring during the peak hour; however, in order to provide a conservative analysis, it was assumed that 15 percent of traffic generated at Taylor Mountain would occur during the daily peak hour. This results in 57 peak hour vehicle trips on a weekday and 96 peak hour vehicle trips on a weekend day. To estimate the percent of these trips that would be entering and exiting the park, the rates presented in ITE for the State Park were applied. While the State Park Trip Generation rates were not determined to be the best match for trip generation purposes given the presence of locally-collected data, the nature of the trips associated with a State Park (such as the ratio of inbound/outbound trips) is expected to be similar. It should be noted that the local data used to develop daily trip generation rates did not include any data indicating the ratio of traffic entering or exiting parks during any given peak period.

Table B.3.14-3. Total Project Vehicle Trip Generation Summary – Prior to Farmers Lane Extension

		Weekday				Weekend Midday			
		Daily	Peak Hour			Daily	Peak Hour		
Land Use	Units	Trips	Trips	In	Out	Trips	Trips	In	Out
Taylor Mountain	1,100 acres	378	57	29	28	640	96	46	50

Trip Generation after FLE. Taylor Mountain would potentially provide more features and services than at Shiloh Ranch Regional Park, including a small bed and breakfast inn, camping facilities and café. To account for these additional uses, data published by ITE was used for a Bed and Breakfast (Hotel, Land Use number 310) and café (Restaurant, Land Use number 931). ITE contains limited data for camping facilities, so data published by the San Diego Association of Governments (SANDAG) was applied to this use. At this time, the design of these uses has not been finalized, so a conservative estimate was used, such that any deviation from this estimate is not expected to alter the significance findings.

Development of these additional facilities is dependent on future funding opportunities and is not likely to occur until access is modified with the construction of the Farmers Lane Extension. Because of this, trip generation potential for these additional uses was only applied to the Future (cumulative) scenario that includes the Farmers Lane Extension. The trip generation potential for the proposed project with these additional services is indicated in Table B.3.14-4.

Table B.3.14-4. Total Project Vehicle Trip Generation Summary – After Farmers Lane Extension

		Weekday				Weekend Midday			
		Daily	Peak Hour			Daily	Peak Hour		
Land Use	Units	Trips	Trips	In	Out	Trips	Trips	In	Out
Taylor Mountain	1,100 acres	378	57	29	28	640	96	46	50
Campground	65 sites	260	21	11	10	260	35	18	17
Bed & Breakfast	8 rooms	65	5	3	2	84	6	3	3
Café	400 square feet	36	3	2	1	38	4	3	1
Total		**739**	**86**	**45**	**41**	**1022**	**141**	**70**	**71**

Trip Generation by Access Point. The total trips were then allocated to the four potential access points based on factors such as:

- Proximity to future visitor center
- Relationship to regional traffic access
- Size of parking lot
- Proximity to population

Since access would be modified over time with the development of the Farmers Lane Extension, there is potential for trip generation by location to change when the Farmers Lane Extension is completed. Table B.3.14-5 provides a summary of the expected project trip generation by access point or staging area for conditions prior to the completion of the Farmers Lane Extension. These conditions assume continued utilization of the existing Kawana Terrace staging area and development of the small staging area at the Kawana Springs Resort that would be accessible from Kawana Terrace.

Table B.3.14-5. Park Access Vehicle Trip Generation Summary – Prior to Farmers Lane Extension

		Weekday				Weekend Midday			
		Daily	Peak Hour			Daily	Peak Hour		
Land Use	%	Trips	Trips	In	Out	Trips	Trips	In	Out
Kawana Springs Resort*	10	38	6	3	3	64	10	5	5
Kawana Terrace (Interim Staging Area)	45	170	26	13	13	288	43	21	22
Petaluma Hill Rd	38	143	21	11	10	243	36	17	19
Linwood Ave	5	19	3	1	2	32	5	2	3
Bath-Watt	2	8	1	1	0	13	2	1	1
Total	**100**	**378**	**57**	**29**	**28**	**640**	**96**	**46**	**50**

* Assumes new parking area accessed by Kawana Terrace.

The anticipated project trip generation for each staging area, with the Farmers Lane Extension, addition of the Farmers Lane staging area, abandonment of the Kawana Terrace staging area, development of additional Park services, and development of Kawana Springs Road access and staging area at the Kawana Springs Resort site is summarized in Table B.3.14-6.

Since the Bath-Watt staging area is expected to generate a negligible amount of traffic, and given its location on the northeast side of the park, it is unlikely that visitors destined for this staging area would travel through any of the study intersections. Based on this, the trips generated at the Bath-Watt staging area were therefore not included in the quantified operational analysis.

Table B.3.14-6. Park Access Vehicle Trip Generation Summary – After Farmers Lane Extension

		Weekday				Weekend Midday			
		Daily	Peak Hour			Daily	Peak Hour		
Land Use	%	Trips	Trips	In	Out	Trips	Trips	In	Out
Kawana Springs Resort*	45	170	26	13	13	288	43	21	22
Kawana Springs Resort – Additional Services	N/A	361	29	16	13	382	45	24	21
Farmers Ln	10	38	6	3	3	64	10	5	5
Petaluma Hill Rd	38	143	21	11	10	243	36	17	19
Linwood Ave	5	19	3	1	2	32	5	2	3
Bath-Watt	2	8	1	1	0	13	2	1	1
Total	100	739	86	45	41	1022	141	70	71

*Assumes development of Kawana Springs Road access and new larger staging area at Kawana Springs Resort site.

Trip Distribution

Once the total trip generation is determined, the trips must be distributed to the various roadway segments. Since the completion of the Farmers Lane Extension would alter regional travel patterns and access to the Preserve, two different trip distribution assumptions were made for the near term existing plus project conditions (without Farmers Lane Extension) and the future (cumulative) plus project conditions (with Farmers Lane Extension). The applied distribution assumptions are shown in Table B.3.14-7.

Table B.3.14-7. Trip Distribution Assumptions

Route	Existing plus Project (prior to FLE)	Future plus Project (full buildout plus FLE)
Kawana Springs Rd to/from west	25%	15%
Kawana Springs Rd to/from north via Brookwood Ave or Meda Ave	5%	2%
Petaluma Hill Rd to/from south	50%	50%
Petaluma Hill Rd to/from north	20%	8%
Farmers Ln to/from the north	N/A	25%
TOTAL	**100%**	**100%**

Impact Significance Criteria

While the project is located in unincorporated Sonoma County, the study intersections are located in both the City of Santa Rosa and the County of Sonoma. Because of this, the thresholds of significance established by either the City or the County were applied to the study intersections and roadways depending on their locations. These thresholds of significance are summarized below for each jurisdiction.

Sonoma County

Based on the most recent criteria published by the County of Sonoma (2002), the project would have a significant traffic impact if it results in any of the following conditions.

1. *On-site roads and frontage improvements*: Proposed on-site circulation and street frontage would not meet the County's minimum standards for roadway or driveway design, or potentially result in safety hazards, as determined by the County in consultation with a registered traffic engineer.
2. *Parking*: Proposed on-site parking supply would not be adequate to accommodate parking demand.
3. *Emergency Access*: The project site would have inadequate emergency access.
4. *Alternative Transportation*: The project provides inadequate facilities for alternative transportation modes (e.g., bus turnouts, bicycle racks, pedestrian pathways) and/or the project creates potential conflicts with adopted policies, plans, or programs supporting alternative transportation.
5. *Road Hazards*: Hazards are increased due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment, heavy pedestrian or truck traffic).
6. *Vehicle Queues*: The addition of project traffic causes the 95th percentile queue length to exceed roadway turn lane storage capacity.
7. *Signal Warrants*: The addition of the project's vehicle or pedestrian traffic causes an intersection to meet or exceed Caltrans signal warrant criteria.
8. *Turn Lanes*: The addition of project traffic causes an intersection to meet or exceed criteria for provision of a right or left turn lane on an intersection approach.
9. *Sight Lines*: The project constructs an unsignalized intersection (including driveways) or adds traffic to an existing unsignalized intersection approach that does not have adequate sight lines based upon Caltrans criteria for state highway intersections and County criteria for County roadway intersections.
10. *County Intersections*: The County Level of Service standard for intersections is Level of Service D. The project would have a significant traffic impact if the project's traffic would cause an intersection currently operating at an acceptable level of service (LOS D or better) to operate below the standard (LOS E or F).

    If the intersection currently operates or is projected to operate below the County standard (at LOS E or F), the project's impact is significant and cumulatively considerable if it causes the delay for any critical movement to increase by five seconds or more. The delay will be determined by comparing intersection operation with and without the project's traffic for both the existing baseline and projected future conditions. These criteria apply to all

controlled or uncontrolled intersections with projected traffic volumes over 30 vehicles per hour per approach or per exclusive left turn movement.

11. *County Roadway Operation*: The Level of Service Standard for County roadway operations is to maintain a Level of Service C, though there are exceptions to this standard for specific roadway segments indicated in Figure CT-3. Policy CT-3a notes, "In cases where a roadway segment is designated as LOS F on Figure CT-3, a PM peak volume to capacity ratio of 1.2 is the acceptable LOS, with the exception of [specified] road segments." The project would have a significant traffic impact if the project's traffic would cause a road currently operating at an acceptable level of service to operate at an unacceptable level.

The study segment of Petaluma Hill Road is identified on County General Plan Figure CT-3 as one of the streets where a volume to capacity ratio of 1.2 is considered to be an acceptable LOS per Part 12 of the County standards.

The updated roadway segment analysis methodologies published in the 2010 version of the HCM determines LOS based upon the percent of time spent following, but since the County's thresholds of significance are based upon the volume to capacity ratio, both metrics are reported in this analysis.

City of Santa Rosa

The City of Santa Rosa's adopted Level of Service (LOS) Standard is contained in *Santa Rosa General Plan 2035*. Standard TD-1 states that the City will try to maintain a Level of Service (LOS) D or better along all major corridors. Exceptions to meeting this standard are allowed where attainment would result in significant environmental degradation; where topography or environmental impacts make the improvement impossible; or where attainment would ensure loss of an area's unique character.

Although the City's standard does not specify criteria for intersections, for the purposes of this study a minimum operation of LOS D for the overall operation of signalized intersections was applied, based upon the City's LOS standard for major corridors and consistent with the County's LOS standard for intersections.

A summary of the applicable LOS standards is provided in Table B.3.14-8.

Table B.3.14-8. Summary of LOS Standards

Study Facility	Facility Type	Agency	LOS Standard
Petaluma Hill Rd/Kawana Springs Rd	Signalized Intersection	City of Santa Rosa	LOS D
Kawana Springs Rd/Franz Kafka Rd	Side-Street Stop-Controlled Intersection	City of Santa Rosa	LOS D
Kawana Terrace/Meda Ave	Side-Street Stop-Controlled Intersection	City of Santa Rosa	LOS D
Kawana Springs Rd/Farmers Lane	Signalized Intersection (future only)	City of Santa Rosa	LOS D
Petaluma Hill Rd/Taylor Mountain N Driveway	Side-Street Stop-Controlled Intersection	County of Sonoma	LOS D
Petaluma Hill Rd/Taylor Mountain S Driveway	Side-Street Stop-Controlled Intersection	County of Sonoma	LOS D
Petaluma Hill Rd	Arterial – Roadway Segment	County of Sonoma	v/c = 1.2

Notes: LOS = Level of Service; v/c = volume to capacity ratio

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?

LESS THAN SIGNIFICANT IMPACT. Implementation of the proposed Master Plan would facilitate multi-use public access to the Taylor Mountain Preserve and would be consistent with County of Sonoma and City of Santa Rosa policies and plans regarding circulation for all modes of transportation. Both intersection and roadway LOS analyses were conducted for the proposed project. Study intersections and roadways for both the 'Existing plus Project Conditions' and the 'Future plus Project Conditions' are expected to operate with acceptable levels of service.

Construction activity would be temporary and distributed among the various staging areas. It is not expected that construction at each staging area will occur simultaneously, as development of the park will occur in phases, as funding is secured. Therefore, modeling was not performed for project construction because construction activity is expected to generate less traffic than full park operations. Traffic modeling was performed for project operations, and the results are discussed below.

Intersection Operation

Existing plus Project Conditions. Upon implementation of the proposed project improvements and the addition of project-related traffic to the existing volumes, the study intersections are expected to continue to operate at LOS C or better, which is considered acceptable by the criteria established by the City of Santa Rosa and County of Sonoma for their respective facilities. These results, which are summarized in Table B.3.14-9, indicate very minor increases (less than one second) in vehicle delay as a result of the project. As shown in the table, project-related traffic will not result in a change in LOS. The project would decrease average delay at Kawana Terrace/Meda Avenue, which may appear counterintuitive to expectations; however, this is due to the fact that the project would contribute only to uncontrolled through movements which do not experience delay, thereby reducing overall average delay.

Table B.3.14-9. Summary of Existing and Existing plus Project Peak Hour Intersection LOS Calculations

Study Intersection *Approach*	Existing Conditions				Existing plus Project			
	PM Peak		Mid Peak		PM Peak		Mid Peak	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1. Petaluma Hill Rd/Kawana Springs Rd	18.8	B	19.9	B	19.3	B	20.6	B
2. Kawana Springs Rd/Franz Kafka Rd	0.8	A	1.1	A	1.0	A	1.6	A
Northbound Franz Kafka Rd	*11.2*	*B*	*10.4*	*B*	*11.4*	*B*	*10.7*	*B*
3. Kawana Terrace/Meda Ave	5.9	A	4.4	A	3.3	A	1.3	A
Southbound Meda Ave	*8.4*	*A*	*8.5*	*A*	*8.5*	*A*	*8.7*	*A*
5. Petaluma Hill Rd/Taylor Mountain N Driveway					0.0	A	0.1	A
Westbound Driveway					*14.5*	*B*	*12.7*	*B*
6. Petaluma Hill Rd/Taylor Mountain S Driveway					0.1	A	0.3	A
Westbound Driveway					*15.6*	*C*	*13.1*	*B*

Notes: LOS results are for the intersection as a whole. Results for minor approaches to two-way stop-controlled intersections are indicated in *italics;* Intersection 4, Kawana Springs Road/Farmers Lane does not exist during Existing Conditions; Project driveways are analyzed only under plus project conditions; Delay is measured in average seconds per vehicle; LOS = Level of Service

Future plus Project Conditions – Cumulative Scenario. Upon the addition of project-generated traffic to the anticipated future no-project volumes, and with the construction of the Farmers Lane Extension, the study intersections are expected to operate at acceptable LOS C or better, as defined by the City of Santa Rosa and the County of Sonoma for their respective intersections. The future plus proposed project operating conditions are summarized in Table B.3.14-10. Compared to existing conditions, the addition of traffic from future development in the area would result in a change of LOS from B to C. According to significance criteria, LOS C is considered acceptable and impacts would be less than significant. Furthermore, as shown in the table, the proposed project's contribution to cumulative traffic impacts is about one second or less and the project's traffic would not result in a change in LOS. Therefore, the project's contribution to cumulative impacts is very minor and less than significant.

Table B.3.14-10. Summary of Future No Project and Future plus Project Peak Hour LOS Calculations

Study Intersection *Approach*	Existing Conditions				Future Conditions				Future plus Project			
	PM Peak		Mid Peak		PM Peak		Mid Peak		PM Peak		Mid Peak	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1. Petaluma Hill Rd/Kawana Springs Rd	18.8	B	19.9	B	27.6	C	24.1	C	28.9	C	25.3	C
2. Kawana Springs Rd/Franz Kafka Rd	0.8	A	1.1	A	0.9	A	1.2	A	0.9	A	1.2	A
Northbound Franz Kafka Rd	*11.2*	*B*	*10.4*	*B*	*13.1*	*B*	*11.6*	*B*	*13.6*	*B*	*12.2*	*B*
3. Kawana Terrace/Meda Ave	5.9	A	4.4	A	5.9	A	4.5	A	5.9	A	4.5	A
Southbound Meda Ave	*8.4*	*A*	*8.5*	*A*	*8.4*	*A*	*8.5*	*A*	*8.4*	*A*	*8.5*	*A*
4. Kawana Springs Rd/Farmers Lane					22.8	C	18.8	B	23.5	C	19.8	B
5. Petaluma Hill Rd/Taylor Mountain N Driveway									nil	A	0.1	A
Westbound Driveway									20.3	C	16.2	C
6. Petaluma Hill Rd/Taylor Mountain S Driveway									0.1	A	0.2	A
Westbound Driveway									*21.9*	*C*	*16.5*	*C*

Notes: Results for minor approaches to two-way stop-controlled intersections are indicated in *italics;* Intersection 4, Kawana Springs Road/Farmers Lane does not exist during Existing Conditions; Project driveways are analyzed only under plus project conditions; Delay is measured in average seconds per vehicle; LOS = Level of Service; nil = calculated overall delay is less than 0.1 seconds

Roadway Segment Operation

Roadway segment analysis of Bennett Valley Road was not included in the level of service calculations because of the small amount of traffic that would be added to Panorama Drive, used to access the Bath-Watt staging area. This is due to the proposed restricted access at the Bath-Watt staging area resulting in a small number of new trips.

Additionally, Brookwood Avenue and Kawana Springs Road were not included in level of service analysis because the analysis methodology published in the *Highway Capacity Manual* and LOS standards established by the County of Sonoma and City of Santa Rosa are intended for use on arterials, and both of these streets are classified as Local Streets by the City of Santa Rosa. It should be noted that both agencies require traffic capacity analysis to be completed using methodologies published in the *Highway Capacity Manual,* and only require segment analysis

for arterials. Both of these local street segments are not constrained by the volume of traffic, so analysis is not needed.

Existing plus Project Conditions. Under existing plus proposed project volumes, the study roadway segments are expected to operate at LOS D or better and with a volume to capacity ratio of 0.56 or less, which is within the County's acceptable range of a volume to capacity ratio of 1.20 or less for operations on Petaluma Hill Road. These results are summarized in Table B.3.14-11. As shown in the table, the change in roadway operations associated with the proposed project is minor and would not result in a change in LOS.

Table B.3.14-11. Summary of Existing and Existing plus Project Peak Hour Roadway Segment LOS Calculations

	Existing Conditions						Existing plus Project					
	PM Peak Hour			Mid Peak Hour			PM Peak Hour			Mid Peak Hour		
Study Segments	PTSF	v/c	LOS	PTSF	v/c	LOS	PTSF	v/c	LOS	PTSF	v/c	LOS
Petaluma Hill Rd												
Northbound	84.7	0.55	D	79.8	0.46	D	84.9	0.56	D	81.2	0.47	D
Southbound	81.5	0.55	D	62.2	0.42	C	81.9	0.56	D	63.7	0.43	C

Notes: PTSF = percent time spent following; v/c = volume to capacity ratio ; LOS = Level of Service

Future plus Project Conditions – Cumulative Scenario. The Future plus project operating conditions are summarized in Table B.3.14-12, with more details provided in the Traffic Impacts Appendix. Cumulative conditions represent a slight decline in operating conditions, compared to existing conditions. With project-generated traffic added to the anticipated future build-out volumes on Petaluma Hill Road, and with the construction of the Farmers Lane Extension, the study roadway is expected to continue to operate at LOS E or better and with a volume to capacity ratio of 0.81 or less, which is within the County's acceptable threshold of 1.20 for the road. As shown in the table, the decline in LOS and volume to capacity ratio is primarily due to buildout development in the area, not the proposed project. The proposed project's contribution to cumulative impacts is very minor and less than significant. The project does not cause LOS to drop to unacceptable levels at any location and does not cause a cumulatively considerable increase in traffic.

Table B.3.14-12. Summary of Future and Future plus Project Peak Hour Roadway Segment LOS Calculations

	Existing Conditions						Future Conditions						Future plus Project					
	PM Peak Hour			Mid Peak Hour			PM Peak Hour			Mid Peak Hour			PM Peak Hour			Mid Peak Hour		
Study Segments	PTSF	v/c	LOS	PTSF	v/c	LOS	PTSF	v/c	LOS	PTSF	v/c	LOS	PTSF	v/c	LOS	PTSF	v/c	LOS
Petaluma Hill Rd																		
Northbound	84.7	0.55	D	79.8	0.46	D	92.4	E	0.80	88.4	0.61	E	92.5	0.81	E	89.1	0.63	E
Southbound	81.5	0.55	D	62.2	0.42	C	90.3	E	0.80	69.8	0.59	C	90.5	0.81	E	71.7	0.61	D

Notes: PTSF = percent time spent following; v/c = volume to capacity ratio; LOS = Level of Service

Qualitative Analysis of Linwood Avenue and Panorama Drive

Given the low existing and projected traffic volumes on Panorama Drive and Linwood Avenue, a full quantitative analysis of these access points was not necessary. The following is a qualitative discussion of these two proposed access routes.

Linwood Avenue. There is access to the property from Linwood Avenue, which currently serves residences and deadends at the Preserve. This access, once developed, would be designed and operated as a minor staging area for pedestrians and bicyclists from the immediate neighborhood and surrounding area. For vehicle access to occur, upgrades to applicable public road standards are needed, as the eastern portion of Linwood Avenue is an unimproved road ranging in width between 10 and 20 feet that is not fully paved. The project is expected to add less than twenty vehicle trips on Linwood Avenue on a week day and 32 vehicle trips on weekends with no more than five trips in any given hour. This amount of traffic added would be imperceptible to most users and would not alter the operations of Linwood Avenue.

Panorama Drive (Bath-Watt). Panorama Drive is a narrow rural-type residential street without sidewalks, and with limited and informal on-street parking. Therefore, the Master Plan has identified this location for minor gated access to a small parking lot within the Preserve that would be restricted to visitors with disabled parking placards and special use permits only. Service, emergency and other authorized vehicles could use this access point, but no other visitors would be allowed to park at the site. The project is expected to add no more than two vehicle trips during any hour, which would have a negligible impact to the operations of Panorama Drive or adjacent streets.

This access would be intended to primarily serve pedestrians and bicyclists coming from the surrounding Bennett Valley residential area. To help ensure that the potential volume of vehicle traffic at this access would be minor compared with the other access points, visitor literature and signage would clearly state that parking is limited to disabled users and special use permit holders. Furthermore, the Master Plan includes a provision (Standard 195) to develop a residential parking permit program to discourage park visitor parking at the end of Panorama Drive. Given the parking restrictions, remote and unsigned location of this access, lack of amenities, the steepness of the hill and availability of easier access at several locations, vehicle drop off and pedestrian and bicyclist use from outside the neighborhood is expected to be minimal.

b. Conflict with an applicable congestion management program, including, but not limited to a level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

LESS THAN SIGNIFICANT. Traffic generated by implementation of the Master Plan would not result in unacceptable operations at any of the study intersections or roadways and would not conflict with any congestion management program or transportation standards. See discussion in Item (a).

c. Would the project 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?

NO IMPACT. No operating airports or heliports are within two miles of the project site. The proposed project would not include any features that would have the capacity to impact air traffic.

d. Would the project substantially increase hazards because of a design feature or incompatible uses?

LESS THAN SIGNIFICANT. There are no unusual conditions that represent obvious safety hazards. While the proposed project would increase the number of vehicle trips on roads in the project area, vehicles would not be exposed to increased hazards as result of the project. Design features of the proposed staging areas would not cause roadway hazards, and no incompatible uses would occur. To reach this conclusion, a comprehensive review of collision hazards and sight distance conditions was conducted.

Sight Distance

Sight distance along Petaluma Hill Road at the Preserve's proposed driveways was evaluated based on sight distance criteria contained in *A Policy on Geometric Design on Highways and Streets* published by American Association of State Highway and Transportation Officials (AASHTO). These guidelines include recommended sight distances at intersections, including stopping sight distances for drivers traveling along the major approaches and for drivers of stopped vehicles at the minor street approaches and driveways. These recommendations are based upon approach travel speeds, and take into account which direction a vehicle would turn onto the major approach, with greater sight distance needed for the more time-consuming task of turning left as compared to turning right.

Sight distance at the northern and southern driveway locations were field measured. Based on a design speed of 55 mph, which is the posted speed limit on Petaluma Hill Drive along the Preserve's frontage, the northern driveway marginally meets sight distance requirements for all movements. However, this driveway will be restricted to allow only right-turn movements. At the southern driveway, where left-turns would be allowed, sight lines would be adequate for all movements. Accordingly, since the northern driveway is proposed to be limited to right turn access, no further changes to access at this location are recommended.

Since the Farmers Lane Extension did not exist at the time of this analysis, it was not possible to field-measure the required sight lines at the proposed driveway. Therefore, Master Plan Standard 200 states that when the proposed driveway connecting to the Farmers Lane Extension is designed, it will need to be designed in a manner that ensures that adequate sight lines are provided.

Collisions

The collision history for the study area was reviewed to determine any trends or patterns that may indicate a transportation safety issue. Since collision analysis is dependent on historic data, only the following intersections that currently exist were included in the analysis:

- Petaluma Hill Road/Kawana Springs Road
- Kawana Springs Road/Franz Kafka Road
- Kawana Terrace/Meda Avenue
- Farmers Lane Extension-Sonoma Academy Entrance/Kawana Springs Road[8]

Of these four intersections, collisions were reported only at Petaluma Hill Road/Kawana Springs Road, with the other intersections having no reported collisions for the five-year period of April 1, 2005 through March 31, 2010 studied. The calculated collision rate for Petaluma Hill Road/Kawana Springs Road was compared to the average collision rate for similar facilities statewide. During the five-year period, a total of 25 collisions were reported at Petaluma Hill Road/Kawana Springs Road, resulting in a calculated collision rate of 0.63 collisions per million vehicles entering the intersection (c/mve), which is greater than the statewide average of 0.43 c/mve. None of the reported collisions resulted in a fatality, but 19 resulted in one or more injuries. The majority of the reported collisions (17, or 68 percent of total collisions) involved one or more drivers making a left-turn movement at the intersection, where all approaches are controlled with protected-permissive left-turn signal phasing (i.e., where a left-turn arrow is provided for "protected" movements, but drivers can also turn when left-turn arrow is off, and the green "ball" light is on, when a safe gap in oncoming traffic is present). Based on discussions with City of Santa Rosa staff (Sprinkle, 2012), the City is considering modifying the signal to provide a flashing yellow left-turn arrow on the approaches with protected-permissive left-turn phasing. This yellow light would flash when permissive left-turns are allowed (i.e., when left-turning drivers are allowed to proceed when there is an adequate gap in oncoming traffic) with the goal of reminding drivers that that oncoming traffic has the right-of-way. This may be effective in reducing left-turn related collisions. At the time of this analysis, the City is considering this modification and has not made a decision. During the same five-year period, the study segment of Petaluma Hill Road that includes this intersection (i.e., from Yolanda Avenue to Hopi Trail, south of the property) had a total of 19 reported collisions, resulting in a calculated collision rate of 0.66 collisions per million vehicle miles travelled (c/mvm), which is less than the statewide average of 1.17 c/mvm for similar facilities.

The addition of project-generated traffic is not anticipated to increase the average collision rate on Petaluma Hill Road or at the intersection of Petaluma Hill Road/Kawana Springs Road. The increase in traffic would be moderate, with the projected addition of 273 weekday daily vehicles on Petaluma Hill Road, or about two percent. There are several factors that potentially affect collisions rates, including roadway capacity, design and geometry, sight distance, traffic volumes, speed, and lighting. The proposed project includes design features such as turning bays and traffic control elements that are focused on reducing the potential for vehicular conflicts and the accommodation of increased traffic.

[8] Since this intersection does not currently exist, collision records for the existing intersection of Kawana Springs Road and the entrance to Sonoma Academy were checked.

e. Would the project result in inadequate emergency access?

LESS THAN SIGNIFICANT. The study intersections and roadway segment are expected to experience imperceptible increases in average delay, and the project access points will be designed to meet applicable standards, so the project can reasonably be expected to have a less-than-significant impact on emergency access. Kawana Terrace currently provides access to Taylor Mountain for emergency vehicles, and emergency responders have card access at the interim staging area. The new access driveways would meet the Sonoma County Fire Safe Standards related to driveway width, slope and access gate. On the property, ranch roads provide emergency vehicle access to many parts of Taylor Mountain. In addition, the Master Plan calls for development and maintenance of emergency access routes across the property. Therefore any impacts related to emergency access would be minor, imperceptible changes in delay and less than significant.

f. Would the project conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

NO IMPACT. The proposed project would not conflict with adopted policies, plans, or programs supporting alternative transportation. The Taylor Mountain Preserve is close to population centers, making it feasible to use alternative modes of transportation. The Master Plan design includes pedestrian and bicycle access gates in several locations. Kawana Terrace would also be available for multi-use following vacation of the roadway.

Transit Facilities

Both the City of Santa Rosa CityBus and Sonoma County Transit provide fixed route bus service in Santa Rosa and outlying areas. Existing transit routes are expected to be adequate to accommodate project-generated transit trips; however, stops are generally located at least three-quarters of a mile from proposed Preserve entrances. The nearest CityBus stops are located at the intersection of Petaluma Hill Road/Kawana Springs Road and on Yolanda Avenue west of Petaluma Hill Road. The Farmers Lane Extension design includes bus pull-outs for potential future bus service along the Preserve's frontage, although at this time, there are no long term plans for service on this route.

Sonoma County Transit Route 46 provides weekday service between Santa Rosa and Petaluma traveling along the project frontage on Petaluma Hill Road. The nearest bus stop for this route is located at Petaluma Hill Road/Kawana Springs Road. Two bicycles can be carried on most CityBus and Sonoma County Transit buses. Bike rack space is on a first come, first served basis.

Dial-a-ride, also known as paratransit, or door-to-door service, is available for those who are unable to independently use the transit system due to a physical or mental disability. Both Santa Rosa CityBus and Sonoma County Transit provide this service within the City of Santa Rosa and unincorporated Sonoma County, respectively.

Bicycle Facilities

The *Highway Design Manual*, California Department of Transportation (Caltrans), 2006, classifies bikeways into three categories:

- *Class I Multi-Use Path*: a completely separated right-of-way for the exclusive use of bicycles and pedestrians with cross flows of motorized traffic minimized.
- *Class II Bike Lane*: a striped and signed lane for one-way bike travel on a street or highway.
- *Class III Bike Route*: signing only for shared use with motor vehicles within the same travel lane on a street or highway.

In the project area, Class II bike lanes exist on Kawana Springs Road west of Brookwood Avenue and on Petaluma Hill Road within the study area in the City of Santa Rosa. The Colgan Creek Trail, a Class I multi-use path, terminates just west of the project site; however, there are plans to continue the trail along Colgan Creek along the northern edge of the Preserve. Bicyclists ride in the roadway and/or on sidewalks along all other streets within the project study area.

The Sonoma County Transportation Authority's (SCTA) Countywide Bicycle and Pedestrian Master Plan (May 2008) calls for on-street Class II bicycle lanes on Farmers Lane north of Kawana Springs Road when the Farmers Lane Extension is developed. South of Kawana Springs Road, Farmers Lane would be designated as a Class III bicycle route. Existing bicycle facilities, including bike lanes on streets, together with shared use of minor streets, provide adequate access for bicyclists. Bicycle parking would be provided at the site by bike racks which will be located at all of the staging areas.

Pedestrian Facilities

The only pedestrian facilities near the project site are sidewalks provided in the residential neighborhoods to the northwest of the park and along the southern side of Kawana Springs Road. Sidewalks do not exist along any of the project frontage roads, which is consistent with the rural nature of the surrounding land uses. When the Farmers Lane Extension is developed, design plans indicate that sidewalks would be provided along the west side of Farmers Lane along the Preserve, and on both sides of the street north of the intersection of Kawana Springs Road/Farmers Lane, where crosswalks and pedestrian signal phasing would be provided. This would provide a connection to the proposed Preserve access at the eastern terminus of Kawana Springs Road. All other access points would be located in rural settings where sidewalks do not exist and would normally not be provided.

Within the site, pedestrian hiking paths are proposed to connect to neighborhoods where sidewalks or other pedestrian amenities are provided. However, it appears that there may be several gaps in offsite pedestrian and bicycle facilities connecting to some of the Preserve's access points. Although there is no impact in terms of consistency with adopted plans, and the facilities are considered adequate to meet basic needs, the following Master Plan guidelines would improve pedestrian and bicycle circulation:

- G184 - The City of Santa Rosa should be consulted to determine the need for pedestrian and bicycle paths in conjunction with development of the Farmers Lane Extension.
- G171 - When access is developed off of Kawana Springs Road, pedestrian and bicycle paths should be included between the end of Kawana Springs Road and the Preserve to provide safe connections with the surrounding neighborhoods. Paths do not need to be paved.

Parking

Although not required by CEQA, the adequacy of the proposed parking supply in the Master Plan was analyzed to ensure that sufficient parking would be provided to meet projected demand. As shown in Table B.3.14-13, in the near-term (prior to completion of the Farmers Lane Extension), it is expected that 124 parking spaces would be provided and at full buildout of the park, 137 parking spaces would be provided. ADA compliant parking will be provided at all staging areas. Since parking at the Bath-Watt staging area would be limited to service vehicles and disabled users with a pre-approved permit, and therefore not available to the general public, its parking supply was not included in the total parking supply.

Table B.3.14-13. Proposed Parking supply*

Location	Near-term	Full Buildout
Kawana Terrace (Interim Staging Area)	48	0
Petaluma Hill Rd	35	35
Kawana Springs Resort	24	75
Linwood Ave	17	17
Farmers Ln	0	10
Total	**124**	**137**

* Parking at Bath-Watt would not be open to the general public and therefore is not included.

Additionally, the Petaluma Hill Road, Kawana Springs Resort and Linwood Avenue staging areas would provide parking for horse trailers, and could be used as overflow parking during peak demand periods. Considering that a maximum of 141 vehicles are expected to travel to and from the Preserve during peak weekend periods, of which 70 trips are expected to be inbound, but 71 would be outbound allowing for turnover, the supply of at least 137 standard parking spaces plus additional horse trailer and disabled accessible parking is expected to be sufficient. Although not included in the parking inventory, the horse trailer parking areas would help meet the parking demand and could be used as overflow vehicle parking during peak periods when not occupied by horse trailers.

B.3.15 Utilities and Service Systems

UTILITIES AND SERVICE SYSTEMS **Would the project:**	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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 which 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?	☐	☐	☒	☐
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?	☐	☐	☐	☒

Significance criteria based on CEQA Guidelines, Appendix G.

B.3.15.1 Setting

This section addresses water supply, wastewater, stormwater, and solid waste. Additional information regarding stormwater drainage is provided in Section B.3.8, Hydrology. The Taylor Mountain Preserve property is outside of the City of Santa Rosa's city limits, urban growth boundary, urban services boundary and Sphere of Influence (SOI). The northern property boundary abuts the urban services, urban growth and SOI boundaries. Because the majority of the property is outside of the urban services area, it is not served by public services (e.g., water supply, sewer hookup and stormwater infrastructure). The northern section of property off of Panorama Drive (Bath-Watt parcel) and the Linwood Avenue parcel are within the City's Urban Services area, but there is no plan to pursue City services in these locations. The property has onsite springs and wells. The existing residence is served by a springs and septic system. The existing portable toilet that serves recreational visitors is serviced by the Regional Parks Department.

On the Sonoma County groundwater availability map (Sonoma County, 2004), the entire property is shown as Zone 3 – limited groundwater area. However, given the presence of springs and a well on the property, and existing and historic use of the onsite aquifer for domestic and commercial purposes, there are likely areas within the 1,100 acres that have groundwater potential for additional well development. As described in the hydrology section, the aquifer appears to be shallow, as indicated by springs and associated wetlands on the property.

B.3.15.2 Environmental Impacts and Mitigation Measures

a. Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

LESS THAN SIGNIFICANT. Wastewater treatment demand would be very limited (see Item (b), below). Wastewater would be handled through development of one or more septic systems and such systems would be subject to compliance with existing regulations. Most restrooms would be connected to septic and leach fields, while a couple restrooms may have tanks that are pumped if water cannot be developed. Even with full implementation of the Master Plan, wastewater treatment would not exceed the requirements of the Regional Water Quality Control Board, given the limited need for wastewater treatment from the proposed uses.

b. Would the project 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?

LESS THAN SIGNIFICANT. The demand for services created by the proposed project would not necessitate construction or substantial expansion of water or wastewater treatment facilities. The Master Plan allows primarily low-intensity recreational uses that have very low water and wastewater treatment demands. The District and Regional Parks are not planning to request public services from the City of Santa Rosa or special districts, at this time. Since onsite water sources are proposed for water supply, new water treatment facilities would not be needed Other than small water treatment equipment at the wellhead. Development of the Preserve would rely on installation of a new septic system for new permanent water-using facilities (e.g., permanent restrooms at several staging areas, visitor services at Kawana Springs Resort area). Water for livestock and horses is available in water troughs fed by spring boxes. State health permits are required if the onsite well or springs resources are planned to be used for commercial purposes. If new septic systems are installed, they would be required to be located so as to avoid any sensitive resources, per Master Plan Standard 143.

c. Would the project require, or result in the construction of, new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

LESS THAN SIGNIFICANT. In conjunction with developing the six staging areas and visitor facilities at the Kawana Springs Resort site within the property, drainage facilities would be constructed onsite to detain and accommodate onsite runoff (see Section B.3.8, Hydrology). Potential impacts of constructing these facilities have been reviewed throughout this document as part of the potential impacts of the whole project. No new stormwater drainage facilities are required offsite.

d. Would the project have sufficient water supplies available to serve the proposed project from existing entitlements and resources, or would new or expanded entitlements be needed?

LESS THAN SIGNIFICANT. Potable water would be required at the Kawana Springs Resort area and non-potable water would be required for toilets at the Petaluma Hill Road staging area. The Linwood Avenue staging area would require water for bathrooms that would be obtained from harvested rainwater or a new well, The Bath-Watt and Farmers Lane staging areas would not require potable water. The estimated peak water demand at full build out of the Kawana Springs Resort area is approximately 12 Equivalent Single Family Dwelling (ESD). The estimate of water requirements includes 4 ESDs for the 8 room Hotel/B & B, 2 ESDs for the café, 4 ESDs for the campground and host site, and 2 ESDs for day use and special events. The City of Santa Rosa uses 110,000 gallons per year per ESD. The estimated peak water demand at the Petaluma Hill Road trailhead restroom would be less than 1 ESD (Cleveland, 2012).

The Preserve would rely on existing onsite water resources, harvested rainwater and/or potential new wells and associated tanks and piping system. An existing well is located near the Barn, but it has not been developed to date. The existing springs at the Kawana Springs Resort staging area could support future planned uses in that area. An existing spring could provide water for toilets at Petaluma Hill Road or a new well could be installed. Standards in the Master Plan reflect use of these proposed water sources at each of the staging areas (see S166, S179, S218). If necessary, new wells would be developed in the future to accommodate full implementation of the Master Plan, but development of a well is not necessarily required for initial operations. The Master Plan includes a standard (S145) stating that site improvements that require water shall not be constructed until a suitable water source is available. Given the relatively low water demand and the fact that the Kawana Springs Resort historically used onsite water sources for residential and resort/visitor serving commercial uses, onsite water supplies should be sufficient to serve the project.

e. Would the project result in a determination by the wastewater treatment provider that serves or may serve the proposed project that it has adequate capacity to serve the proposed project's projected demand in addition to the provider's existing commitments?

LESS THAN SIGNIFICANT. As described in Item (b), the project would rely on septic systems. There may be several portable toilets on the property, but the amount of wastewater treatment required for these facilities would be minimal and would not exceed available treatment capacity.

f. Would the project be served by a landfill with sufficient permitted capacity to accommodate the proposed project's solid waste disposal needs?

LESS THAN SIGNIFICANT. Implementing the Master Plan would result in minimal solid waste disposal needs, which would not substantially change landfill needs. The project's solid waste would be taken to a Sonoma County transfer station where it would be processed and disposed of at a landfill with sufficient disposal capacity. Regional Parks would also provide and maintain

recycling containers, which would further reduce the amount of solid waste going into the landfill.

g. Would the project comply with federal, state, and local statutes and regulations related to solid waste?

NO IMPACT. The project would comply with all regulations regarding solid waste. Solid waste generation from low-level recreational uses would be minimal. Regional Parks would provide and maintain recycling containers, along with garbage containers, which would further reduce solid waste that goes into the landfill.

B.3.16 Mandatory Findings of Significance

MANDATORY FINDING OF SIGNIFICANCE	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a. Does the project have the potential to 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 a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
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.)	☐	☐	☒	☐
c. Does the project have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Significance criteria based on CEQA Guidelines, Appendix G.

a. Does the project have the potential to 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 a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED. Mitigation measures have been incorporated into the project to address potential air quality, geology, hydrology and noise impacts. These measures would ensure that impacts are less than significant.

As described in Section B.3.4.2 (Biological Resources), the site contains potential habitat for several special-status wildlife species. Development of the proposed project would have the potential to reduce habitat for these species. However, habitat protection standards and guidelines that are part of the Master Plan would reduce habitat impacts, and overall impacts would be marginal relative to the remaining habitat for these species in the project vicinity.

As described in Section B.3.5 (Cultural Resources), the recorded cultural resources on the property are not within the areas of proposed development and guidelines have been incorporated into the proposed project to minimize the impacts of any inadvertent discovery of a cultural resource. Therefore, implementation of the Master Plan would not eliminate important examples of the major periods of California history or prehistory.

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, effects of other current projects, and the effects of probable future projects.)

LESS THAN SIGNIFICANT. Cumulative impacts were fully considered in the analysis. Development and improvements allowed in the Master Plan represent low-level recreational and educational

activities. As such, the construction and operation of the Taylor Mountain Preserve would result in a very small overall contribution to cumulative effects.

As discussed in Sections B.3.1 through B.3.15, many of the potential impacts of the proposed project are less than significant. The guidelines and standards that are part of the proposed Master Plan would ensure that the proposed project's contribution to cumulative impacts on species, their habitats, and their movement would be less than significant.

Proposed project operations would involve additional traffic, which would combine with other existing and future traffic on local roadways and at local intersections. However, the transportation analysis in Section B.3.14 includes analysis of cumulative traffic conditions with and without the proposed project. As described in Section B.3.14, level of service standards for intersections in the project area would not worsen significantly as a result of the proposed project traffic. Therefore, the proposed project's contribution to cumulative traffic impacts would be negligible. With regard to the remaining areas of analysis, individually and cumulatively, the proposed project would not result in any significant long-term impacts that would substantially combine with impacts of other current and probable future impacts. Consequently, implementation of the Master Plan would not contribute to impacts that are cumulatively considerable.

c. Does the project have environmental effects, which would cause substantial adverse effects on human beings, either directly or indirectly?

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED. There is a potential for air quality and noise impacts during construction of the proposed project. As stated in Item (a), mitigation measures have been incorporated into the project to avoid or minimize impacts so that the residual impact levels are less than significant.

As a project that involves resource management and allowing public access to Taylor Mountain for multi-use recreation and education, most of the impacts of the project are beneficial. The proposed project would provide a park and open space preserve close to an urban center that is accessible using non-motorized transportation. The Preserve would also have an important education function. Implementation of the proposed project would result in no substantial adverse impacts on human beings

Each of the impacts with the potential to have substantial adverse effects on human beings has been evaluated, and this Initial Study concludes that all of these potential impacts are either less than significant or can be mitigated to a less-than-significant level with implementation of the measures presented in this document that have been incorporated into the project.

C. Mitigation Monitoring Program

MITIGATION MONITORING PROGRAM Taylor Mountain Regional Park and Open Space Preserve Master Plan					
Mitigation Measures	**Monitoring Agency**	**Location**	**Timing**	**Reporting Action**	**Effectiveness Criteria**
Air Quality – Construction Emissions					
Mitigation Measure 3-1: The following measures shall be implemented during grading and construction: ■ Water all active construction areas at least twice daily. ■ Cover all trucks hauling soil, gravel, crushed rock and/or other loose materials, or require trucks to maintain at least two feet of freeboard. ■ Sweep daily (with water sweepers) all paved access roads, parking areas and staging areas at construction sites. ■ Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets. ■ Operate all construction vehicles and equipment with emission levels that meet current air quality standards. ■ Minimize Idling times either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.	SCRP	Staging areas & other construction zones involving grading and earthwork	During construction	Construction monitors verify compliance	Dust and vehicle emissions are minimized for all construction activities; signage is posted

MITIGATION MONITORING PROGRAM Taylor Mountain Regional Park and Open Space Preserve Master Plan					
Mitigation Measures	**Monitoring Agency**	**Location**	**Timing**	**Reporting Action**	**Effectiveness Criteria**
■ Limit vehicle speeds to 15 mph on unpaved surfaces. ■ All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used. ■ Replant disturbed areas as quickly as possible, and always prior to the winter rains. ■ Post a publicly visible sign with the telephone number and person to contact at Regional Parks regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.					
Geology & Soils – Erosion Control					
Mitigation Measure 6-1 (Use of Best Management Practices): Best Management Practices such as preservation of existing vegetation and use of sediment catch basins and silt fencing shall be used to minimize erosion during construction, as required by the Construction General Permit. The staging areas shall be improved between April 15 and October 15, prior to the winter rains, or will utilize Regional Water Quality Control Board Best Management Practices for wet-weather construction.	SCRP	Trail locations; staging areas and other development areas	During construction of staging areas & trails; during operation of trails	Construction monitor to report to SCRP; Periodic inspections during operations & other activities, as required by the CGP.	Soil loss is minimized; soil does not enter water bodies; compliance with CGP.

MITIGATION MONITORING PROGRAM Taylor Mountain Regional Park and Open Space Preserve Master Plan					
Mitigation Measures	**Monitoring Agency**	**Location**	**Timing**	**Reporting Action**	**Effectiveness Criteria**
Hydrology, Water Quality and Flooding					
See Mitigation Measure 6-1 (Erosion and Sedimentation)					
Noise					
Mitigation Measure 10-1 (Construction Noise Impacts): (a) Noise-generating construction activities, including truck traffic coming to and from the site for any purpose shall be limited to daytime, weekday, non-holiday hours (8:00 a.m. to 5:00 p.m.). Any special circumstances which necessitate performance of construction work outside the hours and days specified shall require that contractor request, and the County's project manager approve, such work. (b) Construction equipment shall be properly outfitted and maintained with noise reduction devices to minimize construction-generated noise, i.e., fit motorized equipment with proper mufflers in good working order. Unnecessary idling of internal combustion engines shall be prohibited. (c) The contractors shall locate stationary noise sources such as air compressors as far as practical from existing nearby residences, including the onsite life estate.	SCRP	Work near noise sensitive land uses	During construction	Construction monitor verifies compliance	No noise complaints are received from nearby land uses

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D. References

Project Description

Sonoma County. 2009. Sonoma County General Plan 2020. http://www.sonoma-county.org/prmd/gp2020/index.htm. Accessed November 20, 2011.

Aesthetics

Sonoma County. 2008. Sonoma County General Plan 2020, Scenic Resource Areas, Figure OSRC-1, Adopted September, 2008.

Agricultural Resources

California Department of Conservation. 2008. Division of Resource Protection, Important Farmlands Map.

Air Quality

BAAQMD (Bay Area Air Quality Management District). 2011. CEQA Air Quality Guidelines. http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES.aspx.

CARB (California Air Resources Board). 2010. Ambient Air Quality Standards. http://www.arb.ca.gov/research/aaqs/aaqs2.pdf. Accessed July 26, 2010. Updated February 16, 2010.

_____. 2008. AB 32 Scoping Plan. http://www.arb.ca.gov/cc/scopingplan/scopingplan.htm.

Biological Resources

Best, C., J. T. Howell, W. and I. Knight, and M. Wells. 1996. A Flora of Sonoma County. California Native Plant Society Press. Sacramento, California.

Bolander, G. L., and B. D. Parmeter. 2000. Birds of Sonoma County: An Annotated Checklist and Birding Gazetteer. Redwood Region Ornithological Society. Napa, CA.

Brown, P. R. 1997. A Guide to the Snakes of California. Gulf Publishing Company. Houston, Texas.

Burridge, B. (ed.). 1995. Sonoma County Breeding Bird Atlas: Detailed Maps and Accounts for our Nesting Birds. A Project of Madrone Audubon Society. Braun-Brumfield, Inc. Ann Arbor, MI.

Bush, Lisa. 2012. Draft Taylor Mountain Master Plan Grazing Plan. Prepared for Sonoma County Agricultural Preservation and Open Space District, Sonoma County Regional Parks, and RRM Design Group.

Calflora. 2009. Calflora: Information on California plants for education, research, and conservation. The Calflora Database. Berkeley, CA. Accessed at: http://www.calflora.org; February through November 2010.

CCH (Consortium of California Herbaria). 2010. Data provided by the participants of the Consortium of California Herbaria. Accessed at: http://ucjeps.berkeley.edu/consortium; February 2010.

CDFG (California Department of Fish and Game). 2011. California Natural Diversity Database. Sacramento, CA.

_____. 2010. California Natural Diversity Database. Sacramento, CA.

_____. 2009a. Protocols for Surveying and Evaluating Impacts to Special-status Native Plant Populations and Natural Communities. State of California, California Natural Resources Agency, California Department of Fish and Game. Sacramento, CA.

_____. 2009b. List of Vegetation Alliances, Biogeographic Data Branch. Vegetation Classification and Mapping Program.

_____. 2007a. List of California Vegetation Alliances, Biogeographic Data Branch. Vegetation Classification and Mapping Program.

_____. 2007b. Santa Rosa Plain Conservation Strategy Map. Website: http://www.fws.gov/sacramento/ES/Recovery-Planning/Santa-Rosa/Documents/figure-3_REVISED_4-18-07.pdf

_____. 2003. List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Database Wildlife and Habitat Data Analysis Branch. Vegetation Classification and Mapping Program.

_____. 1994. A Field Guide to Lake and Streambed Alteration Agreements, Sections 1600-1607, California Fish and Game Code.

Circuit Rider Productions, Inc. 2007. Taylor Mountain Ranch Property, Botanical Report. January 2007.

_____. 2006. Taylor Mountain Ranch Property, Botanical Report. July 2006.

CNPS (California Native Plant Society). 2010. Inventory of Rare and Endangered Plants (online edition, v7-11). California Native Plant Society. Sacramento, CA. Accessed at: http://www.cnps.org/inventory.

_____. 2001. CNPS botanical survey guidelines. Pages 38-40 in California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California (D. P. Tibor, ed.). Sixth edition. Special Publication No. 1, California Native Plant Society. Sacramento, CA.

Corps (U.S. Army Corps of Engineers). 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0). September 2008.

CSRL (California Soil Resource Lab). 2010. Online Soil Survey. Accessed at: http://casoilresource.lawr.ucdavis.edu/drupal/node/902; February and October 2010.

Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1. U.S. Army Corps of Engineers Waterways Experiment Station. Vicksburg, MS.

Golden Bear Biostudies. 2000. Biotic Assessment: Wetlands and Special Status Species Survey of the Taylor Mountain Regional Park in Sonoma County. September 2000.

Graymer, R. W., B. C. Morning, G. J. Saucedo, C. M. Wentworth, E. E. Brabb, and K. L. Knudsen. 2006. Geologic Map of the San Francisco Bay Region. U.S. Geological Survey. Scientific Investigations Map 2918.

Graymer, R. W., E. E. Brabb, D. L. Jones, J. Barnes, R. S. Nicholson, and R. E. Stamski. 2007. Pamphlet to accompany Scientific Investigations Map 2956, Geologic Map and Map Database of Eastern Sonoma and Western Napa Counties, California. U.S. Geological Survey.

Hickman, J. C. (ed.). 1993. The Jepson Manual: Higher Plants of California. University of California Press. Berkeley, CA.

Holland, R. 1986. Preliminary Descriptions of the Natural Communities of California. California Department of Fish and Game. Sacramento, CA.

Jameson, E. W., and H. J. Peeters. 2004. Mammals of California. University of California Press. Berkeley, CA.

Jennings, M. A., and M. P. Hayes. 1994. Amphibian and reptile species of special concern in California. Final report. Prepared for the California Department of Fish and Game, Inland Fisheries Division.

Kays, R. W., and D.E. Wilson. 2002. Mammals of North America. Princeton University Press. Princeton, NJ.

NatureServe. 2010. NatureServe Conservation Status. Available at: http://www.natureserve.org/explorer/ranking.

Oak Mapper. 2011. Oak Mapper: Monitoring Sudden Oak Death (online database). University of California, Berkeley. Accessed at: http://www.oakmapper.org/oaks.

Prunuske Chatham, Inc. 2011a. Ecological Resources Report, Taylor Mountain Master Plan. Prepared for Sonoma County Agricultural Preservation and Open Space District, Sonoma County Regional Parks, and RRM Design Group. July 2011.

_____. 2011b. Draft Natural Resources Components, Taylor Mountain Master Plan. Prepared for Sonoma County Agricultural Preservation and Open Space District, Sonoma County Regional Parks, and RRM Design Group. November 2011.

Sawyer, J., T. Keeler-Wolf, and J. Evens. 2009. A Manual of California Vegetation. Second Edition. California Native Plant Society and California Department of Fish and Game. Sacramento, CA.

SCPRMD (Sonoma County Permit and Resource Management Department). 2008. Sonoma County General Plan 2020. Adopted by Resolution No. 08-0808 of the Sonoma County Board of Supervisors, September 23, 2008.

Shuford, W. D., and T. Gardali (eds.). 2008. California Bird Species of Special Concern: A Ranked Assessment of Species, Subspecies, and Distinct Populations of Birds of Immediate Conservation Concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, CA, and California Department of Fish and Game, Sacramento, CA.

Sibley, D. A. 2000. National Audubon Society. The Sibley Guide to Birds. Alfred A. Knopf, Inc., NY.

Stebbins, R. C. 2003. Western Reptiles and Amphibians. Houghton Mifflin Company. New York, NY.

USDA (U.S. Department of Agriculture). 2010. California Hydric Soils List.

_____. 2007. Soil Survey Data. Accessed at: http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

_____. 2005. Soil Survey Data. Accessed at: http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

_____. 1972. Soil Survey of Sonoma County. In cooperation with University of California Agricultural Experiment Station.

USFWS (U.S. Fish and Wildlife Service). 2011a. Critical Habitat Data for the Sacramento Fish & Wildlife Office. Website: http://www.fws.gov/sacramento/ES/Critical-Habitat/Data/es_critical-habitat_data.htm

_____. 2011b. On-line endangered species lists. Accessed at: http://www.fws.gov/sacramento/es/spp_list.htm.

_____. 2007a. National Wetlands Inventory [website]. U.S. Department of the Interior, USFWS, Washington D.C. Accessed at: http://www.fws.gov/wetlands; February 2010.

_____. 2007b. Programmatic Biological Opinion for U.S. Army Corps of Engineers Permitted Projects that May Affect California Tiger Salamander and Three Endangered Plant Species on the Santa Rosa Plain. November 9, 2007.

_____. 1996. Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed, and Candidate Plants. U.S. Fish and Wildlife Service, Sacramento, CA.

Zeiner, D. C., W. F. Laudenslayer, Jr., K. E. Mayer, and M. White. 1990. California's Wildlife, Volumes I-III: Amphibians and Reptiles, Birds, Mammals. California Statewide Wildlife Habitat Relationships System, California Department of Fish and Game. Sacramento, CA.

Cultural Resources

Architectural Resources Group. 2012. Taylor Mountain Master Plan Historical Resources.

Origer, Thomas. 2001. A Cultural Resources Survey for the Taylor Mountain Regional Park Project, Sonoma County, California. (confidential report)

Origer & Steen. "A Cultural Resources Survey for the Taylor Mountain Site Assessment – Russell Property, Sonoma County, California." Sept. 14, 2006. (confidential report)

Tipon, Nick. 2006. Federated Indians of Graton Rancheria, Sacred Sites Protection Committee. Written correspondence, September 1, 2006.

Geology, Soils, and Minerals

California State Mining Bureau. 1926. Report XXII of The State Mineralogist Covering Mining In California and Activities of The State Mining Bureau.

City of Santa Rosa. 2002. City of Santa Rosa 2020 General Plan, Geologic and Seismic Hazards, p. 12-7, Adopted June 18, 2002.

DOC/DMG (California Department of Conservation, Division of Mines and Geology). 1987. Mineral Land Classification: Aggregate Materials in the San Francisco-Monterey Bay Area. Special Report 146, Part III.

McLaughlin et al. 2008. Geologic and Geophysical frame work of the Santa Rosa 7-7 Quadrangle, Sonoma County, CA. Open-file Report 2008-2009.

McPhee, D. K., V. E. Langenheim, S. Hartzell, R. J. McLaughlin, B. T. Aagaard, R. C. Jachens, and C. McCabe. 2007. Basin Structure beneath the Santa Rosa Plain, Northern California Implications for Damage Caused by the 1969 Santa Rosa and 1906 San Francisco Earthquakes. Bulletin of the Seismological Society of America 97(5): 1449-1457.

NRCS (Natural Resources Conservation Service). 2010. Web Soil Survey. United States Department of Agriculture. Website: http://websoilsurvey.nrcs.usda.gov/app/.

Sonoma County. 2010. Permit and Resource Management Department. Activemap. http://www.sonoma-county.org/prmd/activemap/index.htm.

_____. 2006. Sonoma County General Plan 2020, General Plan Update, Draft Environmental Impact Report. State Clearinghouse No. 2003012020.

Working Group on California Earthquake Probabilities. 2008. Active Fault Map Modified from Summary of Earthquake Probabilities in the S.F. Bay Region, 2008-2038.

Hazards and Hazardous Materials

CalFIRE. 2007. Fire Hazard Severity Zones in State Responsibility Areas, Adopted by CalFIRE on November 7, 2007.

DSTC (California Department of Toxic Substances Control). 2010. DTSC's Hazardous Waste and Substances Site List - Site Cleanup (Cortese List). http://www.dtsc.ca.gov/SiteCleanup/Cortese_List.cfm. Accessed March 3, 2012.

Sonoma County. 2006. Sonoma County Hazard Mitigation Plan, Prepared by Natural Hazards Mitigation under the Direction of: Sonoma County Department of Emergency Services and Sonoma County Permit and Resource Management Department, Adopted September 19, 2006.

Hydrology and Water Quality

City of Santa Rosa. 2007. Santa Rosa Citywide Creek Master Plan.

Cleveland, Mark. 2012. Senior Park Planner, Sonoma County Regional Parks Department, personal communication, April 2012.

FEMA (Federal Emergency Management Agency). 2012. FEMA Flood Insurance Rate Map. http://www.r9map.org/pages/projectdetailspage.aspx?choloco=49&choproj=291.

Prunuske Chatham, Inc. 2011a. Ecological Resources Report, Taylor Mountain Master Plan. Prepared for Sonoma County Agricultural Preservation and Open Space District, Sonoma County Regional Parks, and RRM Design Group. July 2011.

Sonoma County. 2004. Groundwater Availability Map, Sonoma County Permit and Resource Management Department. April 1, 2004.

Land Use and Planning

California Department of Fish and Game (CDFG). 2007. Santa Rosa Plain Conservation Strategy Map, April 16, 2007.

Sonoma County. 2009. Land Use Element, Amended. Sonoma County General Plan 2020. http://www.sonoma-county.org/prmd/gp2020/index.htm. Accessed November 20, 2011.

Noise

City of Santa Rosa. 2009. Santa Rosa General Plan 2035 Draft Environmental Impact Report. http://ci.santa-rosa.ca.us/doclib/Documents/Santa_Rosa_GP_2035_DEIR.pdf. Accessed February 20, 2012.

_____. 2009. Santa Rosa General Plan 2035. Adopted November 3, 2009.

_____. 2002. City of Santa Rosa 2020 General Plan EIR. Adopted June 18, 2002.

Sonoma County. 2008. Sonoma County General Plan 2020: Noise Element. http://www.sonoma-county.org/prmd/gp2020/noise.pdf. Accessed February 20, 2012.

Public Services

Jones, Michael. 2009. Division Chief, Santa Rosa Fire Department, personal communication, August 3, 2009.

Williams, Doug. 2009. Chief, Rincon Valley Fire Protection District, telephone communication, August 18, 2009.

Transportation and Traffic

American Association of State Highway and Transportation Officials. 2011. A Policy on Geometric Design of Highways and Streets, 6th Edition.

American Planning Association. 2002. Parking Standards, Planning Advisory Service, Report Number 510/511, 2002.

California Department of Transportation. 2007. 2007 Collision Data on California State Highways (road miles, travel, collisions, collision rates).

_____. 2006. Highway Design Manual, 6th Edition.

California Highway Patrol. 2005-2010. Statewide Integrated Traffic Records System (SWITRS).

City of Santa Rosa. 2009. Santa Rosa General Plan 2035.

Institute of Transportation Engineers. 2008. Trip Generation, 8th Edition.

Santa Rosa CityBus.2011. http://ci.santa-rosa.ca.us/departments/transit/CityBus/maps_schedules/

Sonoma County. 2008. Sonoma County General Plan 2020. http://www.sonoma-county.org/prmd/gp2020/index.htm.

Sonoma County Transit. http://www.sctransit.com/SchedulesMaps.aspx

Sonoma County Transportation Authority. 2008. Countywide Bicycle and Pedestrian Master Plan.

Sprinkle, Rob. 2012. Traffic Engineer, City of Santa Rosa, personal communication, April 11, 2012.

Transportation Research Board. 2010. Highway Capacity Manual

_____. 2000. Highway Capacity Manual

Whitlock & Weinberger Transportation, Inc. 2009. Traffic Impact Study for Taylor Mountain Interim Access Permit Program.

Utilities

Cleveland, Mark. 2012. Senior Park Planner, Sonoma County Regional Parks Department, personal communication, April 2012.

Sonoma County. 2004. Groundwater Availability Map, Sonoma County Permit and Resource Management Department. April 1, 2004.

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APPENDIX
Response to Comments Summary

Taylor Mountain Regional Park and Open Space Preserve Master Plan
Initial Study/Mitigated Negative Declaration (IS/MND)

During the public review period from June 15 to July 16, 2012, several public comments were received on the Taylor Mountain Regional Park and Open Space Preserve Master Plan Draft Initial Study/Mitigated Negative Declaration (IS/MND). Oral comments made during the public workshop on June 20, 2012 were primarily related to the Master Plan, rather than the IS/MND; however, the few comments related to the IS/MND are addressed at the end of this document. Although individual responses to comments are not required by CEQA, this document includes responses to all comments on the IS/MND. Each comment is stated or summarized and followed by a specific response. The full text of each individual comment letter is attached at the end of this appendix.

In several cases, additional text has been added to either the IS/MND or the Master Plan for clarification. For comments that resulted in a text change, the change is referenced in the response. Other comments are addressed by explanation in the response and no change to the IS/MND is required, unless otherwise noted. None of the conclusions in the Draft IS/MND have changed as a result of the public comments.

WRITTEN COMMENTS AND RESPONSES

Written comments include the following:

I. letter from Caltrans (6/29/12)
II. letter from Maurine Caplinger (7/13/12)
III. letter from City of Santa Rosa (7/16/12)

I. Caltrans Letter

Comment: **Trip Distribution and Impacts on US 101 and State Route (SR) 12.** Caltrans is concerned over potentially cumulative adverse impacts on US 101 and SR 12, especially if the existing conditions are congested. The letter requests an amendment to the traffic analysis to include trip distributions to/from US 101 and SR 12, as appropriate. The letter recommends using the *Caltrans Guide for the Preparation of Traffic Impact Studies* (TIS Guide) for determining which scenarios and methodologies to use.

> ***Response:*** In the recommended *Guide for the Preparation of Traffic Impact Studies*, Caltrans establishes the following policies for when a traffic impact study (TIS) is needed:
>
> > *The following criterion is a starting point in determining when a TIS is needed. When a project:*
> > *1. Generates over 100 peak hour trips assigned to a State highway facility*
> > *2. Generates 50 to 100 peak hour trips assigned to a State highway facility – and, affected State highway facilities are experiencing noticeable delay; approaching unstable traffic flow conditions (LOS "C" or "D").*
> > *3. Generates 1 to 49 peak hour trips assigned to a State highway facility – the following are examples that may require a full TIS or some lesser analysis:*

a. Affected State highway facilities experiencing significant delay; unstable or forced traffic flow conditions (LOS "E" or "F").
b. The potential risk for a traffic incident is significantly increased (i.e., congestion related collisions, non-standard sight distance considerations, increase in traffic conflict points, etc.).
c. Change in local circulation networks that impact a State highway facility (i.e., direct access to State highway facility, a non-standard highway geometric design, etc.).

Since both US 101 and SR 12 are expected to operate worse than LOS D under future p.m. peak hour conditions, the 50-trip threshold was applied to determine if analysis of state-owned facilities is necessary. The proposed Taylor Mountain Regional Park and Open Space Preserve (Preserve) is expected to generate up to 86 weekday p.m. peak hour trips, of which 15 percent (13 trips) are expected to travel to/from the west on Kawana Springs Road and 8 percent (7 trips) are expected to travel to/from the north on Petaluma Hill Road, both routes lead to US 101. This is a total of 20 p.m. peak hour trips that would be going to/from the direction of US 101. Likewise, 25 percent (22 trips) is expected to go to/from the north on Farmers Lane, which leads to SR 12.

It is unlikely that all of these drivers would be destined for US 101 or SR 12, but even if all of these trips were destined for these facilities, it would not reach the level of requiring a full traffic impact study for state-owned facilities. If all 20 p.m. peak hour trips were added to US 101, this would increase traffic levels by less than two tenths of one percent, and if all 22 trips were added to SR 12 it would increases traffic levels by less than 0.7 percent. Considering that the potential volume of traffic destined to US 101 and SR 12 is likely less than these levels, the project would have a negligible impact on traffic operations on these two routes.

Since the Preserve would generate a higher level of traffic during the weekend midday peak hour, consideration was given to the weekend traffic. The project is expected to generate up to 141 weekend midday peak hour trips. Applying the same distribution above, the result would be 32 trips going to/from the direction of US 101 and 35 trips going to/from the direction of SR 12. Again, it is unlikely that all of these trips would be traveling on these freeway facilities, but even if they were, the project traffic generation to these routes would not reach the 50-trip threshold resulting in the need for a full analysis of traffic on the state-owned facilities.

A brief statement has been added to the MND to clarify that the projected traffic is less than the threshold for requiring a TIS. No additional analysis or text changes are needed.

II. MAURINE CAPLINGER (comment letter includes photographs – see comment letter at end of this appendix; comment numbers correspond to the letter's headings.)

Comment: **1. Proposed Bath-Watt access to the Preserve via Holland Heights Road and Panorama Drive.** The comment, which is focused on the proposed Bath-Watt access to the Preserve, asserts that the proposed limitations on the access are vague and that the IS/MND has not adequately evaluated the impacts of the increased traffic that will result from planned and potential specially permitted activities, renovated barn, and other potential uses.

Response: The Master Plan includes specific provisions regarding the Bath-Watt staging area, including restrictions on the use of the access and restrictions on parking in the neighborhood. These restrictions are clearly spelled out in the guidelines and standards in the Master Plan and

reiterated in the project description of the IS/MND. These restrictions include: a locked gate that will be accessible only to disabled visitor vehicles and to visitors with a special use permit; a pedestrian gate that will be open from dawn to dusk and locked at night; a residential parking permit program to be implemented prior to the opening of this access point to vehicles or pedestrians/bicyclists; information provided in park brochures and at the Regional Parks office to people requesting disabled parking passes and special use permits that clearly states the restrictions on access at this point; and signage to reiterate access and parking restrictions. Patrols by park staff to check gate security and neighborhood parking violations will help maintain safe access. Due to these restrictions, very low levels of new vehicle trips through this neighborhood are projected.

Section B.3.14 (Transportation) explains CEQA thresholds and the parameters for conducting roadway traffic modeling. This section also describes the methodology for assigning trips to the various access points. The qualitative analysis for the Bath-Watt staging area is adequate because only a total of 8 vehicle trips per week day and 13 trips per weekend day are projected for this access point. This number of vehicles does not trigger the need for a full Level of Service analysis. The addition of 13 trips is not considered substantial.

Comment: **2. Traffic Analysis** -The comment states that the IS/MND's assertion that there is low traffic in the Bath-Watt area is unsupported. The comment claims that the IS/MND does not give any measure of the road's current condition, project-generated vehicle traffic or traffic volumes associated with the additional pedestrians and bicyclists. In addition, the comment notes safety concerns due to narrow winding roadways, blind curves and lack of sidewalks or roadway shoulders.

Response: The determination of existing low volume roadway conditions is supported by field observations, professional planning staff's knowledge of the area and the limited amount of development connecting to these streets that would generate traffic. Projected vehicle traffic associated with this restricted access was fully evaluated and disclosed in the IS/MND. Tables 3.14-5 and 3.14-6 list projected trips to the Bath-Watt staging area, with a total of 8 trips per weekday and 13 trips per weekend day. This very low number of project vehicle trips does not represent a substantial increase in roadway volumes and would not substantially increase traffic hazards in the neighborhood. . The IS/MND projection of two vehicles per peak hour was based on an analysis of all access points. A percent of park-related traffic was assigned based on factors such as location of the staging area, regional connectivity, amenities offered and parking availability. Since the Bath-Watt access would have the most restrictive accessibility and parking, is not easily connected to regional routes and would have limited visitor amenities, traffic specialists determined that it would attract the smallest portion of traffic of all staging areas; this would be approximately two percent of all visitors. Furthermore, pedestrian and bicyclist use is projected to be minor, due to the remote, unsigned location at the top of a steep hill. At the beginning of Section B.3.14.2, the methodology for estimating trip generation and trip distribution is explained. The analysis used accepted standards, which are broadly used in traffic impact analyses. The multiple restrictions on parking and access at the Bath-Watt entrance (described in previous response) ensure that trip generation will be less than significant. Further, these streets are located within unincorporated Sonoma County. The County has established Level of Service (LOS) thresholds for *only* arterial roads, not local streets such as these.

Comment: **3. Traffic Impacts Underestimated.** The comment states that the potential use of the Bath-

Watt access is underestimated because this access is the highest point of elevation into the park and will likely be very popular for drop off use. The comment questions the IS/MND finding that the access point would have the potential to increase vehicle trips to no more than two per hour, noting that the current traffic conditions are already challenging for residents. The comment calls for additional analysis to address the following concerns:

- The barn is slated to be renovated and used for a variety of events and activities, which would increase car, van, trailer, and even bus traffic on Holland Heights Road and Panorama drive.
- The project will cause an increase in vehicle trips, including drop off and pick up trips, which will significantly increase the hazards for motorists, pedestrians, and cyclists alike, despite the restricted parking.
- The restricted parking may result in more vehicle trips, related to trips for drop offs and pick ups.
- Parking near Bennett Valley Road will increase and this impact has not been evaluated. Parking restrictions will be difficult to enforce.

Response:

Responses are provided for each point in the comment.

Access to Preserve Uses and Attractions – The main uses and amenities are located elsewhere on the property adjacent to the primary access points such as the Kawana Springs Resort access area. The only vehicles that would be allowed to use the Bath-Watt access are disabled users with an ADA placard and users who have obtained a special use permit from Regional Parks. This coupled with the restricted parking at the Bath-Watt staging area (maximum of 10 spaces) and the lack of on-street parking in adjacent neighborhoods make it unlikely for visitors to use the Bath-Watt staging area to access these services.

Vehicle Trips – See response to #2 Traffic Analysis above.

Drop off use – Generally, the limited activities allowed in this area of the Preserve are not the types of uses that would generate drop off and pickup use. Experience with other parks indicates that drop offs occur at well developed trailheads where access and supporting amenities are present for the public's use and convenience. Given the somewhat remote location, restricted access and the fact that it is not an apparent entrance from Bennett Valley Road, it is unlikely that many visitors would choose to use this as a drop-off location. Instead, other staging areas that would be identified as general access locations and have more amenities would more likely be used for the purpose of drop-offs. Essentially, the Bath-Watts staging area would not be convenient compared to other locations. Based on this, the expected amount of traffic that would be generated at this staging area remains low.

Bus Use - This is unlikely because bus drivers would not choose to drive in a neighborhood with inadequate maneuvering and staging spaces when other access locations are available. Furthermore, the gated vehicle access driveway would not be designed to accommodate full size buses. By requiring a permit to access the locked gate, Regional Parks will have control over the type and amount of vehicles entering the site through this access.

Parking – The Master Plan includes a specific provision to implement a residential parking permit program. This program will be implemented in consultation with the local community.

Furthermore, the Master Plan includes a guideline calling for responsible agencies to work closely with law enforcement and the neighborhood to monitor traffic and parking in the area. Although the issue of parking is not required to be analyzed under CEQA, the importance of this issue is reflected in the Master Plan provisions for the Bath-Watt access.

Comment: **4. Alternatives.** The comment states that there are reasonable alternatives to the Bath-Watt staging area and they should be evaluated for disabled access potential. For example, there are wonderful views even higher up if access were located near or through the lands to the south east.

Response: Potential alternative access points were reviewed during development of the Master Plan. There is no publicly owned land on the eastern side of the Preserve, therefore, no other access from the north or east is possible at this time. Any new access in this area would require purchase of an easement or acquisition of property, which is unlikely at this time. Given funding and other limitations, these types of alternative access were determined to be infeasible.

Comment: **5. Unlimited Access Point.** The comment states a concern that the easement that the County holds on the Bath-Watt property is open ended and can be changed in the future to allow an expansion of uses and increased access. The comment concludes that there are no assurances that limited access for the disabled will remain the primary reason for this access point and that, given this concern, the impacts of the proposed access and foreseeable future uses on Holland Heights and Panorama Drive have not been adequately evaluated or properly mitigated. The comment notes that the northern section of property off of Panorama Drive (Bath-Watt parcel) and the Linwood Avenue parcel are within the City's Urban Services area and that could lead to additional uses being developed at the Preserve. The comment mentions the various future uses allowed within the proposed Master Plan, which the commenter believes supports the notion that the easement is open ended and presents a real concern.

Response: The MND fully discloses all potential impacts associated with the project, as defined in the Master Plan. Because the proposed access is restricted, the impacts are substantially less than a full public unrestricted access. Each allowed use in the Master Plan is assigned to specific areas of the Preserve, within designated development envelopes. See Table B.1-1, Allowed Uses Matrix, in the IS/MND. Changing the access to allow unrestricted vehicular access or changing the allowed uses in the Preserve would require amending the Master Plan, as described in Section 2.5 of the Master Plan. Master Plan amendments will require additional evaluation of environmental impacts of proposed changes, as required under CEQA. The commenter suggests that the development of uses such as the visitor center or bed and breakfast inn would have an impact on traffic within the neighborhood. These uses would be located on a different area of the property near the Kawana Springs Resort staging area, where access is from Kawana Springs Road and parking would be provided.

Comment: **6. Conclusion.** The letter concludes with a summary of concerns outlined in the previous comments:

- The proposed uses at the Preserve will result in an expansion of the easement from Panorama Drive and there is no limitation on future uses
- Use of the Bath-Watt trail head and parking lot will necessarily exacerbate the current road conditions and increase traffic, pedestrian, and cyclist presence and these issues have not been properly evaluated.
- If the easement were narrowed in scope, there might be a means by which some access for

the disabled could be accommodated with minimal impacts on traffic and the environment.

- The draft IS/MND does not have adequate disclosure of existing road way volumes or proposed conditions on Holland Heights and Panorama Drive, Without this information, there is no way to adequately evaluate or mitigate potential impacts of increased traffic, off site parking issues, increased pedestrian and bicycle traffic, or road way widening.

Response: As stated in previous responses and in the IS/MND, the Bath-Watt access is narrow in scope, through a locked gate with restricted access, residential parking permit program and lack of amenities in this area of the Preserve. No road widening is proposed in the neighborhood. Given these factors and the remote, unsigned location, there would be a minimal amount of use of the Bath-Watt staging area. Pedestrians and bicyclists from outside the neighborhood would have to travel up a steep hill to access the Preserve, which would be a deterrent to using this access. Easier access is readily available at several other locations. The traffic analysis did include evaluation of the Bath-Watt staging area, including projection of vehicle trips, based on the trip generation methodology discussed in Section B.3.14.2 (see response to comment 2). No changes to the IS/MND are needed.

III. City of Santa Rosa (lettering corresponds to lettering in the City's comments)

From Fire Department:
Comment: The letter states that any access gate needs to have both a County and City knox pad lock for emergency access, and that bridges must carry the weight of emergency equipment which is in excess of 38,000 pounds.

Response: References to these requirements have been added to the Master Plan. Design of park access features, including bridge capacity, will comply with Fire Department requirements. Master Plan Standard 158 includes specific reference to the bridge design.

From Transportation and Public Works Department:
Comment: The comment includes three questions:

a) **Access.** How would pedestrians and bicyclists access the Preserve?
b) **Proposed Parking Supply (Page B-122, Table B.3.14-13).** Where would the 10 spaces shown in the table be located?
c) **Transportation Technical Appendix** – Figure 2 & 3, Intersection 3. Why did the existing traffic volume at intersection 3 go away in future conditions?

Response:

a) Pedestrian and bicycle address is provided along surface streets abutting the project property. There are several access points to the Preserve, as noted in the MND project description. The Master Plan provides more details about access. A future bus stop could be developed in the vicinity of the Farmers Lane Extension.
b) The proposed parking supply for the future Farmers Lane access is shown in Figure B.1-6, Farmers Lane Extension/Kawana Knoll Staging Area. The parking area would be within the Preserve, not on Farmers Lane.
c) For future plus project conditions (with the completion of the Farmers Lane extension), traffic was not assigned through the intersection of Kawana Terrace/Meda Avenue because it was assumed that main access to the Preserve would be from Farmers Lane and Kawana Springs Road near the Sonoma Academy site.

From Utilities Department:

Comment: **a) Page B-13** - The comment states that all future buildings and impervious area must meet the requirements of the Storm Water Low Impact Development (LID) Technical Design Manual and provisions of the Cal Green building code. Additionally, all soil disturbing activities must conform to the statewide Construction General Permit (CGP).

Response: Permit requirements are addressed generally in Section B.1.7 and stormwater requirements are noted in Section B.3.8, where specific language has been added to the MND to reference the LID design manual and Construction General Permit. The Master Plan acknowledges that permits will be required for the various project components. The Master Plan also includes a standard calling for LID for new construction.

Comment: **b) Page B-32,** Section B.1.7, paragraph 2**.** The comment asserts that the list of required project approvals is incomplete.

Response: Section B.1.7 lists all federal, state and local permitting agencies referenced in the comment except the State Water Resources Control Board, which has been added. Please note that the project is located within the unincorporated portion of Sonoma County. Section B.1.7 notes that approval from the City of Santa Rosa would be required for any roadway improvements within the City boundaries. In addition, the project would require review and approval from the local fire departments. No additional changes are required.

Comment: **c) Page B-57**, Biological Resources - The comment asks why the California tiger salamander (CTS) is not mentioned in the Biological Resources, Special-status Wildlife species section.

Response: Page B-57 specifies observed special-status wildlife species. CTS was not observed on-site; CTS is discussed under the subsection regarding potential species. No change is needed.

Comment: **d) Page B-58,** Biological Resources Regulatory Setting – The comment suggests a text edit to the discussion of US Army Corps permits to note that the project may be subject to more than one type of permit from this agency. The suggested edit would read as follows: "In summary, the project may be subject to, *including but not limited to* permits under the provisions of Section 404 of the federal Clean Water Act, as regulated by the U.S. Army Corps of Engineers.

Response: This sentence refers to Army Corps 404 permits specifically. The only permit required from the Corps is a Section 404 permit for the proposed project. Therefore, no change is needed.

Comment: **e) Page B-58,** Biological Resources Regulatory Setting – The comment suggests editing the text to refer to the Regional Water Board as a regional agency rather than a state agency.

Response: Although this item refers to the Regional Water Board, it is considered a state agency. No change is needed.

Comment: **f) Page B-58,** end of Biological Resources Regulatory Setting section - The comment requests the following text addition: "Additionally, future development will meet the requirements of the Storm Water Low Impact Development Technical Design Manual and the Cal Green building code."

Response: Requirements regarding storm water design are addressed in the Hydrology and Water Quality section of the MND rather than in the Biological Resources section. No change is needed.

Comment: **g) Page B-62,** Standard S49 - The comment refers to vegetation removal for fire fuel reduction and notes that these activities may require additional permits and/or approval.

Response: Although upland vegetation clearing for fuel reduction generally does not trigger permitting from regulatory agencies, the Master Plan states that all activities will comply with applicable permit requirements. This would include compliance with requirements in regulations such as the Migratory Bird Treaty Act and Heritage Tree Ordinance. No change is needed.

Comment: **h) Page B-63.** The comment references the discussion of the Westem Pond Turtle standards and suggests listing Standard 45, which includes preconstruction surveys, pre-construction training and temporary wildlife exclusionary fencing.

Response: The standards listed under Pond Turtle (S67, S69 and S71) cover the items included in S45. No change is needed.

Comment: **i) Page B-63,** Operational Phase S55 – The comment references the standard that prohibits dogs off leash and off trail and suggests adding an exception for designated enclosed areas.

Response: The full text of the referenced Standard 55 is in the Master Plan and includes this exception. No change is needed.

Comment: **j) Page B-63,** Operational Phase Guideline 23 (Monitor and manage for non-native birds and feral cats) - The comment asks how these non-native species would be managed.

Response: Details regarding management of non-native species are provided in Chapter 5.9 of the Master Plan. No change is needed.

Comment: **k) Page B-65.** The comment notes that activities listed in the following standards may require additional permits and/or approvals:

20, 21, 25, 27, 28, 29, 30, 97 and 98.

Response: The first paragraph of this section, as well as many other areas in the document, address the potential need for permits for activities that take place in creeks, wetlands, and riparian areas. Also, the Master Plan states that project activities will comply with permit requirements. No changes are needed.

Comment: **l) Page B-65,** S21 - The comment recommends amending Standard 21 to require Low Impact Development (LID) techniques *per the Storm Water Low Impact Design Technical Design Manual.*

Response: Master Plan Standard 21 has been modified to reference the LID Technical Design Manual.

Comment: **m) Page B-65,** after S98 – The comment recommends addition to the text to clarify that all proposed measures will only be conducted with the appropriate approval.

Response: Section B.1.7 and the Biological Resources Regulatory Section acknowledge that permits and approvals will be required for the various project components. The Master Plan also includes statements regarding compliance with laws, regulations and permit requirements. It is not necessary to reference permit requirements in each standard.

Comment: **n) Page B-68,** S14 regarding ground disturbance in oak woodland – The comment notes that these activities may need additional permits and/or approval.

Response: See response to item m.

Comment: **o) Page B-70,** S32 regarding development related disturbance – The comment notes that these activities may need additional permits and/or approval.

Response: See response to item m.

Comment: **p) Page B-70,** S34 – The comment suggests adding text to Standard 34 to specify that work activities will be subject to requirements of NCRWQCB and CAP.

Response: See response to item m.

Comment: **q) Page B-73,** S38 – The comment asks how invasive plant populations in wetland habitats will be prevented.

Response: Details regarding management and prevention of invasive plants are provided in the Master Plan Section 5.8. No change is needed.

Comment: **r) Page B-73,** S39 & S40 – The comment suggests that removal of plants in wetlands may need additional permits and/or approval.

Response: Permit requirements related to wetlands are addressed elsewhere in the document. It is not necessary to reference permit requirements in these standards.

Comment: **s) Page B-81,** Mitigation Measure 6-1 – The comment requests adding a reference to the requirements of the state wide Construction General Permit.

> ***Response:*** Reference to the Construction General Permit has been added to the mitigation measure, as requested.

Comment: **t) Page B-84,** Hazardous Materials Regulations – The comment suggests adding North Coast Regional Water Quality Control Board to the list of existing regulations.

> ***Response:*** The North Coast Regional Water Quality Control Board and issues related to water quality are addressed in Section B.3.8, Hydrology and Water Quality. No change is necessary.

Comment: **u) Page B-85,** S278 – The comment asks how emergency access routes through the property will be maintained.

> ***Response:*** Chapter 8 of the Master Plan includes provisions for developing emergency access roads within the Preserve. All Preserve facilities will be maintained by Regional Parks. General maintenance guidelines and standards are included in Chapter 9 of the Master Plan.

Comment: **v) Page B-86,** S284 – The comment asks for information on how invasive plant species will be controlled.

> ***Response:*** See response to comment Q.

Comment: **w) Page B-88, B-89, B-90, B-91, B-92** (Hydrology and Water Quality Section) – The comment includes miscellaneous recommended text changes regarding NPDES and State and Regional Water Boards and other permit requirements. The comment calls for referencing the MS4 Permit, Construction General Permit, City/County Low Impact Development (LID) requirements, CALGreeen and County Landscape Ordinance. Also, the comment requests review of the new FEMA flood maps that will become effective October 16, 2012.

> ***Response:*** The suggested edits are addressed as follows:
>
> - The recommended edits regarding discharge permits have been incorporated into the Hydrology and Water Quality setting discussion, in Section B.3.8 of the IS/MND.
> - Master Plan Standard 21 has been modified to refer to the MS4 permit and to the LID manual. The Master Plan includes general text referencing the need for various permits for project components and notes that the project will fully comply with all permit requirements and conditions. It is not necessary to reference permit requirements in each of the various standards.
> - Additional text has been added to the setting for hydrology and water quality and to the impact analysis to reference the Water Efficient Landscape Ordinance and CALGreen provisions.
> - References to MS4 LID requirements and the Construction General Permit have been added to the Master Plan text and to the IS/MND, as requested. Drainage features will be designed to contain and filter runoff, as required by permit requirements. Overall, the low-intensity project components will not result in a substantial increase in runoff. The amount of paving will be minimized and natural landscape features will be used to ensure that increased runoff is avoided.
> - Review of the proposed revised FEMA flood hazard maps indicates that a slightly broader area of Colgan Creek will be included in the flood hazard area. However, no permanent structures, other than the creek bridge are proposed within this area. The creek bridge would be designed to clear span the creek and would not impede flood flows. Additional language has been added to Master

Plan Standard 151 to clarify that any development along Colgan Creek will consider the FEMA maps and be designed appropriately.

Comment: **x) Page B-124** - The comment requests explanation of the stormwater design to clarify whether the design would capture 100% of the runoff for all storms and whether new outfalls or stormwater facility connections would be required. The comment also notes that outfalls require additional permitting approval.

> ***Response:*** Storm drainage design has not been finalized; final designs will comply with all applicable permit requirements regarding percentage of stormwater capture, runoff controls and outfalls or connections. No change is needed.

Comment: **y) Page B-124**, item d - The comment states that new development must comply with CALGreen requirements.

> ***Response:*** Reference to CALGreen requirements has been added to the MND text in the Hydrology and Water Quality section.

Comment: **z) Page B-127**, Section B.3.16, item c) - The comment recommends adding water quality to the list of impacts in this category.

> ***Response:*** This impact category in Section B.3.16, item c), applies specifically to impacts on humans (i.e., air quality and noise). Reference to water quality impacts is included in item a) of this Section B.3.16. Water quality refers to surface water quality, not drinking water supplies. No change is needed.

Comment: **aa) Page C-2, C-3,** Mitigation Monitoring Plan - The comment includes suggested text changes within the Mitigation Monitoring Plan table.

> ***Response:*** Some of the suggested edits have been incorporated into the Final IS/MND. It is not necessary to reference the details of permit requirements in the Mitigation Monitoring Plan, as they are already required by law and the Master Plan states that the project components will comply with all regulations and permit requirements. The mitigation measures for Hydrology and Water Quality are the same as listed for Geology and Soils.

Comment: **bb) Page C-4,** comments refer to page C-3 (Mitigation Monitoring Plan). The comment recommends additional language regarding permit requirements and notes that ail construction activities must be conducted per the Construction General Permit (CGP). The comment states that:

- All work affecting wetlands, waterways and/or water bodies will be conducted per the requirements of the applicable permits and/or regulations and will not be conducted prior to issuance of such permits of approval.
- All permanent water quality features will be designed and installed per the Storm Water Low Impact Development Technical Design Manual as specified by the storm water MS4 permit.
- AII flood control and storm water conveyance systems shall be designed per the Sonoma County Water Agency's Flood Control Design Criteria and all subsequent revisions.

Response: Both the Master Plan and MND acknowledge that permit approvals will be required for construction activities, wetland and waterway work. It is not necessary to re-state this requirement in each section. References to the LID Technical Design Manual, the MS4 permit and Sonoma County Water Agency Flood Control Design Criteria have been added to the Master Plan and to Section B.3.8 of the MND.

ORAL COMMENTS AND RESPONSES

Oral comments from members of the public were provided at the Taylor Mountain Regional Park and Open Space Preserve public workshop on June 20, 2012. The comments on the IS/MND are addressed below. While some of these comments are not specifically related to the CEQA analysis, responses to the general environmental concerns are addressed below. Comments solely focused on the Master Plan are being addressed separately. None of the oral comments required revisions to the IS/MND.

Comment: **Impacts on Wildlife** – Human presence will drive wildlife away.

Response: Extensive evaluation of wildlife and wildlife habitat occurred as part of the Master Plan process. The Master Plan trail and facility designs are based on the concept of avoiding habitat fragmentation. Several trails were removed from the design during the process to leave larger, unfragmented areas (especially the southern tip, and the Colgan Creek forested area). Therefore, impacts on wildlife are expected to be less than significant.

Comment: **Impacts of Continued Cow Grazing**: Cows damage habitats and creeks.

Response: Cows currently graze on the property and will continue to be allowed to graze on certain areas of the property. A complete grazing management plan has been developed as part of the Master Plan to address potential conflicts between grazing and biological resources protection.

Comment: **Seasonal Trail Closures:** Will trails be closed during the wet season?

Response: The Master Plan includes provisions for seasonal trail closures to minimize erosion.

Comment: **Erosion:** What will be done to minimize erosion?

Response: The Master Plan includes numerous measures to prevent and minimize erosion. Erosion is addressed in the IS/MND in Sections B.3.6 and B.3.8.

Comment: **Fire Control:** What regulations are in place to prevent fires?

Response: The IS/MND addresses fire hazards in Section B.3.7. No smoking will be allowed on the property. The Master Plan includes specific standards to prevent fire hazards.

Comment: **Additional CEQA Review:** Will additional CEQA review be required prior to construction?

> ***Response:*** The IS/MND fully addresses potential impacts of all proposed uses and facilities outlined in the Master Plan. Therefore, additional CEQA review will not be required prior to construction, as long as proposed development is consistent with the uses and development envelopes identified in the Master Plan.

Comment: **Parking Restrictions at Bath-Watt Access:** Will parking restrictions be in place prior to opening this access?

> ***Response:*** The Master Plan includes a provision to establish the parking restrictions prior to opening the staging area at this location. Pedestrian access will not be provided prior to implementing the parking permit program.

Comment: **Bicycle Lanes on Petaluma Hill Road:** Bicycle lanes and adequate line of sight must be maintained on this roadway.

> ***Response:*** All driveways would be designed in a manner that ensures the presence of adequate sight lines and would not impede existing or planned bicycle facilities. Parking in bicycle lanes is prohibited.

Comment Letters Received On Taylor Mountain Regional Park And Open Space Preserve Master Plan Draft Is/Mnd

- **Letter from Caltrans (6/29/12)**
- **Letter from Maurine Caplinger (7/13/12)**
- **Letter from City of Santa Rosa (7/16/12)**

1. Caltrans Letter

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY EDMUND G. BROWN Jr., Governor

DEPARTMENT OF TRANSPORTATION
111 GRAND AVENUE
P. O. BOX 23660
OAKLAND, CA 94623-0660
PHONE (510) 286-5541
FAX (510) 286-5559
TTY 711

Flex your power!
Be energy efficient!

June 29, 2012

SON1011046
SON-101-18.49
SCH 2012062048

Ms. Sara Press
Sonoma County Agricultural Preservation and Open Space District
747 Mendocino Avenue, Suite 100
Santa Rosa, CA 95401

Dear Ms. Press:

Tayler Mountain Regional Park and Open Space Preserve – Mitigated Negative Declaration

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the project referenced above. Based on the project location, Caltrans anticipates potentially adverse impacts to US-101 at Yolanda Avenue and/or State Route (SR) 12 at Farmers Lane if and when an intensification of traffic-generating development occurs.

Trip Distribution on US-101 and SR-12
According to Table B.3.14-7 of the Mitigated Negative Declaration (MND), 25% of the traffic to be generated by the project prior to the Farmers Lane extension will be to/from west of Kawana Springs Road. Based on Table B.3.14-3 of the MND, this translates to 14 weekday peak hour and 24 weekend midday peak hour trips to/from the west. US-101, accessed at Yolanda Avenue, is located approximately 0.5 miles west of the project site, while SR-12/Farmers Lane is approximately 1.5 miles north of the project. Caltrans is concerned over potentially cumulative adverse impacts to US-101 and to SR-12, especially if the existing conditions are congested.

Therefore, please amend the project's traffic analysis to include trip distributions to/from US-101 and SR-12 as appropriate. We recommend using the Caltrans *Guide for the Preparation of Traffic Impact Studies* (*TIS Guide*) for determining which scenarios and methodologies to use in the analysis. The guide is available at the following website address: http://www.dot.ca.gov/hq/tpp/offices/ocp/igr_ceqa_files/tisguide.pdf. If the proposed project will not generate the amount of trips needed to meet Caltrans' trip generation thresholds, an explanation of how this conclusion was reached must be provided.

RECEIVED
DATE 6/29/12
C: SP
D: File

"Caltrans improves mobility across California"

Ms. Sara Press/Sonoma County Agricultural Preservation and Open Space District
June 29, 2012
Page 2

Should you have any questions regarding this letter, please call Connery Cepeda of my staff at 510-286-5535.

Sincerely,

GARY ARNOLD
District Branch Chief
Local Development - Intergovernmental Review

c: Scott Morgan (State Clearinghouse)

II. Maurine Caplinger Letter and Photographs

July 12, 2012

Sara Press
Agricultural Preservation and Open Space District
747 Mendocino Avenue
Santa Rosa, CA 95401

Dear Staff:

Please accept these comments on the adequacy of the Draft Initial Study and Mitigated Negative Declaration (IS/MND) for the Taylor Mountain Regional Park and Open Space Preserve Master Plan.

1. INTRODUCTION

Preservation of this property was a great achievement, and I am very much in support of such acquisitions. My comments are, therefore only specific to the proposed Bath-Watt access to the park via Holland Heights Road and Panorama Drive. Although there is some mention of limited access via this "staging area" or trailhead, the limitations are ephemeral and vague. Unfortunately the open ended nature of the language and easement leave open significant potential for increase in uses, and more importantly traffic, in the short- and long-term. I do not think the IS/MND is adequate to evaluate the impacts of the increased traffic that will result from planned and potential specially permitted activities, renovated barn, and other potential uses. This access point may very well turn into a popular trailhead at a location that is accessed by very narrow and inferior roadways. I believe the Master Plan can and must be modified to ensure that those who currently use, and new users, of the roadways are safe and the environment is protected. I look forward to speaking with you regarding such modifications.

2. ABSENCE OF ANY TRAFFIC ANALYSIS

The IS/MND admits that analysis of the Bath-Watt access point has only been superficial.

The IS/MND states that, "[a] qualitative discussion is presented for the other access locations at Linwood Avenue and Bath - Watt (via Panorama Drive). Given the low traffic volume of these locations, a full quantitative analysis was not appropriate or necessary."

The IS/MND goes on to say, "[r]oadway segment analysis of Bennett Valley Road was not included in the level of service calculations because of the small amount of traffic that would be added to Panorama Drive, used to access the Bath - Watt staging area. This is due to the proposed restricted access at the Bath - Watt staging

area resulting in a small number of new trips."

The general assertion that there is low traffic in the area is unsupported. There must be a basis for making a statement or the statement does not constitute substantial evidence that traffic is low or will remain low. The IS/MND does not give any measure of the current status or condition of the road or of how much vehicle traffic could potentially increase or how the influx of additional pedestrians and bicyclists will affect roadway volumes. The real life experiences of the residents do not comport with the conclusions in the IS/MND. In addition, the level of traffic is only one measure of the feasibility and appropriateness of increasing traffic in a neighborhood that is accessed by very narrow winding roadways, where no sidewalks or even shoulders exist, and where blind curves are a current problem. There has been a vehicle fatality in this neighborhood already.

Traffic volumes are a factor, but over all safety is arguably more important. I for one have encountered on-coming traffic in my lane on Holland Heights Road many times over the years that I have lived here. Because there are no shoulders on the road or sidewalks, local children and older residents must evade cars when they attempt to walk through the neighborhood (see photo attached).

3. TRAFFIC IMPACTS UNDER ESTIMATED

Because this access point is billed as the highest point of elevation into the park, it will likely be very popular. Parking, however is proposed to be limited en route to, and at, the access point. Individuals and groups that come to this spot to enter the park will be dropped of and picked up at the top of Panorama drive - approximately a mile above Bennett Valley Road, via a steep inferior road with many blind curves (see photo attached). Those that are not dropped off will have to ride or walk on the shoulderless roadway in traffic's way causing serious safety issues. As proposed, the increased number of vehicle trips will significantly increase the hazards for motorists, pedestrians, and cyclist alike.

The assertion that the access point would have the potential to increase vehicle trips no more than two an hour is not supported and improperly minimizes potential impacts. The current traffic conditions are already challenging for residents and traffic would likely be significantly increased more at certain times of the day and certain times of the week. Again, the limited parking idea at the top does not restrict use. The "intentions" of the preparers of the IS/MND not withstanding, an access point will be available and used by residents from all over the County on a drop off/pick up basis actually increasing traffic concerns. Footnote 1

Bath-Watt a.k.a Panorama Drive has an existing unimproved road to the radio tower and a dirt road to an existing barn. The barn is

slated to be renovated, provide special event accommodations, horse facility, out door classroom, restrooms, parking, pinic tables, night time lighting, and last but not least a kissing gate. These proposed uses and attractions have the potential to increase car, van, trailer, and even bus traffic on Holland Heights Road and Panorama drive. These impacts must be evaluated and have not.

Upgrading this roadway is one way to accommodate increased vehicle, pedestrian, and bicycle traffic. There may be modifications to the Master Plan for example crafting a narrower easement (formerly the Nunes/Russell easement) at the Bath-Watt property that might also resolve my concerns. An access point that is truly to serve a limited number of vehicles and perhaps a plan that guides pedestrians and cyclists to more appropriate and safer routes to access points at higher elevations could address the traffic issue. The future uses of the Park are ambitious, more appropriate access points have not been evaluated, significant increased traffic and use at Bath-Watt are highly foreseeable, and safety has to this point been improperly over looked.

The IS/MND alludes to a residential parking permit program. This is not satisfactory as described above. Many users of the park will have to be dropped off at the trailhead do to the attempted restrictions on parking. This can actually increase traffic on these narrow roads. In addition, a residential parking program relies upon residents to enforce by calling the sheriff and or tow trucks to come up to the neighborhood and compel drivers to leave. This is an untenable solution. The sheriff has more important things to do and will likely not place the parking problem high on the list of priorities leaving the local residents to wait as the narrow streets are encroached upon by additional vehicles. I am hoping that the District will consider these concerns and seek to modify the access potential in the short- and long-term.

Parking near Bennett Valley Road will predictably increase and this impact has also not been evaluated. The analysis of City and County road departments must occur at the earliest point in the process as possible to determine the feasibility of this access point. This information must be available for public review. There needs to be much stronger assurances that the access point will not have an unreasonable impact on safety and that once the Master Plan is approved, future uses will not impact roadway safety significantly.

4. ALTERNATIVES

The emphasis on providing access to people with physical disabilities to the view from Panorama Drive is commendable. That access is essentially available now. Reasonable alternatives to the Bath-Watt "staging area" exist and should be evaluated for disabled access potential. For example, there are wonderful views for every

one to enjoy even higher up if access were located near or through the lands to the south east. Perhaps the landowner, I believe it might be Kendall Jackson, would allow access through its lightly traveled unencumbered "neighborhood" in partnership with the Open Space District, for disabled folks, special events, etc.

5. UNLIMITED ACCESS POINT

The easement that the County holds on the Bath-Watt property is open ended. The proposed limitations on traffic and intended use can in fact be changed in the future. This potential expansion of uses and access is foreseeable. For example, the County representative with whom we originally spoke about this access point, stated that the access would not be through Panorama Drive for obvious reasons. Now, however the County is proposing just that. Plans do change, and there are no assurances that providing limited access for the disabled will remain the primary reason for this access point.

The IS/MND states that the majority of the property is outside the Urban Services boundary. However, "[t]he northern section of property off of Panorama Drive (Bath - Watt parcel) and the Linwood Avenue parcel are within the City's Urban Services area, but there is no plan to pursue City services in these locations." The master plan, however makes mention of many potential future uses of the park, "disc golf course, small visitor center in the existing bathhouse structure, limited camping, including family, small group and environmental camping, café or food vendor, small bed and breakfast inn/hotel, fenced off - leash dog park, community/demonstration garden, special events space." Again, being within the Urban Services boundary and given the ability and practice of the County to change direction, supports the notion that the open ended easement presents real concerns.

The analysis, just with respect to the access as currently proposed and impacts to Holland Heights and Panorama Drive, have not been adequately disclosed, evaluated or properly mitigated and nor have the foreseeable expanded changes.

6. CONCLUSION

The access to the radio tower is historic and has remained a reasonable use with only minimal impact on traffic. This use has been narrow and appropriate. With the expansion of the use to parking lots, a potential bed and breakfast Inn, etc., the easement is being expanded and there is no limitation on what can be attempted in the future. This trail head and parking lot will necessarily exacerbate the current road conditions and increase traffic, pedestrian, and cyclist presence. These have not been properly evaluated and cannot, therefore be properly mitigated. If the easement were narrowed in scope, there might be a means by which

some access for the disabled could be accommodated with minimal impacts on traffic and the environment.

Respectfully, the draft IS/MND prepared for the County is inadequate because it does not have adequate disclosure of the history of traffic on Holland Heights and Panorama Drive, the previous statements by County representatives, the existence of an open ended easement on the property, the absence of any information on road way volumes or conditions pre- or post- construction, does not have any traffic analysis whatsoever, and there is no way to adequately evaluate or mitigate potential impacts of increased traffic, off site parking issues, increased pedestrian and bicycle traffic, or road way widening. Again, I am confident that both the needs of the District and the neighborhood can be met. I look forward to discussing ideas that I have that can facilitate a mutually agreeable solution to this important challenge.

Sincerely,

Maurine Caplinger

cc: Kimberly Burr

Footnote 1
""Panorama Drive (Bath-Watt). Panorama Drive is a narrow rural-type residential street without sidewalks, and with limited and informal on-street parking. Therefore, the Master Plan has identified this location for minor gated access to a small parking lot within the Preserve that would be restricted to visitors with disabled parking placards and special use permits only. Service, emergency and other authorized vehicles could use this access point, but no other visitors would be allowed to park at the site. The project is expected to add no more than two vehicle trips during any hour, which would have a negligible impact to the operations of Panorama Drive or adjacent streets.

This access would be *intended* to primarily serve pedestrians and bicyclists coming from the surrounding Bennett Valley residential area. To help ensure that the potential volume of vehicle traffic at this access would be minor compared with the other access points, visitor literature and signage would clearly state that parking is limited to disabled users and special use permit holders. Furthermore, the Master Plan includes a provision (Standard 194) to develop a residential parking permit program to discourage park visitor parking at the end of Panorama Drive." (emphasis added).

ATTACHMENTS TO MAURINE CAPLINGER LETTER: Pictures of blind curves and person walking in street with dogs, very narrow roadway

Blind curve, very narrow roadway

Blind curve

Person walking dogs in street - no sidewalk or shoulder and blind curves.

III. City of Santa Rosa Letter

City of Santa Rosa

July 16, 2012

Sara Press
Sonoma County Agricultural Preservation
and Open Space District
747 Mendocino Ave., Suite 100
Santa Rosa, CA 95401

RE: CITY OF SANTA ROSA COMMENTS FOR TAYLOR MOUNTAIN MASTER PLAN – DRAFT INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION

Dear Ms. Press:

Please find attached the list of comments from the City of Santa Rosa regarding the Draft IS/MND.

From Fire Dept.
I reviewed the Neg/Dec for the Fire Department and just wanted to make sure that any access gate would have both a County and City knox pad Lock for emergency access. I didn't see any mention of bridges but if there are bridges they need to carry the weight of our emergency equipment which is in excess of 38,000 pounds. If you need clarification on anything let me know.

From Transportation and Public Works Dept.
a) General comment – If I were a pedestrian, how would I get to the preserve? If I were a bicyclist, how would I get to the preserve? I did not see these modes of access addressed.
b) Page B-122, Table B.3.14-13 Proposed Parking Supply, The design of Farmers Lane Extension has no parking along road, chart shows 10 spaces, where are these 10 spaces located?
c) Technical Appendix Transportation/Traffic Impact Analysis – Figure 2 & 3, Intersection 3. Existing Traffic volume at intersection, why did this volume go away in future conditions?

From Utilities Dept.
a) Page B-13. All future buildings and impervious area must meet the requirements of the Storm Water Low Impact Development (CID) Technical Design Manual and provisions of the Cal Green building code. Additionally, all soil disturbing activities must conform to the statewide Construction General Permit.

b) Page B-32. Section B.1.7, paragraph 2. Required approvals are incomplete. Proposed improvement and mitigation measure will require approval by outside agencies, including but not limited to; U.S. Army Corps of Engineers, North Coast Regional Water Quality Control Board, State Water Resources Control Board, U.S. Fish and Wildlife Services, California Department of Fish and Game as well as the appropriate departments of the County of Sonoma and the City of Santa Rosa.
c) Page B-57 Special-status Wildlife Species – California tiger salamander?
d) Page B-58 Regulatory Setting ... project may be subject to (please add) *including but not limited to* permits ...
e) Page B-58 Regulatory Setting ... At the ~~State~~ *regional* level ...
f) Page B-58 at end of Regulatory Setting section – Please add – Additionally, future development will meet the requirements of the Storm Water Low Impact Development Technical Design Manual and the Cal Green building code.
g) Page B-62 Sect S49 Conduct fire fuel reduction activities (This may require additional permits and/or approval.)
h) Page B-63 Western Pond Turtle Lists S71 & S67, but what about S46 which includes preconstruction surveys, pre-construction training and temporary wildlife exclusionary fencing.
i) Page B-63 Operational Phase bullet S55 Prohibit dogs off leash and off trail. Comment – except in designated enclosed areas.
j) Page B-63 Operational Phase bullet G23 – Monitor and manage for non-native birds and feral cats ... Comment – How would these be managed?
k) Comment – May require additional permits and/or approvals. Applies to Page B-65 bullet S20, S21, S25, S27, S28, S29, S30, S97 and S98.
l) Page B-65 bullet S21 Utilize Low Impact Development (LID) techniques *per the Storm Water Low Impact Technical Design Manual.*
m) Page B-65 after bullet S98 *All proposed measures will only be conducted with the appropriate approval.*
n) Page B-68 bullet S14 – regarding ground disturbance. *May need additional permits and or approval.*
o) Page B-70 bullet S32 – regarding development related disturbance. *May need additional permits and or approval.*
p) Page B-70 bullet S34 – comment protect wetland during construction per NCRWQLB and CAP.
q) Page B-73 bullet S38 – comment How will invasive plant populations in wetland habitats be prevented?
r) Page B-73 bullet S39 & S40 – regarding removal of plants in wetlands – *May need additional permits and or approval.*
s) Page B-781 section 6-1 – comment *The requirements of the state wide construction general permit, including using CASQA BMP's will need to be met.*
t) Page B-84 section State Regulations – comment *Add North Coast Regional Water Quality Control Board to list.*
u) Page B-86 bullet S278 – How will emergency access routes through the property be maintained?

Department of Transportation and Public Works
69 Stony Circle • Santa Rosa, CA 95401
Phone: (707) 543-3800 • Fax: (707) 543-3801
www.srcity.org

July 16, 2012
Sara Press
Page 3 of 10

v) Page B-86 bullet S284 – How will invasive plant species be controlled?
w) Page B-88, B-89, B-90, B-91, & B-92 See attached scanned pages.
x) Page B-124, item c. Questions – 100% capture? All Storms? No runoff? No new outfalls or connections? Outfalls require additional permitting approval.
y) Page B-124, item d. Comment New development must comply with Cal Green requirements.
z) Page B-127, item c. Comments about first paragraph. LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED. There is a potential for air quality, *water quality*, and …
aa) Page C-2, C-3, See attached scanned pages.
bb) Page C-4. Comments refer to page c-3 - All construction activities will be conducted per the state wide Construction General Permit (CGP) – see mitigation measures 6-1.
- All work affecting wetlands, waterways and/or water bodies will be conducted per the requirements of the applicable permits and/or regulations and will not be conducted prior to issuance of such permits of approval.
- All permanent water quality features will be designed and installed per the Storm Water Low Impact Development Technical Design Manual as specified by the storm water MS4 permit.
- All flood control and storm water conveyance systems shall be designed per the Sonoma County Water Agency's Flood Control Design Criteria and all subsequent revisions.

No comments were received from Transit or Recreation and Parks. Should you have any questions, please don't hesitate to call me at (707) 543-3854.

Sincerely,

LORI URBANEK, PE
Interim Supervising Engineer

Enclosures

c: Tony Gossner, Deputy Fire Chief
Nancy Adams, Transportation Planner, Transportation and Public Works
Anita Winkler, Deputy Director, Transportation and Public Works
Rita Miller, Supervising Engineer, Utilities
Marc Richardson, Director, Recreation and Parks

Department of Transportation and Public Works
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July 16, 2012
Sara Press
Page 4 of 10

erty is Colgan Creek, sometimes referred to as Kawana Springs C
woodlands of Taylor Mountain in the central portion of the pro
westerly direction adjacent to the resort and then along the nort
west to the Laguna de Santa Rosa. Within the property, this reac
meandering, narrow, and relatively rocky with a steep gradient.
provide moderate canopy cover. Further downstream, the creek
trol channel. Much of the lower reaches are grass or concrete
vegetative cover (City of Santa Rosa, 2007). Because of these fe
critical migration corridor.

Additional noteworthy stream channels on the property include
Todd Creek and East Fork Todd Creek, originating in the western
southwesterly to the Laguna de Santa Rosa. Colgan Creek orig
property and flows directly to Santa Rosa Creek through a series of modified channels. All of these
channels are highly disturbed, with the likely exception of the upper headwaters on Taylor Mountain.

Originating on the northern slopes of Sonoma Mountain and th
Creek flows a short distance through the property's southeaster
the northeast towards Galvin Community Park. This upper reac
with intact instream habitat and good canopy coverage. How
preclude natural runs of native fish.

On the Sonoma County groundwater availability map (Sonoma
shown as Zone 3 – limited groundwater area. However, the gra
serve as a groundwater recharge and storage area. Structural
rainfall infiltration through interception and absorption. The
wetlands, and the grassland swales slowly release water store
These hydrologic processes help support the diverse array of v
wildlife found on the property and buffer nearby urban areas fro

There is a large, freshwater pond in the central portion of the p
into late summer are also critical watering holes. The property
are described in Section B.3.4, Biological Resources.

Applicable water quality regulations are described below. Development of the site will be subject to several approvals and permits related to water quality and stormwater runoff. The regulations establishing these approvals contain requirements to ensure protection of water quality.

Regulatory Setting

Clean Water Act. The Clean Water Act establishes the basic structure for regulating discharges of pollutants into the waters of the United States and has given the Environmental Protection Agency (EPA) the authority to implement pollution control programs. The Clean Water Act also contains requirements that set water quality standards for all contaminants in surface waters.

National Pollution Discharge Elimination System. The National Pollution Discharge Elimination System (NPDES) Nonpoint Source Program (established through the Clean Water Act) regulates runoff water quality; the NPDES program objective is to control and reduce pollutants to water bodies from nonpoint discharges. Nonpoint source (NPS) pollution, unlike pollution from industrial and sewage treatment plants, comes from many different sources. NPS pollution is caused by rainfall moving over and through the ground. As the runoff moves, it picks up and carries away natural and human-made pollutants,

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finally depositing them into lakes, rivers, wetlands, coastal waters, and even our underground sources of drinking water. The program and permit are administered by the Regional Water Quality Control Board (RWQCB), as determined by the EPA and the State Water Resources Control Board (SWRCB). An NPDES permit is needed for any construction activity that will, or is part of, a "common plan" of development that will disturb one or more acres and has the potential to have a discharge of stormwater to a water body of the United States.

Section 404 and 401 Permits. Section 404 of the Clean Water Act establishes programs to regulate the discharge of dredged and fill material in waters of the U.S., including wetlands. When an application for a Section 404 permit is made the applicant must show it has:

- Taken steps to avoid wetland impacts where practicable;
- Minimized potential impacts on wetlands; and
- Provided compensation for any remaining unavoidable impacts through activities to restore or create wetlands.

Wetlands are addressed in Section B.3.4 of this IS/MND. In order for any work to be completed around the various surface water bodies, Section 401 of the Clean Water Act would be applicable. Section 401 requires any applicant for a federal permit that conducts any activity that may result in a discharge of pollutants to first obtain a Water Quality Certification (WQC) from the State.

State Water Resources Control Board (SWRCB). The SWRCB and the nine RWQCBs throughout California regulate water quality in surface and groundwater bodies. The SWRCB regulates water quality through the Porter-Cologne Water Quality Act of 1969. Porter-Cologne contains a complete framework for the regulation of waste discharges to both surface waters and groundwaters of the state. On the regional level, Taylor Mountain is within the North Coast Regional Water Quality Control Board jurisdiction, which is responsible for the implementation of State and federal water quality protection statutes, regulations and guidelines.

Lake or Streambed Alteration Agreement. Since some work for the implementation of the proposed Master Plan would be completed along the banks of various surface water bodies, an application for a Lake or Streambed Alteration Agreement may be required. Section 1602 of the California Department of Fish and Game Code requires any person who proposes a project that will substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank or any river, stream, or lake or use materials from a streambed, to notify the Department before beginning the project.

B.3.8.2 Environmental Impacts and Mitigation Measures

Implementation of the Master Plan would require several trail crossings over streams, development of staging areas that include drainage improvements, and installation of a new replacement bridge over Colgan Creek to allow for pedestrian, bicyclist, equestrian and vehicle access.

a. Would the project violate any water quality standards or waste discharge requirements?

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED. During construction of the various improvements, land would be cleared and graded for access, parking areas, picnic facilities and other low-intensity visitor services. Exposure of surface soils during construction activities could lead to increased erosion, runoff, and sedimentation of on-site water features. Construction equipment and vehicles could accidentally discharge oil or other construction-related contaminants into surface water bodies on the site. In addition, trail development may necessitate stream crossings, which have the

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potential to contribute to erosion and sedimentation. However, several existing trails/dirt roads on steep slopes would be decommissioned and revegetated to minimize erosion. Project construction will be required to comply with NPDES through a Stormwater Pollution Prevention Plan (SWPPP) that includes detailed erosion and sedimentation controls and BMPs for controlling runoff, construction practices, vehicle fueling and maintenance and other measures to protect water quality (Master Plan Standard 146).

Operation of the Preserve would have the potential to result in impacts on water quality due to run off. Operation of private vehicles on the site could result in the deposition of oil and grease on surface parking lots that could subsequently be carried to surface water on the site. Impervious surfaces could result in increased runoff. However, the amount of impervious area would be very limited, as the staging areas would be primarily unpaved pervious surfaces, as shown on the Master Plan conceptual design figures. Staging areas and visitor development would contain runoff features to achieve Low Impact Development (LID), meaning that features would be incorporated into the design to capture onsite runoff and prevent increased discharge to nearby water sources. Reuse of the existing bathhouse would further limit the amount of new impervious features.

The proposed project would allow hikers, bicyclists and equestrians to use Taylor Mountain on a regular basis. While equestrian use and dogs would result in some additional urine and feces being deposited on the site, park information would emphasize minimizing the amount of urine and fecal matter that enters the drainage. Any potential increase would not be substantial in relation to the existing use of the site for cattle grazing.

One of the Master Plan's objectives is to protect upland hydrology to maintain existing stormwater and sediment delivery levels to creeks. The Master Plan includes numerous standards to minimize erosion and sedimentation during construction and operation, summarized as follows:

- S21 – Utilize Low Impact Development (LID) techniques in landscaped or other developed areas near riparian corridors, including pervious pavement and path surfaces and bioswales, to intercept flows and allow water to percolate into soil and reduce sediment delivery.
- S26 and S66 – Maintain vegetated buffers from creeks. (Table 3 in the Master Plan lists buffer requirements for various types of proposed development.)
- S37 – Locate new trails well away from headcuts.
- S44 – Site new trails at least 500' from the existing freshwater pond.
- S86 – Avoid and minimize erosion in trail routing and construction.
- S87 – Use full bench construction for trails where feasible. This means the full tread width is supported by undisturbed soil without the need for fill on the downhill side. This technique results in more stable trails that are less susceptible to erosion.
- S93 – Use rolling dips to direct water off the trail for minor seasonal drainage crossings and at appropriate intervals based on trail slope.
- S94 – Use armored rolling dips at moderate seasonal drainage crossings to minimize erosion and sediment impacts and provide all weather access for trail users.
- S95 – Use log causeways, armored crossings, or drainage lenses at seasonally wet areas (not identified as wetlands) to minimize erosion and sediment impacts and provide all weather access for trail users.

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- S97 – Avoid new trail crossings over stream channels to the greatest extent feasible. Locate trails on existing roads or trails wherever possible and appropriate.
- S98 – Locate new riparian/creek crossings on geomorphically stable sites (i.e., low slopes in channel and banks) and construct to minimize, to the greatest extent possible, streambank and bed erosion.

Implementation of these Master Plan standards and the following mitigation measure would reduce this potential impact to a less-than-significant level:

6-1 Best Management Practices to minimize erosion. (See Section 8.3.6, Geology, for full text of this measure.)

b. Would the project 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?

LESS THAN SIGNIFICANT. As stated in the setting, the project area is identified as a Marginal Groundwater Availability Area in the Sonoma County General Plan 2020. As noted in Item (a), development of staging areas and allowed visitor facilities would not substantially increase the amount of impervious surfaces, as parking areas would be maintained with permeable surfaces to the extent feasible. Also, stormwater runoff would be contained onsite through LID features. Therefore, the project would not interfere with groundwater recharge on this 1100 acre property.

Onsite water sources would be used for low-level recreational uses, but this would not substantially deplete groundwater supplies as these uses generally require low amounts of water. The Master Plan sets guidelines and standards for water supply development at the various staging areas. Proposed water sources include existing onsite springs, wells and/or a potential new well at one or more of the staging areas. The existing springs at the Kawana Springs Resort area was used in the past for previous residential and commercial recreational uses. This source would be used for potable water, which will require a State water system permit. The springs at Petaluma Hill Road staging area could be used as a water supply for restrooms.

Estimated peak water demand at full build out of the Kawana Springs Resort area would be approximately 12 Equivalent Single Family Dwellings (ESD) (Cleveland, 2012).. This estimate of water requirements includes 4 ESDs for the 8-room hotel/B & B, 2 ESDs for the café, 4 ESDs for the campground and host site, and 2 ESDs for day use and special events. The estimated peak water demand at the Petaluma Hill Road trailhead restroom would be less than 1 ESD. The City of Santa Rosa uses 110,000 gallons per year per ESD. Landscaping would utilize native plants that require low amounts of water, which will help minimize onsite water demand. If testing of the springs determines that supplies are insufficient to meet this demand, a new well may be developed. Given the presence of springs and associated wetlands, and historic water use, the low level demand for this 1,100-acre property would not result in a substantial depletion of groundwater supplies.

c. Would the project 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 erosion or siltation on or off site?

LESS THAN SIGNIFICANT. As described in the setting section, Colgan Creek and several intermittent streams flow through the Taylor Mountain property. None of the proposed improvements would substantially alter the drainage patterns of the site. Master Plan erosion and sedimentation guidelines and

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standards noted in Item (a) would ensure that erosion and siltation are minimized. Stabilizing creek crossings, likely through armoring, would help to maintain the integrity of the drainage courses, and thereby not alter the drainage patterns or create additional runoff or flooding. In addition, staging area development will be required to comply with NPDES by preparing and implementing a Stormwater Pollution Prevention Plan (SWPPP) that includes detailed erosion and sedimentation controls and BMPs for controlling stormwater runoff (Master Plan Standard 141).

d. Would the project 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 that would result in flooding on or off site?

LESS THAN SIGNIFICANT. See Items (a) and (c). Implementation of the Master Plan would not result in substantial alterations of the site's existing drainage patterns and would not contribute to flooding on or off site.

e. Would the project create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems to provide substantial additional sources of polluted runoff?

LESS THAN SIGNIFICANT. Development of staging areas and allowed uses in the Master Plan would incorporate design features to contain and filter runoff onsite, through the use of LID features. The Master Plan includes additional guidelines to minimize runoff such as the use of permeable surfaces. Therefore, the proposed project would not create runoff that exceeds stormwater drainage system capacity or substantially increases pollutant loads.

f. Would the project otherwise substantially degrade water quality?

LESS THAN SIGNIFICANT. As discussed above in Items (a) and (c), the Master Plan design guidelines and standards include numerous provisions to reduce and avoid potential water quality impacts during construction and operation. With implementation of these measures, as outlined in the Master Plan, the project would prevent substantial degradation of water quality.

g. Would the project place housing within a 100-year floodplain, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

NO IMPACT. The Master Plan does not include housing; none of the allowed facilities are within a 100-year floodplain (FEMA, 2012).

h. Would the project place within a 100-year floodplain structures that would impede or redirect flood flows?

NO IMPACT. Development areas are not located within a 100-year floodplain.

i. Would the project 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?

NO IMPACT. The proposed project would not be within or near a dam failure inundation area.

j. Would the project cause inundation by seiche, tsunami, or mudflow?

NO IMPACT. The project area is not located in an area that would be subject to inundation by seiche, tsunami, or mudflow.

New FEMA flood maps along Colgan Creek in the project area will become effective 10/16/12. These statements should be re-evaluated with consideration to these B-92 new maps. See map panels 06097C0737F and 06097C0741F @ www.r9map.org/Pages/ProjectDetailsPage.aspx? cheLoco = 49 cheProj = 291

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MITIGATION MONITORING PROGRAM
Taylor Mountain Regional Park and Open Space Preserve Master Plan

Mitigation Measures	Monitoring Agency	Location	Timing	Reporting Action	Effectiveness Criteria
Limit vehicle speeds to 15 mph on unpaved surfaces. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used. Replant disturbed areas as quickly as possible, and always prior to the winter rains. Post a publicly visible sign with the telephone number and person to contact at Regional Parks regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.					
Geology & Soils – Erosion Control					
Mitigation Measure 6-1 (Use of Best Management Practices): Best Management Practices such as preservation of existing vegetation and use of sediment catch basins and silt fencing shall be used to minimize erosion ~~along the paths. The~~ staging areas shall be improved ~~between April 15 and October 15~~, prior to the winter rains, ~~or will utilize Regional Water Quality Control Board (RWQCB) Best Management Practices for wet-weather construction.~~	SCRP As required by the CGP	Trail locations; staging areas Entire site as applicable	During construction of staging areas & trails; during operation of trails	Construction monitor to report to SCRP; Periodic inspections during operations As required by the CGP.	Soil loss is minimized; soil does not enter water bodies. As required by the CGP

during all construction

Each will meet the requirements of the statewide Construction General Permit and file a Notice of Intent prior to any land disturbing activities.

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MITIGATION MONITORING PROGRAM
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Mitigation Measures	Monitoring Agency	Location	Timing	Reporting Action	Effectiveness Criteria
Hydrology, Water Quality and Flooding					
~~See Mitigation Measure 8-1 (Erosion and Sedimentation).~~					
Noise					
Mitigation Measure 10-1 (Construction Noise Impacts): (a) Noise-generating construction activities, including truck traffic coming to and from the site for any purpose shall be limited to daytime, weekday, non-holiday hours (8:00 a.m. to 5:00 p.m.). Any special circumstances which necessitate performance of construction work outside the hours and days specified shall require that contractor request, and the County's project manager approve, such work. (b) Construction equipment shall be properly outfitted and maintained with noise reduction devices to minimize construction-generated noise, i.e., fit motorized equipment with proper mufflers in good working order. Unnecessary idling of internal combustion engines shall be prohibited. (c) The contractors shall locate stationary noise sources such as air compressors as far as practical from existing nearby residences, including the onsite life estate.	SCRP	Work near noise sensitive land uses	During construction	Construction monitor verifies compliance	No noise complaints are received from nearby land uses

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