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DRAFT FINAL INITIAL STUDY/  
MITIGATED NEGATIVE DECLARATION  
COMMENTS AND RESPONSES

# CALERO COUNTY PARK TRAILS MASTER PLAN

SCH No. 2013072023

PREPARED FOR  
Bellinger Foster Steinmetz

August 30, 2013

EMC PLANNING GROUP INC.  
A LAND USE PLANNING & DESIGN FIRM



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Draft Final Initial Study/Mitigated Negative Declaration  
Comments and Responses

SCH No. 2013072023

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# INITIAL STUDY

## Environmental Evaluation Checklist for County of Santa Clara

### A. BACKGROUND

Project Title	Calero County Park Trails Master Plan	Date	August 30, 2013
File Number	Not applicable		
APN(s)	70833001; 70833005-007; 70847015; 71217014; 71217017; 71217020; 71217021; 71217026; 71217027; 74202012; 74205015; 74206032; 74208031; 74208033; 74208057; 74208058; 74209007; 74209036; 74209037; 74209038; 74209039; 74209040; 74209041; 74209042; 74209043; 74209046; 74209049; 74209050; 74210003; 74210013; 74210015; 74210017; 74210018; 74210019; 74210020; 74210021; 74210022; 74212007; 74212009; 74213008; 74213009; 74213011; 74233003		
City Zoning	R-1-1	City General Plan Designation	Open Hillside
County Zoning	A; A H: A HS-sr	County General Plan Designation	Regional Park, Existing
Project Type	Trails Master Plan	USA (if any)	Outside of USA
Lead Agency Name and Address	County of Santa Clara 298 Garden Hill Drive, Los Gatos, CA 95032-7669		
Applicant Name and Address	County of Santa Clara, Parks and Recreation Department 298 Garden Hill Drive, Los Gatos, CA 95032-7669		
Owner Name and Address	Same as above		
Telephone	408-355-2200		
Project Location	Calero County Park consists of approximately 4,442 acres of land located partially within the City of San Jose and partially in unincorporated Santa Clara County approximately 10 miles south of the city center and outside the urban services area. The main entrance to the park is located at 23205 McKean Road, approximately three miles southwest of U.S. Highway 101. <a href="#">Figure 1</a> and <a href="#">Figure 2</a> illustrate the project location.		

## PROJECT DESCRIPTION

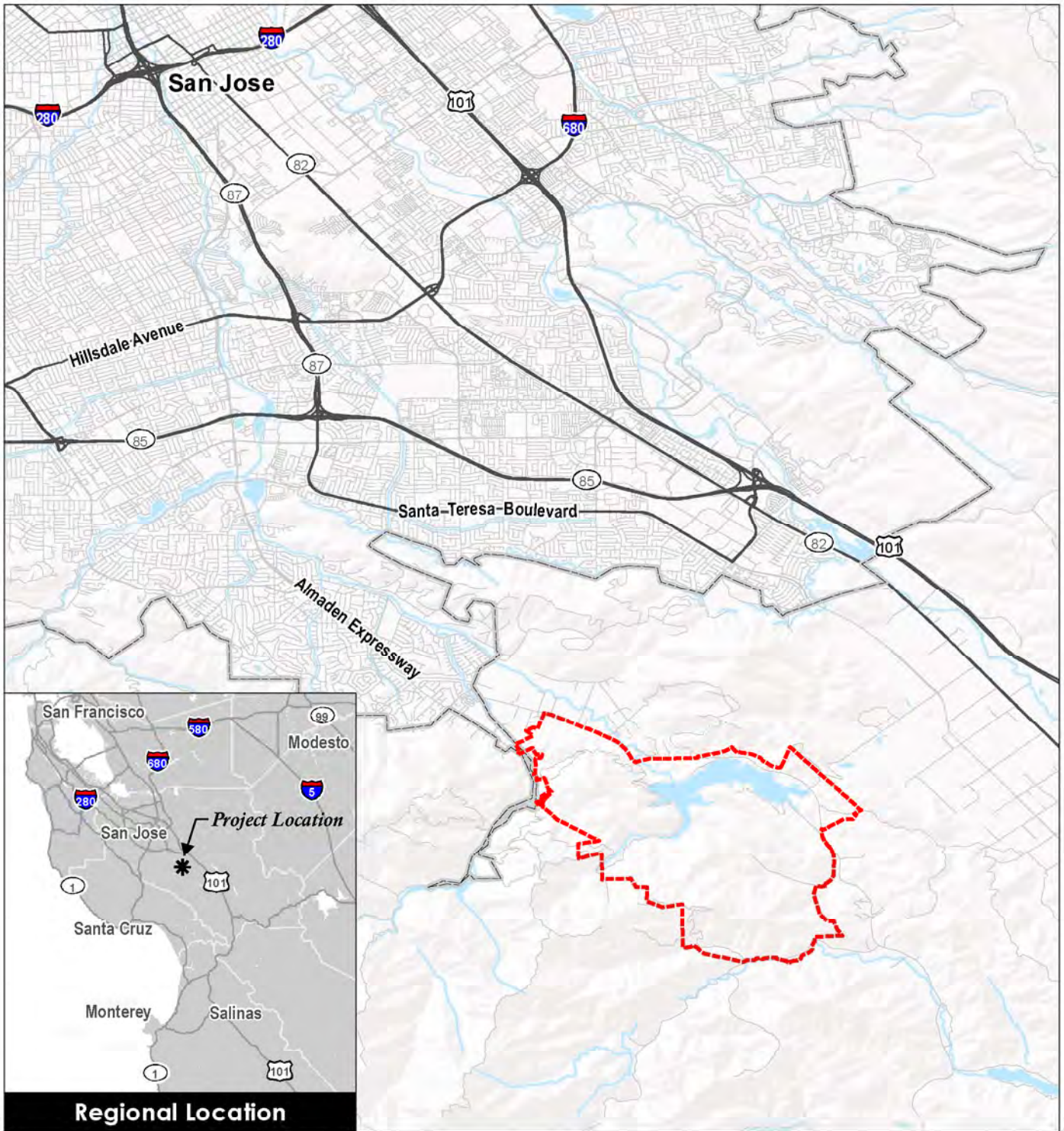
### *Project Summary*

The proposed Draft Calero County Park Trails Master Plan (Trails Master Plan) provides a framework for expansion of the existing park trail system into a multi-use trail network over 10-year time period, while supporting protection and enhancement of the sensitive cultural and environmental resources within the park. The proposed Trails Master Plan will:



- Allow 966 acres of newly acquired areas in the park to be opened for recreational trail use;
- Expand the existing trail system by approximately 14.7 miles to 35.9 miles at build-out;
- Designate 26.6 miles of trails as multi-use, to be shared by hikers, bicyclists and equestrians;
- Retain 7.5 miles of trails as limited use for equestrian and hiking only;
- Designate 1.8 miles of trails as hiking only;
- Remove 4.9 miles of existing service road and trails and restore to native landscape;
- Remove dogs on-leash restriction on most trails in the park;
- Upgrade existing in-stream creek channel crossings with bridges spanning the creek/drainage ways or other crossing techniques to minimize in-channel hiking, bicycle, and equestrian water quality disturbance;
- Expand existing trail head staging facilities at Calero Park Ranger Station;
- Create new trail head staging facility off McKean Road;
- Create new trail head staging facility off Almaden Road;
- Install new fences, gates, signage, picnic and rest facilities and pet waste stations; and
- Install surface drainage facilities at new and existing trail head facilities that will maintain or improve storm water quality.

As outlined above, the Trails Master Plan nearly doubles the mileage of the existing trail system. Equestrians and hikers currently use approximately 20 miles of trails. At final build-out, the expanded Calero County Park's trail system will have grown to approximately 36 miles and will offer many trails for walkers with dogs on-leash and mountain bikers while still retaining historic, limited trail use for equestrians and hikers on some trails. In addition, the Trails Master Plan will provide regional trail connections as identified in the *Santa Clara County Countywide Trails Master Plan* (1995).

A complete version of the Calero County Park Trails Master Plan is available to view and download at the Santa Clara County Parks Department website: [www.parkhere.org](http://www.parkhere.org).



**Legend**

 Project Boundary  Urban Area



Source: Santa Clara County 2012, ESRI 2009

Figure 1  
Location Map



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**Legend**

- Project Boundary
- Water Course

Source: Santa Clara County 2012, Google Earth 2011, ESRI 2009



Figure 2  
**Aerial Photograph**

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## **Project Goals**

The objective of the Trails Master Plan is to implement the directive established by the *Santa Clara County Parks and Recreation System's Strategic Plan (2003)* to "identify opportunities to increase multiple-use trails and to ensure consistency with the Countywide Trails Master Plan and Strategic Plan." As such, the stated goals of the Trails Master Plan are as follows:

- Ensure consistency with 2003 Strategic Plan for the Santa Clara County Parks and Recreation System to "identify opportunities to increase multiple-use trails;"
- Ensure consistency with 1995 Countywide Trails Master Plan Update to identify routes for proposed regional trails through and adjacent to Calero County Park;
- Comply with natural resource management goals and practices, including managed grazing, as were established in relevant natural resource and grazing management plans for the park;
- Comply with the *Final Santa Clara Valley Habitat Plan (2012)* (Valley Habitat Plan) requirements for defined habitat areas in Calero County Park, including the Rancho San Vicente addition;
- Incorporate site-appropriate standards and guidelines for trail design, construction and maintenance, staging areas and access points, and trail related amenities such as signage, shade, seating, water, restrooms, etc.;
- Evaluate existing trails relative to natural resources, operations needs, and maintenance considerations. Re-route trails where necessary to assure long-term sustainability;
- Evaluate opportunities for new trails to expand the variety of trail user experiences and to meet other functional park operations needs;
- Integrate with long range use and management goals of the Santa Clara Valley Water District, the City of San Jose, and the Open Space Authority for lands under their jurisdiction in or adjacent to Calero County Park;
- Identify partnership opportunities with adjacent landowners and other agencies to implement the Trails Master Plan; and
- Consider implications of the Trails Master Plan recommendations in relation to existing and future operations and maintenance resources.

## **New Trail User Groups**

Currently Calero County Park trails are open to equestrians and hikers only, with one trail also open to horses with carts. Implementation of the Trails Master Plan will add new user groups to Calero County Park trails including people with dogs on-leash, bicyclists, and those on approved mobility devices.

Equestrian/hiking only trails will be maintained in what is considered the central core of Calero County Park i.e., areas of the park acquired prior to 1989, while expanding its user group to include dogs on-leash. All other trails will either be converted to multi-use, reconstructed to accommodate multi-use, or be new trails designed and constructed as multi-use. Two trails have been designated for pedestrian use



only, one due to steep terrain and the other to protect sensitive serpentine habitat. See [Figure 3, Proposed Trails Map](#).

In accordance with County policy, all parks are open to dogs on-leash, except where special circumstances necessitate otherwise. However, to accommodate Open Space Authority policies which prohibit dogs on Open Space Authority preserves, trails on the south side of the park that lead to Open Space Authority facilities or connect to Open Space Authority trails will not allow dogs on-leash.

## ***New Uses on Trails***

The proposed Trails Master Plan identifies several new or enhanced uses of the park trails. These uses include implementation of a “Healthy Trails Program” in coordination with local health providers, Geocaching (an activity that involves the use of GPS devices to locate storage boxes hidden along trails in the shortest time possible), guided nature walks, and electronic mapping (use of smart phones and other electronic devices to guide users through the park).

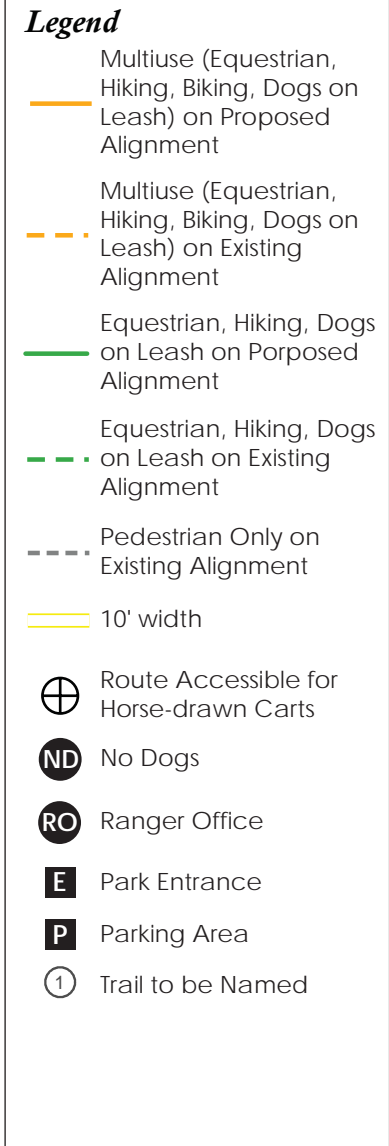
## ***Proposed Trails***

As described in the Calero County Parks Trails Master Plan, the majority of proposed trails follow existing trail or road alignments. New trails provide users with a variety of experiences and access to new areas of the park, complete loops for specific user groups, or connect to neighboring parks and regional trails. Proposed trails are identified on [Figure 3](#), presented earlier. [Table 1, Proposed Trails](#), summarizes details about each of the 14 trails and [Table 2, Trail Mileage and Summaries](#), provides a summary of trail mileage.

New multi-purpose and equestrian trails will be natural soils, compacted and sloped for drainage. Gravel or crushed fines reinforcement and stabilization may be required in some locations. Trail bed and trailside drainage will direct water off the trail to stabilized slopes, channels and outfalls. If necessary, a boardwalk or metal grating will be included to protect serpentine habitat areas above the radio tower, and turnpikes or rock causeways within permanent or seasonally wet areas. Bridges may be installed over creeks and drainage ways with supports outside the channels, or other crossing techniques. Trail widths will vary from four to six feet to six to 12 feet. See [Figure 4, Limited Use Trail Design](#), and [Figure 5, Shared-Use Trails](#).

## ***Regional Trail Connectivity***

Calero County Park is situated between two large Santa Clara County parks: Almaden-Quicksilver and Santa Teresa. It is also adjacent to other agency open spaces. As such, Calero County Park is key to providing regional connectivity between area parks and open space.



Source: Draft Calero County Park Trails Master Plan, Bellinger Foster Steimetz 2013



Figure 3  
Calero County Park Trail Map

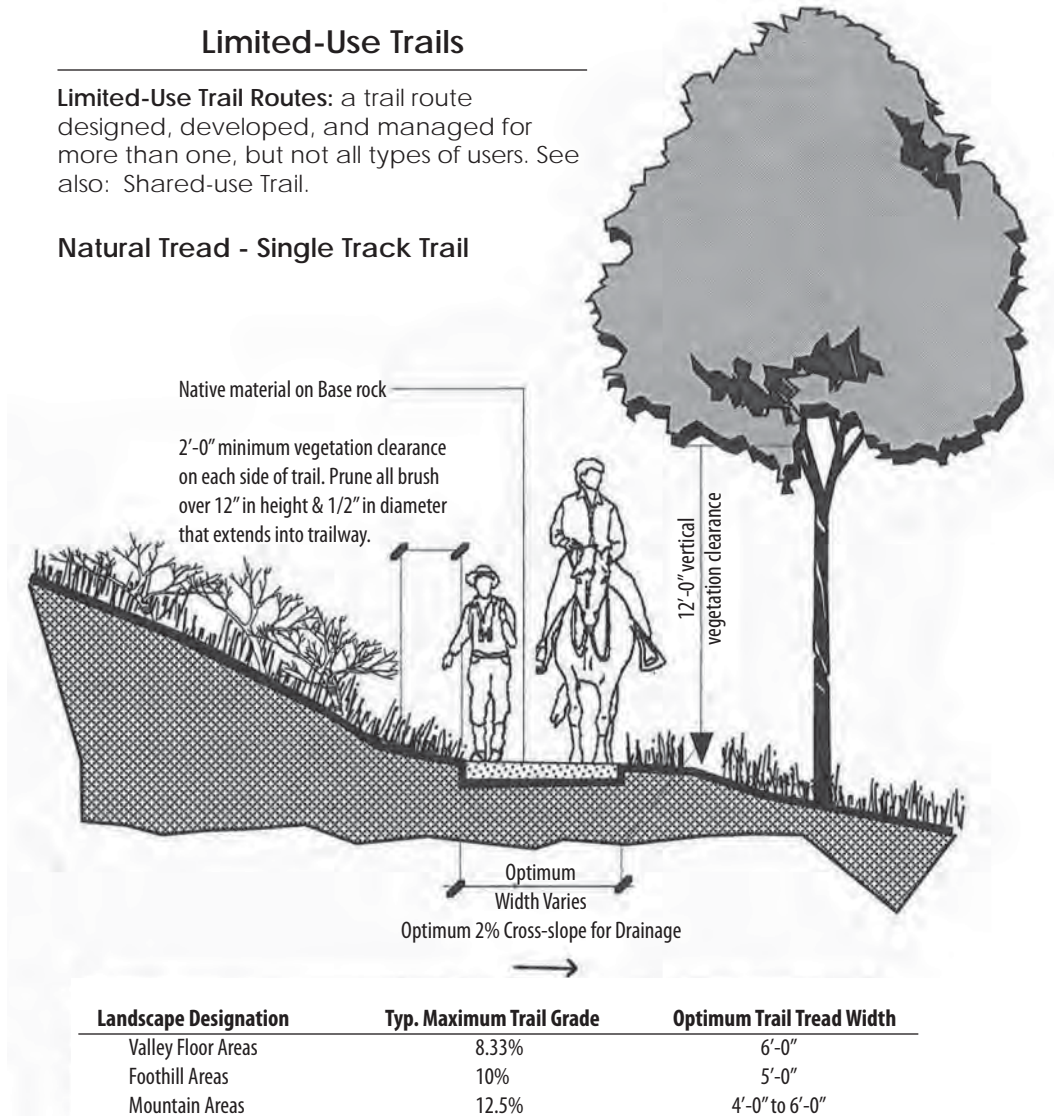
Draft Calero County Park Trails Master Plan Initial Study

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## Limited-Use Trails

**Limited-Use Trail Routes:** a trail route designed, developed, and managed for more than one, but not all types of users. See also: Shared-use Trail.

### Natural Tread - Single Track Trail



**Notes:**

- "Optimum:" the best or most favorable conditions for a particular trail situation from the perspective of responsible management.
- Should a situation be encountered where the optimum width indicated can not be achieved or a staged development approach is used where narrower trails precedes the optimum buildout width, mitigation measures should be used to provide for trail user safety. Such measures could include, but are not limited to: brush removal and clearing to augment lines-of-sight, trail pullouts at regular intervals, one-way trail management, signage, or dismounting requirements.

Source: Draft Calero County Park Trails Master Plan, Bellinger Foster Steinmetz 2013

Figure 4

## Limited-Use Trail Design

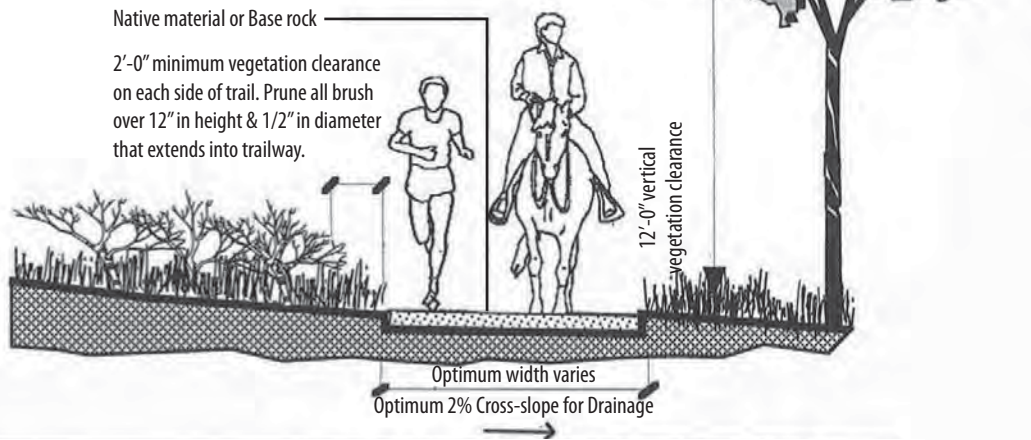
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## Shared-Use Trails

**Shared-Use Trail Routes:** a trail route designed, developed, and managed for all types of users. Use would be accommodated either on one Shared-Use Trail, or a combination of parallel Limited-Use and/or Single-Purpose Trails.

### Natural Tread - Double Track Trail Equestrians, Hikers, & Bicycles



Landscape Designation	Typ. Maximum Trail Grade	Average Terrain Slope	Optimum Trail Tread Width
Valley Floor Areas	8.33%	0-15%	12'-0"
		16-30%	12'-0"
		>30%	N/A
Foothill Areas	10%	0-15%	12'-0"
		16-30%	10'-0"
		>30%	8'-0"
Mountain Areas	12.5%	0-15%	6'-0"***
		16-30%	6'-0"***
		>30%	4'-0" to 6'-0"

#### Notes:

- For trails typically outside of Urban Service Areas as shown on the County General Plan Land Use Map.
- "Optimum:" the best or most favorable conditions for a particular trail situation from the perspective of responsible management.

\*\*\*Should a situation be encountered where the optimum width indicated can not be achieved or a staged development approach is used where narrower trails precedes the optimum buildout width, mitigation measures should be used to provide for trail user safety. Such measures could include, but are not limited to: brush removal and clearing to augment lines-of-sight, trail pullouts at regular intervals, one-way trail management, signage, or dismounting requirements.

Source: Draft Calero County Park Trails Master Plan, Bellinger Foster Steinmetz 2013

Figure 5

## Shared-Use Trail Design

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**Table 1 Proposed Trails**

<b>Trail #</b>	<b>Trail Name</b>	<b>User Type</b>	<b>Width</b>	<b>Description</b>	<b>Regional Connection</b>	<b>Special Features</b>
1	TBD**	Multi-use	4'-6'	Links McKean Road Staging Area to Almaden Road Staging Area	C18	Bridge crossing Alamitos Creek
2	TBD**	Multi-use	4'-6'	From Almaden Road Staging Area to Trail #5	C18	
3	TBD**	Pedestrian	4'-6'	From Trail #5 to radio tower		Use of boardwalk or metal grating to protect serpentine habitat
4	TBD**	Multi-use	4'-6'	From Bertram Road trail entrance to Trail #5		Upgraded bridge across Alamitos Creek required
5	TBD**	Multi-use	Both 4'-6' and 10' sections	Links McKean Road Staging Area to Cottle Trail and Cherry Cove Trail. Some alignment adjustments needed away from existing ranch road and existing seeps	C18	Part of trail to be narrowed from road width to trail width
6	TBD**	Multi-use	10'	Creates loop with Cottle Trail and Trail #5		
7	TBD**	Equestrian/ Hiking	4'-6'	Connects from Javelina Loop to Chisnantuk Peak Trail		
-	Chisnantuk Peak Trail	Multi-use	4'-6'	Chisnantuk Trail topography and alignment adjustment	C18	
-	Serpentine Loop Trail	Multi-use	Both 4'-6' and 10' sections	Trail realignment to avoid erodible soils and flooding		See discussion of erodable soils in the Geology and Soils section of this Initial Study

Trail #	Trail Name	User Type	Width	Description	Regional Connection	Special Features
8	TBD**	Multi-use	4'-6'	From Ranger Station to Bald Peaks Trail	C18	Crosses Figueroa Trail at existing stream crossing
9	TBD**	Equestrian/ Hiking	4'-6'	Pena Trail reroute from Ranger Station to Figueroa Trail to avoid steep slopes and erodible soils		
10	TBD**	Multi-use	4'-6'	From Ranger Station to Javelina Loop along southern edge of reservoir		Requires construction of several small bridges over drainages
11	TBD**	Multi-use	4'-6'	From Trail #13 east to park property line along existing road		Requires crossing of McKean Road
12	TBD**	Multi-use	4'-6'	From Trail #13 north to park property line	C19	Requires crossing of McKean Road
13	TBD**	Multi-use	4'-6'	From Ranger Station along northern side of Calero Reservoir to Cherry Cove Trail	S6	Requires construction of several small bridges or culverts
14	TBD**	Multi-use	4'-6'	Along McKean Road from Cherry Cove Trail to McKean Staging area	S6	

**Source:** Draft Calero County Park Trail Master Plan (May 2013), pages 43-44.

**Notes:** \*Named trails are not numbered; \*\*To Be Determined

**Table 2 Trail Mileage Summaries**

<b>Trail Mileage by User</b>				
	Multi-Use A	Multi-Use B		
Equestrian, Hiking, Dogs on-leash 7.5	(Equestrian, Hiking, Biking, Dogs on-leash) 23.8	(Equestrian, Hiking, Biking, No Dogs) 2.8	Pedestrian Only 1.8	Total 35.9
<b>Trail Mileage by Width</b>				
Single Track (4'-6') 22.8	Drivable (10'-12') 13.1			Total 35.9
<b>Trail Mileage by Type</b>				
Existing 21.2	Proposed 14.7	Abandoned/ Restored* -4.9		Total 35.9

**Source:** Proposed Calero County Park Trail Master Plan (May 2013), page 45.

**Notes:** \*Abandoned / Restored Trail lengths are not included in total trail mileage

The *Santa Clara County Countywide Trails Master Plan Update* (1995), which is an element of the County's General Plan, establishes the general routes through which the regional connections are to be made. The following routes which connect to, or transect, Calero County Park are accommodated in the Trails Master Plan:

- West Valley Trail (S6): From Almaden Lake Park to the southern county link of the Bay Area Ridge Trail;
- Guadalupe / Calero Trail (C18): Connecting Guadalupe Reservoir and Almaden-Quicksilver County Park with Calero County Park;
- Calero / Santa Teresa Trail (C19): Connecting McKean Road / Calero County Park with Santa Teresa County Park; and
- Bailey Road Trail (C20): Connecting Calero County Park with the Juan Bautista de Anza National Historic Trail and the Bay Area Ridge Trail.

These trails are illustrated on [Figure 6, Regional Connectivity Plan](#).

## ***Trails to Abandon and Restore***

Some existing park trails have proven difficult to maintain due to erosion, topography, or hydrologic activity and are classified for abandonment and restoration. Additional trails in the Rancho San Vicente portion of the park will be rerouted to protect environmentally sensitive areas and to avoid seepage areas.

As identified in the proposed Trails Master Plan, where trails are planned for closure, the trail will be eliminated from view as much as possible, and replanted to a natural condition. Compacted ground will be scarified and aerated to aid natural seeding and restoration. To facilitate re-growth and to blend with the Calero County Park Trails Master Plan

Final Initial Study/Mitigated Negative Declaration

natural topography, it may be necessary to re-grade heavily eroded areas. Areas will be replanted with native materials in support of park habitat values. Where existing trail widths exceed proposed width, width reduction will follow procedures established in the *Santa Clara County Parks Trails Maintenance Manual* (County of Santa Clara 2005). Trails to be abandoned and restored are illustrated on [Figure 7, Existing Trails to be Abandoned](#).

## ***Future Trails for Consideration and Additional Study***

The Parks Master Plan has identified several possible future trail alignments including the following:

- A trail connection between boat launch ramp and Cherry Cove Trail;
- A trail between Rancho San Vicente Trail and western end of Cottle Trail;
- A trail between Bertram Road and the Almaden Calero Canal Trail; and
- A trail to connect to Coyote Valley Open Space Preserve.

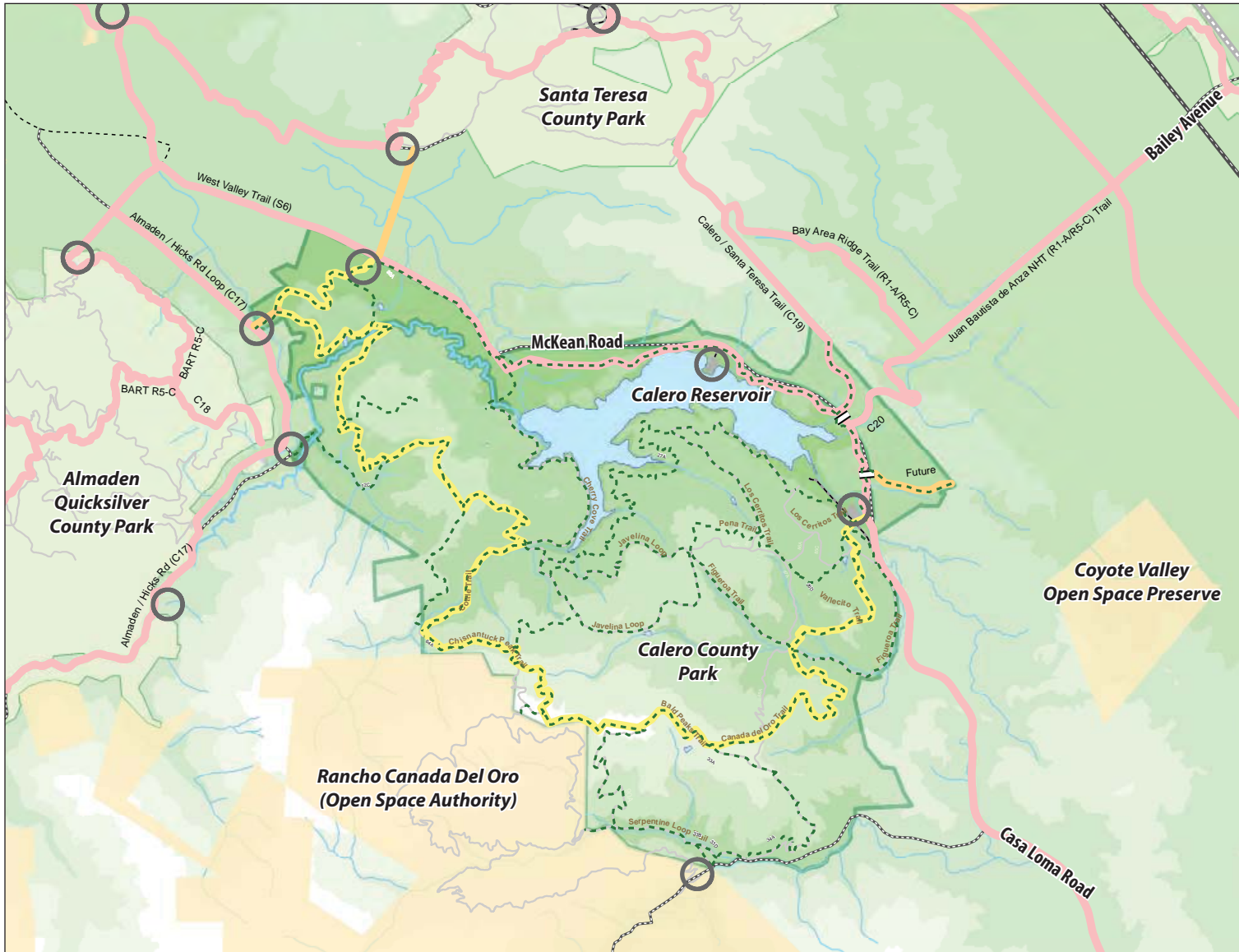
While these areas have been identified for continued study and coordination, specific trail alignments are not currently proposed as part of the Calero County Parks Trail Master Plan. Therefore, these alignments are not evaluated within this Initial Study.

## ***Staging Areas***

There are four existing and two proposed staging areas included in the Trails Master Plan. The location of each of the staging areas is identified on [Figure 3](#) (presented earlier) and is described below.

### **Ranger Station**

The existing Ranger Station staging area is currently the primary access point to park trails for equestrians, and will likely continue to be so at final buildout of the Trails Master Plan. The existing informal equestrian staging area will be structured into eighteen trailer parking spaces and seventy-five new car spaces. To be in compliance with the Valley Habitat Plan, the staging area will be modified to keep parking out of the 150' stream buffer and will organize parking through the use of planting islands. Staging for equestrians is sized to accommodate horse trailers which can carry up to six horses, and a corral will facilitate temporary holding of animals near the trailhead. Parking for new user groups (bicycles and dogs on-leash) will be provided to the southeast of the existing staging area. All parking surfaces will be an all weather aggregate surface on a compacted rock base. Surface storm water will be directed to swales for on site infiltration. Due to storm water contact with horse manure, storm water may be directed to a storm water detention pond. A new 1.5-acre special events and overflow parking area is proposed on the southwest side of the entrance road. This area will remain a grass surface with no improvements. A portable restroom will be removed and a new restroom building will be constructed with a leach field or pump vault for waste treatment. A picnic area will be located near the trailhead. See [Figure 8, Ranger Station Staging Area](#), for a detail map describing the conceptual design for this staging area.



**Legend**

- Calero County Park Trails**
- - - Proposed & Existing Trails
- Regional Trails\***
- Countywide Trails Master Plan Routes
- Implementation of CWTMP C18
- Future Trail Route
- Staging Area

\*Santa Clara County Countywide Trails Master Plan (1995)



Source: Draft Calero County Park Trails Master Plan, Bellinger Foster Steimetz 2013

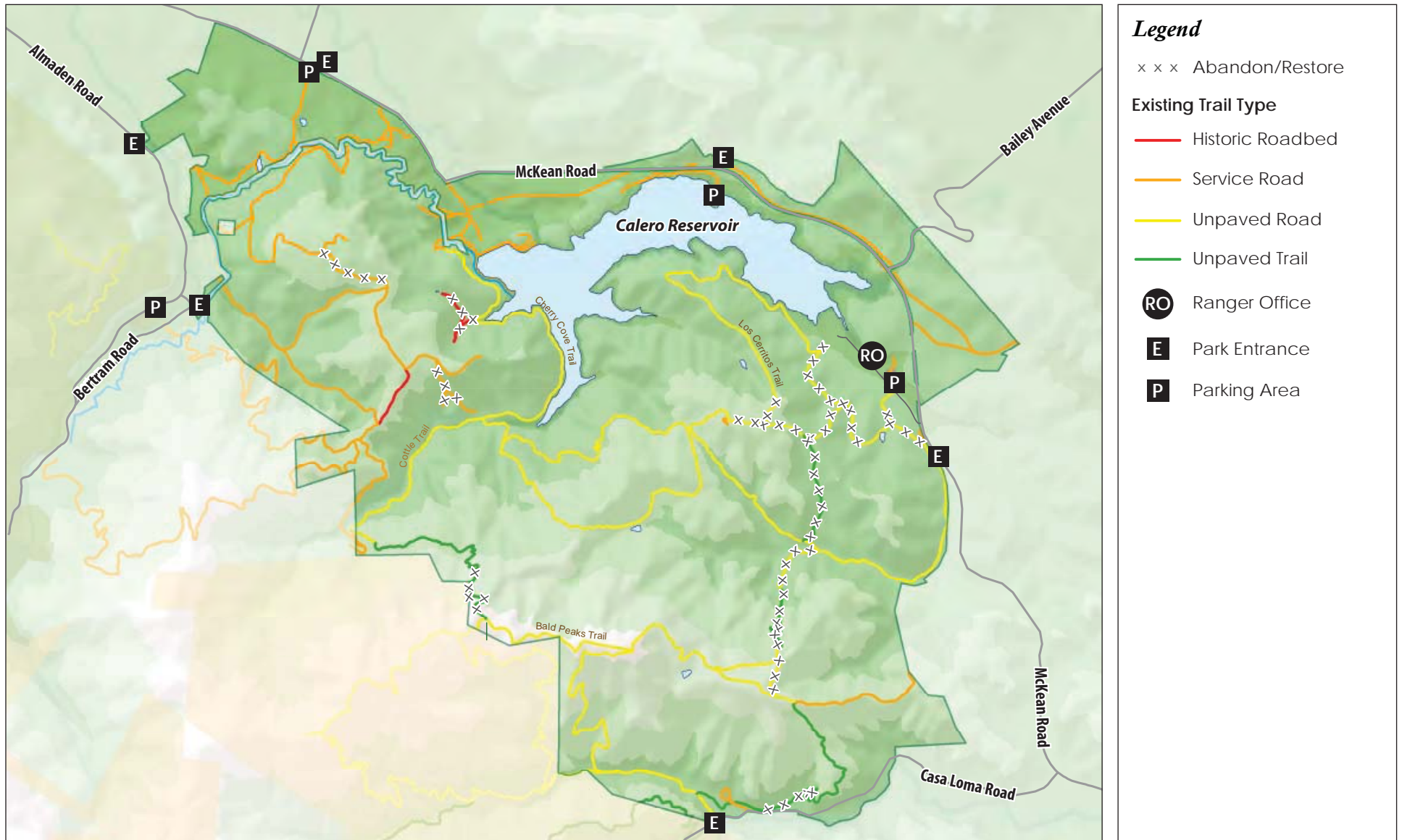


Figure 6  
**Regional Connectivity Plan**

Draft Calero County Park Trails Master Plan Initial Study

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Source: Draft Calero County Park Trails Master Plan, Bellinger Foster Steimetz 2013




Figure 7  
Existing Trails to be Abandoned

Draft Calero County Park Trails Master Plan Initial Study

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 not to scale

Source: Draft Calero County Park Trails Master Plan, Bellinger Foster Steimetz 2013





Figure 8  
**Ranger Station Staging Area**

Draft Calero County Park Trails Master Plan Initial Study

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## **Casa Loma Road**

Access to the park off Casa Loma Road will be facilitated using the existing Open Space Authority staging area. A small picnic area is proposed in the meadow east of the Serpentine Loop trailhead. Signage will include dog access limitations between Open Space Authority facilities and Calero County Park.

## **Boat Launch**

Minor adjustments will be made to the existing site to accommodate and regulate access to new park trails. Equestrian staging will not be permitted at this location.

## **Bertram Road**

Necessary site improvements will be provided to this existing site to allow local walk-bike-ride in access. No parking is currently provided or will be provided with implementation of the Trails Master Plan.

## **Rancho San Vicente**

The proposed Rancho San Vicente staging area will provide a new park entrance off McKean Road and accommodate public access with multiuse trails to a portion of the park that is currently closed to the public. It will also preserve service access for the existing cattle grazing operation, the Almaden Calero Canal (operated by the Santa Clara Valley Water District), and the radio tower leasehold.

Features of the Rancho San Vicente staging area include identifiable signage, paybooth, gates, and provisions for hikers, picnic use and equestrians. The new 30-foot wide asphalt entry road will be aligned with Fortini Road, on the north side of McKean Road. The entry road will be gated, restricting access from dawn to dusk. Fifteen “early bird” spaces will accommodate off-hours visitors. Seventy-five regular parking and 25 trailer spaces will accommodate regular park hour use with additional fenced turnout/parking overflow space. The staging area will include picnic area and restrooms that will support up to 125 park visitors at any one time. Proposed features for the equestrian area include a corral or turnout area, mounting block, hitch rail and watering trough. See [Figure 9, Rancho San Vicente Staging Area](#), for a detail map describing the conceptual design for this staging area.

All parking areas will be on an aggregate surface on compacted rock base. Surface storm water will be directed to swales for on site infiltration. Due to storm water contact with horse manure, contact storm water may be directed to a storm water detention pond. The restroom will be either leach field or pumped vault for waste treatment. Maintenance of the equestrian area will include manure management, stormwater management, and upkeep of water troughs and other structure.

New trails will be routed to the staging area as shown on [Figure 3](#), presented earlier. At final build-out, connections to regional trails, Almaden Quicksilver Park and Santa Teresa Park are envisioned from this staging area.

## **Almaden Road**

A small staging area is proposed off Almaden Road, with parking, picnic area and trailhead access to Rancho San Vicente. An existing bridge over Alamitos Creek will require upgrades prior to use.

## ***Additional Park Elements***

Signage, fencing and gates are necessary elements of Calero County Park in guiding users and establishing park character. Signage is an important early implementation feature of the Trail Master Plan and critical to effective user way-finding. To maintain visual consistency, the Trails Master Plan directs the new directional signage to follow Santa Clara County signage standards and sign characteristics developed for Calero County Park. In addition, all signs will be easily visible, and not create user hazards or interferences.

The Trails Master Plan states the material and style of fencing will either support the park character or be practical in nature. As such, split-rail fencing should be used near staging areas and trail heads and wire-fencing will be used for cattle control.

Where trails are slated for closure, strategically placed natural debris or fencing and educational signage may be necessary to keep users out of re-vegetation areas. In areas of sensitive habitat, inconspicuous fencing such as cable rail may be provided to protect species. Lockable vehicular gates are needed to secure entry into the park and to prevent unauthorized vehicle access and use on trails. Self-closing gates are appropriate where grazing cattle need to be contained while allowing users onto trails within grazing zones.

## ***Best Management Practices***

The *Santa Clara County Countywide Trails Master Plan Update*, adopted by the County Board of Supervisors in 1995, and the *Santa Clara County Parks Trail Maintenance Manual* (County of Santa Clara 2005) establish the County Parks Departments best management practices for trail siting, trail construction, and trail maintenance that will be used to avoid or reduce impacts to natural resources and to sensitive receptors. The Calero County Park Trails Master Plan includes Best Management Practices (BMPs) identified these two documents. In addition, the Trails Master Plan identifies several other project-specific BMPs related to air quality, biology, geology, hydrology, stormwater, and removal/restoration to ensure environmental effects are minimized. Refer to the corresponding environmental issue area of Section D. Environmental Checklist and Discussion of Impacts for identification of specific proposed BMPs that address potential environmental concerns.

## ***Santa Clara Valley Habitat Plan Requirements***

Calero County Park is located within the permit area of the Valley Habitat Plan and identified as a “covered activity” under the Valley Habitat Plan. As such, the proposed Trails Master Plan project would be subject to the conditions of the approved Valley Habitat Plan and permits. Compliance with the Valley Habitat Plan is identified as a goal of the Trails Master Plan (see the Project Goals, presented earlier) and Valley Habitat Plan requirements and guidelines for the development of new trails, staging areas and recreational facilities within future parklands that would be enrolled in reserve system are incorporated into the proposed Trails Master Plan (see Chapter 3 of the Trails Master Plan).



not to scale

Source: Draft Calero County Park Trails Master Plan, Bellinger Foster Steimetz 2013



Figure 9  
**Rancho San Vicente Staging Area**

Draft Calero County Park Trails Master Plan Initial Study

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## Implementation

The proposed Trails Master Plan will be implemented incrementally over a 10-year period. Three concurrent implementation strategies are proposed including Strategy #1: Sequential implementation of major Master Trails Plan routes; Strategy #2: Ongoing improvements to existing trails and habitat as identified in the Trails Master Plan; and Strategy #3: Long range projects, which focuses on trail segments that require major capital improvements such as bridge crossings and property acquisition that may require additional environmental review as projects are further defined.

The proposed construction phasing with simultaneous implementation approaches to facilitate new user groups and access to Rancho San Vicente early in the process is outlined below in [Table 3](#) and illustrated in [Figure 10, Trail Phasing Plan](#). It should be noted that while the phasing plan provides general direction for implementation, actual timing will be dependent on factors such as staff resources and available funding.

**Table 3 Phasing Timeline**

Implementation Strategy	Purpose	Implementation Years									
		1	2	3	4	5	6	7	8	9	10
<b>Strategy #1</b> <i>Sequential Implementation of major Trails Plan routes</i>	Create trails in Calero County Park to open new areas of park and convert existing trails that connect to Open Space Authority trails to multi-use										
	Create new multi-use lakeside trail and increase internal loop trail options for all users										
	Complete additional new trail connections to further complete plan										
<b>Strategy #2</b> <i>Ongoing improvements to existing trails and habitat</i>	Upgrade existing trails to reduce seasonal closures, improve user experience, and enhance resource protection										
	Restore to native habitat those trails that are no longer used or that have been rerouted		x	x	x	x	x	x	x	x	
<b>Strategy #3</b> <i>Long Range projects</i>	Implement trail segments that need additional major design, infrastructure or acquisition										

**Source:** Draft Calero County Park Trail Master Plan (May 2013), page 72.

**Note:** Colors in timeline correspond to trail colors on Figure 10, Trail Phasing Plan.

## Operations and Maintenance

Santa Clara County Parks currently maintains almost 300 miles of trails, distributed over 29 parks in the County. Guidance for the County Park's primary objectives of trails maintenance activities, standards for tasks to be performed, and staffing priorities are detailed in the County's Trail Maintenance Manual (2005).

Calero County Park is part of a staffing unit that includes Almaden Quicksilver County Park and the Casa Grande complex. Distribution of staff time between the three facilities is on an as-needed basis. With growing demands at Calero County Park and Casa Grande, the shared staff arrangement might need to be revisited in the future.

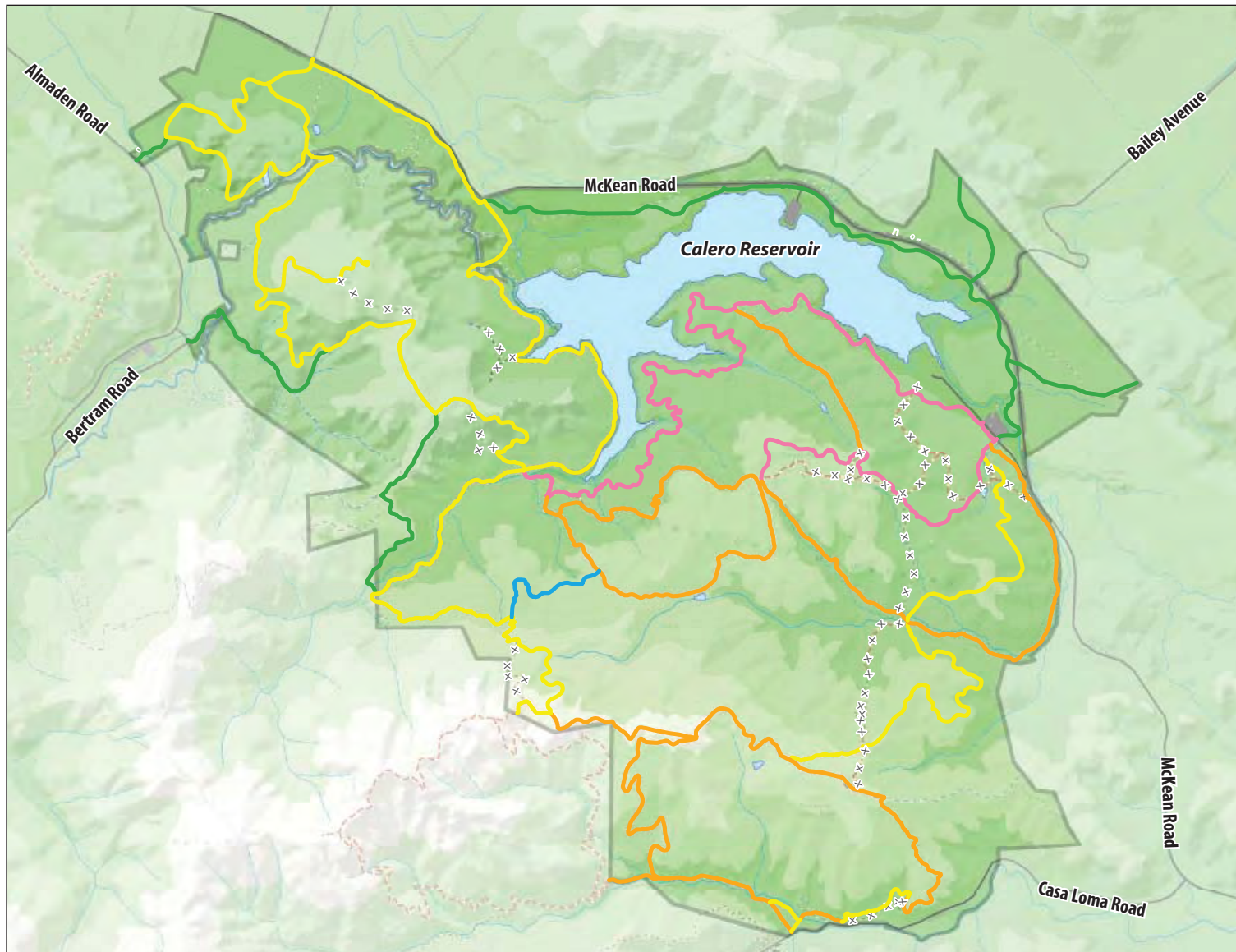
Project operating expenses developed for the Calero County Park trails system only include costs for permanently assigned staff; it does not include seasonal positions, trail construction, or project crews or equipment and supplies. To assist with the staffing needs planning, the following personnel will be necessary: trails construction crew (one trails crew lead, three trails crew staff, up to three equipment operators, as needed); special project crew (one project lead and three project staff), and parks maintenance staff. County parks staff identified the following additional personnel necessary for implementation of the Trails Master Plan as described below in [Table 4](#).

**Table 4** Permanently Assigned Staff Required for Project Operations

Existing Calero Park Operations Staff Positions		Additional Staff needed as a result of full implementation of the Trails Master Plan	
Number of Staff	Position Title	Number of Staff	Position Title
1	Senior Park Ranger		
4	Park Ranger	1	Park Ranger
1	Park Service Attendant		
1	Senior Park Maintenance Worker		
3	Park Maintenance Worker	1	Park Maintenance Worker

**Source:** Draft Calero County Park Trail Master Plan (May 2013), page 77.

As project improvements are being phased over time, park staffing needs will gradually increase before reaching final build-out requirements. Even at full build out, the decision to implement staff increases at Calero County Park will be dependent on a range of factors, including staffing needs of the larger Parks Department, seasonal demand, budgetary constraints, and undefined staffing needs of portions of the park to be enrolled in the Reserve System as a result of the Santa Clara Valley Habitat Plan (ICF International 2012).



**Legend**

- Years 1-5  
New Trails + OSA  
Multi-Use Connection
- Years 5-7  
Multi-Use Lakeside Trail  
+Equestrian Loop
- Years 1-8  
Upgrade Existing Trails
- Years 7-8  
New Trail Connections
- Years 2-9  
x x x Abandoned/Rerouted  
Trails
- Years 1-10+  
Interdivision +  
Interagency  
Improvements



Source: Draft Calero County Park Trails Master Plan, Bellinger Foster Steimetz 2013

Figure 10  
**Trail Phasing Plan**



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## **ENVIRONMENTAL SETTING / SURROUNDING LAND USES**

The 4,442-acre park Calero County Park is situated in the eastern foothills of the Santa Cruz Mountains part of the rolling hill country of Santa Clara County. The proximity to U.S. Highway 101 provides easy regional access from San Jose and communities further south such as Morgan Hill and Gilroy.

The park is between two other large Santa Clara County parks: Almaden-Quicksilver with over 33 miles of trails on 3,977 acres to the west and Santa Teresa with 14 miles of trails on 1,672 acres to the north. Just beyond the western edge of Almaden Quicksilver County Park, is the Mid-peninsula Regional Open Space District's vast 17,000-acre Sierra Azul. Adjacent to Calero Park to the south is the Santa Clara Valley Open Space Authority's 3,882-acre Rancho Canada del Oro Open Space Preserve. The 548-acre Coyote Valley Open Space Preserve (owned by the Santa Clara County Open Space Authority) is located less than a mile to the east.

With the exception of Rancho Cañada del Oro Open Space Preserve on its southwest border, Calero Park is surrounded by private small ranches and rural residences. The Cinnabar Hills Golf Course is adjacent to the southern end of the park east of McKean Road.

Two distinct areas define Calero County Park: the reservoir, which offers a host of water-oriented recreational activities, and the adjoining "back country" which contains a diversity of plant communities and associated wildlife habitats. The recently acquired Rancho San Vicente portion of the park is currently not accessible by the general public and is leased for grazing to a private operator. Specific physical and environmental features of the park are described below.

### ***Existing Park Features***

The Calero County Park system contains approximately 20 miles of trails that are open nearly year-round for hikers and equestrian uses. One trail allows for horse and cart activities, by permit only. The park's rolling terrain and diverse ecological habitats provides users with an opportunity to enjoy a variety of trail experiences, lengths, and degrees of difficulty. Most trails are linked to create loops while others offer a specific destination such as a place or scenic lookout. The majority of trails are aligned on historic ranch roads.

The park abuts the Open Space Authority's portion of Rancho Canada del Oro and is in proximity to Almaden Quicksilver County Park and Santa Teresa County Park. There are current trail connections between Calero County Park and the Rancho Canada del Oro Open Space Preserve. The newly acquired Rancho San Vicente portion of the park currently has no official public access.

Trail width and grades vary greatly throughout the park, ranging from flat to over 20 percent in a few spots and from three feet wide to over 12 feet wide. All trail surfaces are compacted native soil, susceptible to inclement weather impacts that trigger seasonal closure of some trails. A number of trails require significant maintenance due to layout, soil conditions, water seeps, and steep slopes, and may be periodically closed to users.

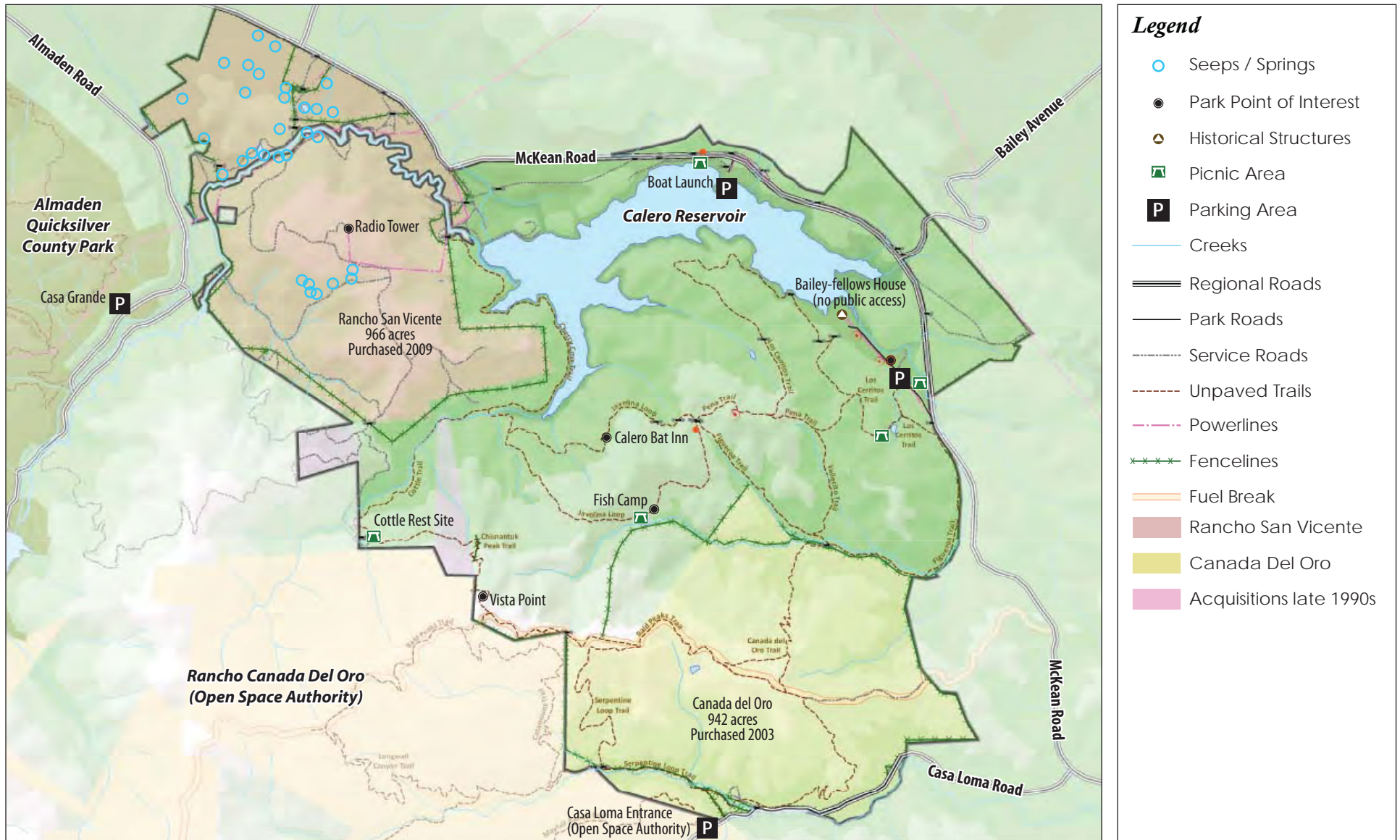
Current trail amenities include parking, equestrian staging area and portable restrooms at one trailhead, picnic areas, interpretive signs, and defined trail markers. Currently, there are no ADA-compliant trails.

The Trails Master Plan identifies the following additional park features:

- Ranger Station/Visitor Center. Located along the main park entry, visitors can register for activities, speak to park rangers, obtain park information, and view displays. Park maintenance activities are staged from the adjoining equipment yard. A portable restroom is located at this area.
- The Calero Reservoir Launch Ramp. This location offers access to many types of water-related activities, including fishing and year-round use by power and non-power water vessels. Picnic areas along its northern shore are available on a first-come first-served basis. A group picnic area is available by reservation.
- Calero Bat Inn. Located along the Javelina Loop Trail, visitors to the Bat Inn can observe the nightly emergence of native bats who hunt over Cherry Cove Creek and Calero Reservoir. It is estimated that thousands of bats use this roosting station.
- Radio Transmission Tower. Located in the middle of the Rancho San Vicente site of Calero Park a radio tower stands tall above Calero Reservoir amidst serpentine outcroppings. Accessed by a gravel ranch road off McKean Road, the site is not open to the public.
- Water Tank. A 100,000 gallon water tank with pump house and propane tank is located along Peña Trail, and stores water for park use and fire suppression.
- Cattle Rest Site. The Cattle rest site along Chisnantuk Peak Trail provides a picnic facility and horse trough.
- Fish Camp and Los Cerritos Pond (formerly grazing stock ponds). These areas offer picnic facilities, and at Fish Camp, a horse trough. Interpretive signs educate visitors and pond life invites nature observation.
- Power Transmission Lines. These lines cross the Rancho San Vicente area at two locations; one large overhead line parallels the Almaden Calero Canal and one smaller line serves the radio tower.

Location of existing trails and features of the park are identified on [Figure 11, Physical Features and Park History](#). [Figure 12, Site Photos](#), provides photos of several of the parks features.





Source: Draft Calero County Park Trails Master Plan, Bellinger Foster Steimetz 2013

Figure 11  
**Physical Features and Property History**

Draft Calero County Park Trails Master Plan Initial Study



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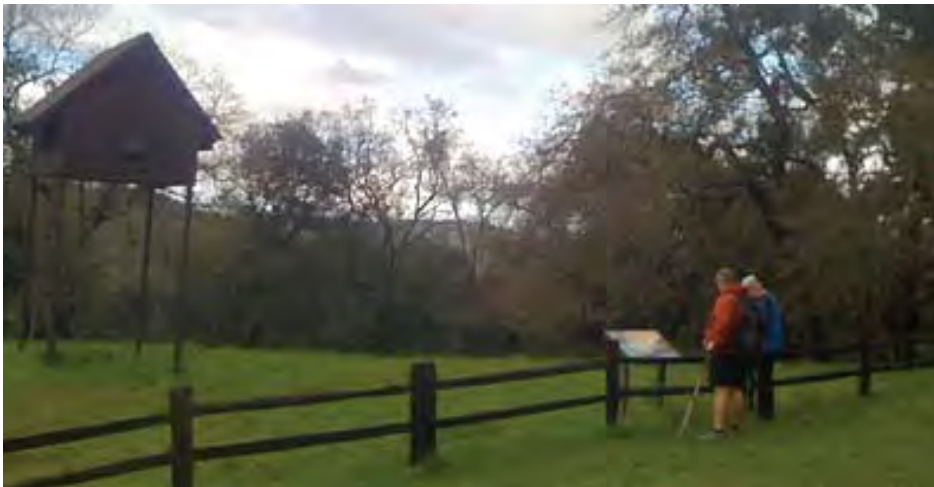




① Los Cerritos Pond/Fish Camp



③ Calero Reservoir



② Calero Batt Inn



④ Calero Park Ranger Station and Visitor Center

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## ***Aesthetics and Visual Resources***

The Draft Calero County Park Trails Master Plan identifies several scenic vistas available to trail users. Along higher elevation trails users can see the Loma Prieta Mountain, Bald Peak, and Mt. Umunhum to the west. Coyote Ridge and Mount Hamilton are visible to the east. Views to the north open upon the Calero Reservoir and the Santa Clara Valley beyond, with views of some of San Jose's residential development approaching from the northwest. From some vista points, the Sierra Azul Mountains to the southwest may be visible. Along the lower elevation trails, intimate views of the varied landscape and habitats are available including oak woodlands, chaparral, grasslands, wetlands, ponds and freshwater marshes.

Under the Regional Parks, Trails, and Scenic Highways Element of the Santa Clara County General Plan, three main park access roads (McKean Road, Bailey Avenue, and Casa Loma Road) are designated as a Scenic Rural Routes.

## ***Air Quality and Climate***

### **Air Quality**

The project site is located within the San Francisco Bay Area Air Basin (Air Basin). Air pollutants of concern in the Air Basin are ozone, particulate matter (PM10 and PM2.5), and toxic air contaminants (TACs). Both the State of California and the federal government have developed ambient air quality standards for the criteria pollutants, which include ozone, CO, NO<sub>2</sub>, SO<sub>2</sub>, and PM10.

Ambient air quality in the project area is monitored by the Bay Area Air Quality Management District (Air District) at eight locations in Santa Clara County. The Air Basin has been unable to meet state standards for ozone and particulate matter, and is considered to be in "non-attainment" (Bay Area Air Quality Management District 2012). Responsibility has been delegated to the Air District to implement both federal and state mandates at the local level for improving air quality in the Air Basin through an air quality plan. The Air District has adopted several plans in an attempt to achieve state and federal air quality standards. The most recent plan is the Bay Area 2010 Clean Air Plan finalized in September 2010.

Sensitive air quality receptors (segments of the population susceptible to adverse effects of poor air quality) near the project site are residences along McKean Road, Casa Loma Road, Almaden Road, and Bertam Road.

### **Climate**

Temperatures at nearby San Jose Airport average 59 degrees Fahrenheit annually, ranging from the low-40s on winter mornings to near 80 degrees Fahrenheit on summer afternoons. Winter, typically referred to as "the rainy season," is characterized by offshore wind flow and occurrence of storms. Weak inversions coupled with moderate winds result in a low air pollution potential. During the summer, cool and moisture-laden air approaching the coast from the Pacific Ocean is further cooled by the presence of the cold water band resulting in condensation and the presence of fog and stratus clouds along the Northern California coast. Wind speeds are greatest in the spring and summer and weakest in the fall and winter. Nighttime

and early morning hours frequently have calm winds in all seasons, while summer afternoons and evenings are quite breezy. Strong winds are rare, associated mostly with winter storms.

## ***Biological Resources***

Calero County Park contains a wide-range of habitats and is considered one of Santa Clara County's most ecologically diverse parks. Land covers, their ecosystem functions, and common wildlife associations are described in detail in the Valley Habitat Plan. The consolidated mapping available from the Valley Habitat Plan was used to depict unified land cover designations for the Calero County Park Master Plan used in the Parks Master Plan. See [Figure 13, Land Cover](#).

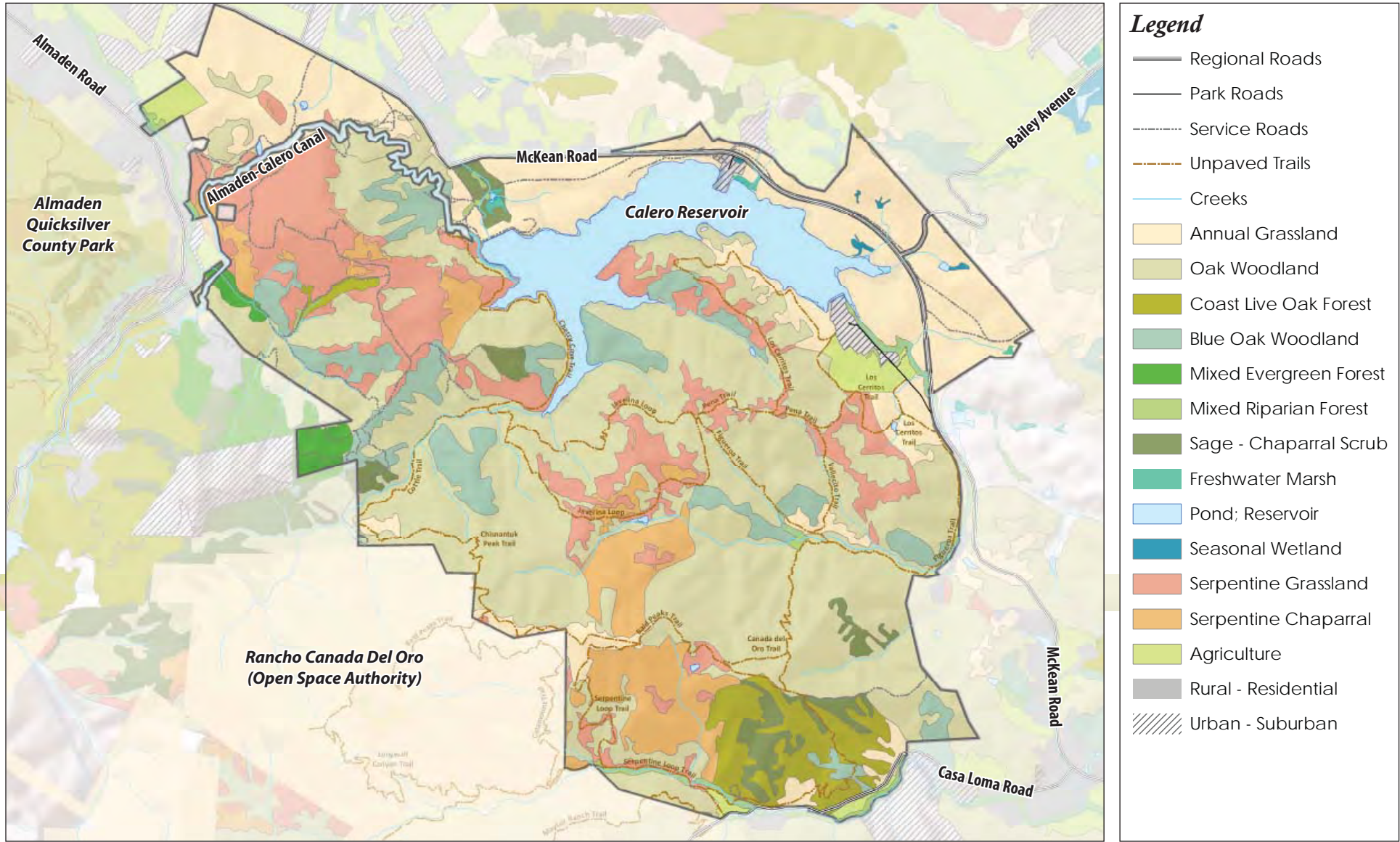
As identified on [Figure 13](#), the most prevalent land cover types are non-native annual grasslands and Coast Live Oak Woodland. Other plant communities include blue oak woodland, valley oak woodland, riparian forest, serpentine grassland and serpentine chaparral, sage-chaparral scrub and seasonal wetland, pond, and freshwater marsh. In particular, land covers associated with serpentine soils are considered sensitive and cover considerable areas of the park. As they contain rare and endangered species habitat, these serpentine areas and their habitats were carefully considered and avoided where feasible in planning new trail routes in Calero County Park.

## ***Cultural and Historic Resources***

The Draft Calero County Park Trails Master Plan identifies the following cultural or historic resources at the park:

- The Bailey-Fellows House and Barns: This is an historic site owned by the Santa Clara Valley Water District that is not open to the public at this time. Park Entrance Gate Pillars are the only remaining structures outside the Bailey-Fellows House that are associated with the recent history of the park before it was purchased by the County. Made of simple brick construction and painted white, they form an iconic entrance feature to the park.
- Casa Loma Barn: The Casa Loma Barn is an historic barn located off of Casa Loma Road and associated with the former Rancho Cañada del Oro. While the actual date of construction is unknown, it is the only remaining building on Calero County Park property associated with the former Rancho Cañada del Oro. At this time the site is not open to the public.
- Archaeological Sites: Before Spanish and Mexican colonization in California, the lands were inhabited by Native Americans associated with several of the Ohlone Indian tribal groups. A number of archeological sites relating to Native American site use exist within Calero County Park and in the surrounding vicinity.
- No known structures associated with the recent habitation of Rancho San Vicente are still in existence. However, remnants of building foundations are located in areas below the Almaden Calero Canal.





Source: Draft Calero County Park Trails Master Plan, Bellinger Foster Steimetz 2013

Figure 13  
Land Cover



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## **Geology and Soils**

### **Geographic Features**

The site has a rugged topography with elevations ranging from approximately 450 feet near the northwest corner of the reservoir to greater than 1,400 feet near the southern edge of the site. Slopes vary from flat (0 percent) to very steep (40 percent and above). Generally the flatter lands are found adjacent to the north and east shores of the reservoir. The majority of ridges in Calero Park run east to west, with the majority of trails following this alignment.

### **Geology**

Calero County Park is located in a region that contains several major fault systems, including the well-known San Andreas Fault, along with many minor fault trace - both active and inactive. The park is located within the southeastern portion of the New Almaden fault block, composed primarily of highly-sheared and jumbled mix of marine sedimentary, volcanic and intrusive igneous rocks of basaltic composition. Several significant geologic units are mapped within the park boundary including: Franciscan mélange, undifferentiated (fm); metamorphosed volcanic rocks of the Franciscan mélange (fpv); metamorphosed basaltic rocks of the Franciscan mélange (fmv); Serpentinized ultra-mafic rocks (Jos); Landslide deposits (Qls); Alluvial deposits (Qal); and Alluvial fan deposits (Qpf). *Draft Calero County Park Trails Master Plan* (May 2013) page 27 based information provided by the Soil Geographic (SSURGO) data base 2010 and summarized in *Geologic and Hydrologic Opportunities and Constraints for Trail Planning*, memo prepared by Balance Hydrologics in 2011.

Several large landslides are mapped in the area south of the western portion of Calero Reservoir, and northwest of the Casa Loma entrance to the park. Pleistocene alluvial fan deposits are present within the northwestern-most corner of the Park. These are unconsolidated, poorly-sorted deposits that have a greater potential for erosion than the bedrock units within the park, but because of the presence of gravel and boulders within the deposits, are not particularly prone to excessive erosion. Geologic Conditions are identified in [Figure 14, Geologic Constraints](#).

### **Soils**

The soils within the park are predominately well-drained, sandy loams to clay with moderate to high slopes. Some areas are more likely than others to be subject to ponding, and/or saturated conditions. These areas are identified on [Figure 14, Geologic Constraints](#). The proposed Trails Master Plan also states that the soil survey information for the site identified that several soils in the park have a particularly high stone content which could make trail construction in these areas more difficult (SSURGO, 2010; Balance Hydrologics, 2011).

### **Seismic Hazards**

The active San Andreas Fault System is located approximately seven miles southwest of Calero Reservoir. The shape of the reservoir and topography of the surrounding area has partially developed as a result of the northwest-trending inactive Calero Fault Zone, which crosses the site.

## **Hydrology**

As identified in the Trails Master Plan, Calero County Park makes up more than 50 percent of the land area within the 6.9-square mile Calero Reservoir watershed. Portions of Rancho San Vicente drain west to Alamitos Creek, which also enters the Guadalupe River. Portions of the former Rancho Cañada del Oro property drain south to Llagas Creek and eventually enter the Pajaro River.

Average annual precipitation within the watershed is 24.5 inches, with a range from 20 - 28 inches. The majority of the park drains into the reservoir and down through Calero Creek to the Guadalupe River.

The northern edge of the park is defined by Calero Reservoir. The reservoir, with a maximum surface area of 347 acres and a 10,054-acre-feet capacity is fed mostly by local runoff, via Cherry Canyon Creek, Calero Creek, and a number of seasonal tributaries. The Almaden Calero supplies some water from the Almaden Reservoir.

In addition to the large reservoir, within the park are several human-made ponds, constructed primarily for cattle grazing operations. Numerous seeps and springs exist in the park and some of these springs are used to support watering troughs for cattle or horses.

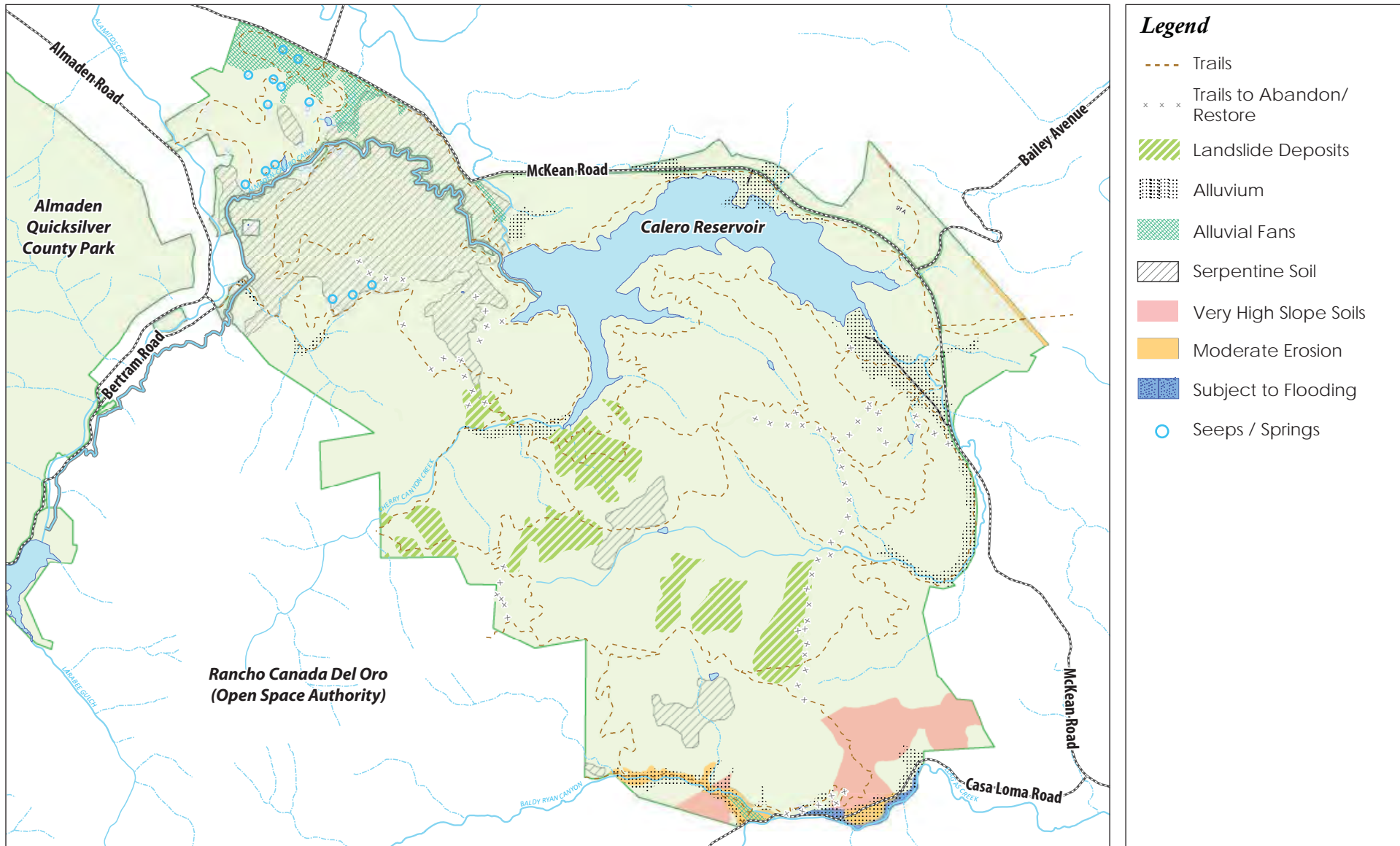
The source of potable water for park facilities is limited to small wells on both Santa Clara Valley Water District and County Parks property. A 100,000 gallon water storage tank is located adjacent to the Pena trail that is used to store water for both park use and limited fire suppression.

## **Land Use**

Much of Calero County Park lies within the limits of the City of San Jose, but is outside the boundary of the City's Urban Service Area. More than a third of Calero County Park is defined by Calero Reservoir and facilities associated with active recreational water use. Calero Reservoir, constructed in 1935, and its surrounding shoreline is owned by the Santa Clara Valley Water District. Recreational use in this area is provided by County Parks through a long-term lease between the two agencies. However the reservoir's primary role is as a source of safe drinking water. The remainder of the park is owned by the County and is primarily used for trails and open space.

Lands within Calero County Park are designated as Open Hillside and zoned for residential use (R-1-1) by the City of San Jose; and designated as Regional Park, Existing and zoned for Exclusive Agriculture, Exclusive Agriculture Hillside, and Exclusive Agriculture Hillside Scenic Road (A, A HS and A HS-SR) by the County of Santa Clara.





Source: Draft Calero County Park Trails Master Plan, Bellinger Foster Steimetz 2013

Figure 14  
**Geologic Constraints**



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Except for the 3,882-acre Rancho Cañada del Oro Open Space Preserve to the south, land surrounding the park is designated as non-urban Open Hillside in the City of San Jose's General Plan and much of the surrounding area is designated as Agriculture in the County of Santa Clara General Plan. The County has designated an area northwest of the park as Rural Residential. Land use surrounding the park is characterized by numerous rural residences and small ranches. As identified earlier, Calero Park is within a mile of two other large County parks and other open space lands.

The County recently acquired the Rancho San Vicente portion of the park, which is leased for grazing to a private operator. A small portion of this land is also leased to another private entity for a radio transmission tower. The Rancho San Vicente portion of the park is also bisected by the Almaden Calero Canal which is owned by the Santa Clara Valley Water District. This concrete-lined canal is part of the Santa Clara Valley Water District's raw water distribution system and transports water from the Almaden Valley Watershed into Calero Reservoir. The canal is not fenced and no public access is allowed along its service road. Above the Almaden Calero Canal, on the western edge of the park, the San Jose Water Company has a 2.8- acre in-holding. Two power transmission lines cross the Rancho San Vicente area. The southwestern portion of Calero County Park, previously part of Cañada del Oro, is slated for grazing operations starting within the next two years.

Between 1985 and 2010, a portion of land north of the ranger office complex, in the vicinity of the Bailey-Fellows House historic complex was in operation as a public boarding stable under a lease agreement with the County of Santa Clara Parks and Recreation Department. The Calero Ranch Stables also offered riding lessons, summer camp, and horses for rent. In 2006, the Santa Clara Valley Water District, owners of the underlying land, determined that Calero Ranch Stables operation was within the 1,000 foot setback area of the reservoir and therefore was not compatible with recently amended public health guidelines for protection of municipal drinking water sources. In October 2010, the final extension of the lease expired, at which time the property was vacated, and all facilities not related to the historic areas associated with the Bailey-Fellows house were removed. As the land is subject to potential inundation should there be a failure of the dike that surrounds the area, no new land uses for this area or long-term plans for the Bailey-Fellows House have been identified by the Santa Clara Valley Water District

## ***Traffic and Circulation***

McKean Road is an undivided two-lane road that bounds Calero County Park on its northern and eastern edge, with Bailey Avenue intersecting McKean from the east, near the main park entrance. Bailey Avenue connects the park to U.S. Highway 101 and provides for easy access. To the west of the park, McKean Road connects to the Almaden Expressway, a major collector road into the City of San Jose. To the east and southeast of the Park, McKean Road remains rural and eventually becomes Uvas Road. Casa Loma Road intersects with McKean Road and provides park access along its southern edge. A number of private roadway easements not open to the general public provide access from Bertram Road from the southwest but do not penetrate the park boundary. A gravel service road leads from McKean Road to the radio tower on Rancho San Vicente and also provides access to the grazing operation. Throughout Calero Park many of the trails also function as maintenance roads.

## **OTHER PUBLIC AGENCIES WHOSE APPROVAL IS REQUIRED**

**Santa Clara Valley Habitat Plan Implementing Entity:** As a public agency Permittee, the County of Santa Clara (which includes Santa Clara County Parks, County Roads and Airport Department and other County departments) would be subject to a project compliance process for public projects covered under the Valley Habitat Plan. The process includes the following:

- Submission of a Habitat Plan application package for the implementation of the Trails Master Plan to the new Santa Clara Valley Habitat Agency.
- Payment of appropriate mitigation impact fees to the Habitat Agency, or in lieu fees.
- Review by the new Santa Clara Valley Habitat Agency for consistency with Condition 9 of the Valley Habitat Plan and integrated into the applicable reserve unit management plan, which will be reviewed and approved by the Permittees (i.e. County Parks) and the wildlife agencies.

**California Department of Fish and Wildlife:** Prior to construction of all proposed creek crossings, the California Department of Fish and Wildlife (CDFW) would require notification and a Streambed Alteration Agreement under Section 1600 of the CDFW code.

**San Francisco Regional Water Quality Control Board:** Prior to construction of improvements of the trailhead staging areas and creation of new trails, the San Francisco Regional Water Quality Control Board may require submittal of a National Pollution Discharge Elimination (NPDES) Permit and Storm Water Pollution Prevention Plan (SWPPP) for approval.

**Santa Clara Valley Water District:** Prior to construction of components of the project within lands owned by the Santa Clara Valley Water District (Water District), the Water District will require submittal of an encroachment permit application and consultation on detailed design for compliance with Santa Clara Valley Water District regulations and operations.

## B. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact as indicated by the checklist on the following pages.

### ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

- |  |  |   |
|--|--|---|
| <input checked="" type="checkbox"/> Aesthetics           | <input type="checkbox"/> Agriculture and Forestry Resources                        | <input checked="" type="checkbox"/> Air Quality             |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural/ Historical/ Archaeological Resources | <input type="checkbox"/> Energy                             |
| <input type="checkbox"/> Geology / Soils                 | <input type="checkbox"/> Greenhouse Gas Emissions                                  | <input type="checkbox"/> Hazards & Hazardous Materials      |
| <input type="checkbox"/> Hydrology / Water Quality       | <input checked="" type="checkbox"/> Land Use & Planning                            | <input type="checkbox"/> Mineral Resources                  |
| <input type="checkbox"/> Noise                           | <input type="checkbox"/> Population / Housing                                      | <input type="checkbox"/> Public Services/ Utilities         |
| <input checked="" type="checkbox"/> Recreation           | <input checked="" type="checkbox"/> Transportation / Traffic                       | <input type="checkbox"/> Mandatory Findings of Significance |
-

## C. 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.
- X 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 (1) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (2) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Polaris Kinison Brown, Project Manager, EMC Planning Group (Consultant)

July 8, 2013

Name and Title

Date

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## D. ENVIRONMENTAL CHECKLIST AND DISCUSSION OF IMPACTS

### NOTES

1. A brief explanation is provided for all answers except “No Impact” answers that are adequately supported by the information sources cited in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer is explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers take account of the whole action involved, including off-site as well as on-site, cumulative as well as a project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once it has been determined that a particular physical impact may occur, then the checklist answers indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
4. “Negative Declaration: Less-Than-Significant Impact with Mitigation Measures Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less-Than-Significant Impact.” The mitigation measures are described, along with a brief explanation of how they reduce the effect to a less-than-significant level (mitigation measures from section XVII, “Earlier Analyses,” may be cross-referenced).
5. Earlier analyses are used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier document or negative declaration. [Section 15063(c)(3)(D)] In this case, a brief discussion would identify the following:
  - a. “Earlier Analysis Used” identifies and states where such document is available for review.
  - b. “Impact Adequately Addressed” identifies which effects from the checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and states whether such effects were addressed by mitigation measures based on the earlier analysis.
  - c. “Mitigation Measures”—For effects that are “Less-Than-Significant Impact with Mitigation Measures Incorporated,” mitigation measures are described which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances, etc.) are incorporated. Each reference to a previously prepared or outside document, where appropriate, includes a reference to the page or pages where the statement is substantiated.
7. "Supporting Information Sources"—A source list is attached, and other sources used or individuals contacted are cited in the discussion.
8. This is the format recommended in the CEQA Guidelines as amended January 2011.
9. The explanation of each issue identifies:
  - a. The significance criteria or threshold, if any, used to evaluate each question; and
  - b. The mitigation measure identified, if any to reduce the impact to less than significant.

<b>A. AESTHETICS</b>						
<b>WOULD THE PROJECT:</b>	<b>IMPACT</b>					<b>SOURCE</b>
	<b>NO</b>	<b>YES</b>				
	<u>No Impact</u>	<u>Less Than Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporated</u>	<u>Potentially Significant Impact</u>	<u>Cumulative</u>	
1. If subject to ASA, be generally in non-compliance with the Guidelines for Architecture and Site Approval?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	35
2. Create an aesthetically offensive site open to public view?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 2,3,5
3. Substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 2,3,5,33
4. Obstruct scenic views from existing residential areas, public lands, public water body or roads?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 2,3,5
5. Be located on or near a ridgeline visible from the valley floor?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 2,3,5
6. Adversely affect the architectural appearance of an established neighborhood?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,5
7. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,5

## ***Discussion/Mitigation***

### **1. Non-compliance with the Guidelines for Architecture and Site Approval**

The proposed Trails Master Plan is not subject to ASA. **No Impact.**

### **2. Create an Aesthetically Offensive Site Open to Public View**

**Short-term Construction Impacts.** Based on the construction associated with the Draft Trails Master Plan (185 new spaces plus additional size for 43 trailer spaces) and average trail disturbance, it estimated that the proposed project disturbance area would be approximately 2.5 acres (parking areas between three staging areas) and approximately 14.25 acres (total trail area throughout the park) incrementally over approximately a 10-year period. Where feasible, trail alignments follow existing trail and service roads, as such, new alignments will minimize grading. Some grading may be necessary for the new staging areas and to in some heavily eroded areas, minimal grading may be necessary to facilitate re-growth and to blend with the natural topography. However, as the proposed project would not involve large amounts of grading, short-term construction impacts will create an aesthetically offensive site open to public view.

**Existing Public Views from within the Park.** Existing scenic views at higher elevations such those towards Loma Prieta Mountain, Bald Peak, Mt. Umunhum Coyote Ridge, and Mount Hamilton would not change as a result of implementing the Draft Trails Master Plan. With an overall increase in trail mileage at the park, the number of opportunities for recreationalists to view scenic vistas would increase. The impact is considered to be **less than significant**.

### **3. Substantial Damage to Scenic Resources within a State Scenic Highway**

There are no state-designated scenic highways in the vicinity of the park. Therefore, implementation of the proposed Draft Trails Master Plan would not cause substantial damage to scenic resources within a state scenic highway. **No Impact.**

### **4. Impact - Obstruct Scenic Views from Residential and Public Facilities**

In the Regional Parks, Trails, and Scenic Highways Element of the Santa Clara County General Plan, McKean Road, Bailey Avenue, and Casa Loma Road are all designated as a Scenic Rural Routes. The new Rancho San Vicente staging area would be visible from McKean Road. However, the character of the proposed staging area will have a rural design, in keeping with the existing conditions and the park setting. It will also preserve current service access for the existing cattle grazing operation, the Almaden Calero Canal (operated by the Santa Clara Valley Water District), and the radio tower leasehold.

The new staging areas would not be visible from Calero Reservoir. Some of the new trail alignment along Calero Reservoir would likely be visible from the reservoir; however, non-paved trails along a water body are considered a compatible use in the County's General Plan and would obstruct views from Calero Reservoir.

Implementation of the proposed Draft Trails Master Plan would not obstruct scenic views from existing residential areas, public lands, public water body or roads. **No Impact.**

### **5. Be Located on or Near a Ridgeline Visible from the Valley Floor**

Per Design Guidelines outlined in the *Countywide Trails Master Plan Update*, trail alignments across the face of open hillsides and top of ridgelines shall be sited to avoid creating permanent, noticeably visible lines on the existing landscape when viewed from points looking up at or perpendicular to the trail.(D-1.4) Some trails to higher elevations of the park, particularly, some segments leading to the radio tower in Rancho San Vicente may be visible from certain points within the park, but the higher elevations of the park are located more than a mile from the valley floor and therefore, could not be seen from the valley floor. **No Impact.**

### **6. Affect the Architectural Appearance of an Established Neighborhood**

Implementation of the proposed Draft Trails Master Plan would not adversely affect the architectural appearance of an established neighborhood. **No Impact.**

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

The proposed Draft Trails Master Plan does not include any lighting on the trails or any new source of substantial light or glare at park entrances and staging areas. **No Impact.**

## B. AGRICULTURE AND FOREST RESOURCES

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

WOULD THE PROJECT:	IMPACT					SOURCE
	NO	YES				
	No Impact	Less Than Significant Impact	Less Than Significant With Mitigation Incorporated	Potentially Significant Impact	Cumulative	
1. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4,36, 37
2. Conflict with existing zoning for agricultural use?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8,11
3. Conflict with an existing Williamson Act Contract or the County's Williamson Act Ordinance?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 8
4. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,4,5
5. 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 definite by Government Code section 51104(g)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8,11
6. Result in the loss of forest land or conversion of forest land to non-forest use?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4,8,11

## Discussion/Mitigation

### 1. Convert Farmland to Non-Agricultural Use

The Santa Clara County Important Farmland Map (California Department of Conservation 2010) designates the area within and around Calero County Park as Grazing Land, which is not Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Portions of the park are currently



used for cattle grazing; however, implementation of the project would not affect the current grazing activities. Therefore, the proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. **No Impact.**

## 2. Conflict with Existing Zoning for Agricultural Use

Lands within Calero County Park are zoned for residential use (R-1-1) by the City of San Jose and Exclusive Agriculture, Exclusive Agriculture Hillside, and Exclusive Agriculture Hillside Scenic Road (A, A HS and A HS-SR) by the County of Santa Clara. According to the County of Santa Clara County Zoning Code, the purpose of the Exclusive Agricultural Zoning district is to:

“...reserve those lands most suitable for agricultural production for agricultural and appropriate related uses. This zoning district will provide stability for ongoing agricultural operations and provide for new uses necessary to support a viable local agriculture industry. This district is also intended to retain in open space uses those lands which may be suitable for future urbanization until such time as they are included within a city’s urban service area and public facilities and services can be economically provided...” Santa Clara County Zoning Code § 2.20.010

Implementation of the proposed Draft Trails Master Plan would not conflict with County of Santa Clara existing zoning for agricultural use and the purpose of reserving land and retaining open space. **No Impact.**

## 3. Conflict with an Existing Williamson Act Contract or the County’s Williamson Act Ordinance.

There is one parcel in Calero County Park (742-12-007) that is currently under the Williamson Act. Notification of non-renewal has been filed and the contract terminates in January 2017. The parcel is located south of Casa Loma Road in the south easterly quadrant of the park. No proposed trails or improvements to existing trails will occur on this parcel. The parcel is outside of the project area of any trail improvements proposed in the Trails Master Plan; therefore, there are no lands in the proposed Calero County Park Trails Master Plan that are protected by the Williamson Act. **No Impact.**

## 4. Conversion of Farmland

As discussed in question 1 above, much of the land around the park is designated as Grazing Land on the Important Farmlands Map. However, there are no aspects of the project, including new staging areas, upgrading existing trails, and creating new trails that would affect adjacent and surrounding farming operations. Therefore, the proposed project would not result in the conversion of any farmland to non-agricultural use or impair the agricultural productivity of nearby prime farmland. **No Impact.**

## 5. Conflict with Existing Zoning of Forest Land

Lands within Calero County Park are not zoned for forestland or timberland. Therefore implementation of the proposed Draft Trails Master Plan would not conflict with existing zoning for, or cause rezoning of, these land types. **No Impact.**

## **6. Result in the Loss or Conversion of Forest Land**

Calero County Park does not contain forest land. With the exception of Rancho Cañada del Oro Open Space Preserve on its southwest border, Calero Park is surrounded by private small ranches and rural residences. The Cinnabar Hills Golf Course is adjacent to the southern end of the park east of McKean Road. Therefore, the proposed project would not result in the conversion of any forest land to non-forest use, or impair the agricultural productivity of nearby forest land, or convert forest land to non-forest use.

**No Impact.**

## C. 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:	IMPACT					SOURCE
	NO	YES				
	No Impact	Less Than Significant Impact	Less Than Significant With Mitigation Incorporated	Potentially Significant Impact	Cumulative	
1. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,5,16,19
2. Violate any ambient air quality standard, contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,5,16,19
3. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,5,16,19
4. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,5,16,19
5. Create objectionable dust or odors affecting a substantial number of people?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,5,16,19
6. Alter air movement, moisture, or temperature, or cause any change in climate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,5,16,19

## Comments

This Air Quality section is based on the *Air Quality Technical Memo*, prepared by EMC Planning Group in June 2013, included as [Appendix A](#) in this Initial Study. The Air Quality Technical Memo relied on traffic data provide in the *Focused Transportation Analysis for Calero County Park Trails Master Plan* prepared by Fehr & Peers in June 2013 which is included in this Initial Study as [Appendix D](#).

## Discussion/Mitigation

### 1. Conflict With or Obstruct Implementation of the Applicable Air Quality Plan

The applicable air quality plan is the *Bay Area 2010 Clean Air Plan* (Bay Area Air Quality Management District 2010). The Clean Air Plan addresses ozone, particulate matter, and TACs. The Air District's *California Environmental Quality Act Guidelines* (Bay Area Air Quality Management District 2012) Section 9.1 provides guidance on determining if a project is consistent with the Clean Air Plan. For consistency, a project should meet three criteria:

- 1) **Support the primary goals of the Clean Air Plan.** The primary goals of the Clean Air Plan are to attain air quality standards; to reduce population exposure and protect public health in the Bay Area; and to reduce greenhouse gas emissions and protect the climate. This is considered to have been accomplished if there are no project-level significant impacts, or if significant impacts are mitigated to a less than significant level. Since the proposed project's operational criteria air pollutant and greenhouse gas emissions meet Air District standards, and the proposed project's construction criteria air pollutant emissions are mitigated to meet Air District standards, the proposed project is considered to meet the primary goals of the Clean Air Plan.
- 2) **Include applicable Clean Air Plan control measures.** There are 55 control measures in the Clean Air Plan, many of which are applicable only for industrial or regional implementation, and do not apply to other types of projects. The Air Quality CEQA Guidelines do not state the extent to which a project must be consistent with potentially applicable control measures. None of the control measures are applicable to a park or open space project.
- 3) **Not disrupt or hinder implementation of any Clean Air Plan control measures.** Since none of the control measures are applicable to a park or open space project, the proposed project would not interfere with their implementation.

The proposed project meets the three criteria and would be consistent with the Clean Air Plan. Consistency of the proposed project with applicable Santa Clara County General Plan polices was also considered. Two air quality policies are potentially applicable:

**C-HS 12** Measures to reduce particulate matter pollution originating from quarrying, road and building construction, industrial processes, unpaved parking lots, and other sources should be encouraged.

**C-HS 13** Emissions from small scale sources such as gasoline-powered lawn equipment, consumer products, barbeque grills, and other sources should be reduced through public education, product replacement, and regulation where appropriate.

Policy C-HS 12 is applicable because the proposed project would include unpaved parking lots, which can be a source of dust, and can also result in tracking of dirt or mud onto paved roadways, where passing traffic can cause it to become airborne. The Draft Trails Master Plan does not include any guidance on parking lot design, and dust from unpaved lots could violate the intent of Policy C-HS-12. The following mitigation measure is recommended to ensure consistency with County air quality policy.

### **Mitigation Measure**

*AQ-1. The Master Plan will be revised to include best management practices for dust control on unpaved parking lots.*

Policy C-HS 13 is applicable only in that some park users could potentially bring barbeque grills to picnic areas. Policy C-HS 13 calls for public education, product replacement, and regulation where appropriate

to reduce emissions from barbeque grills and similar small outdoor appliances or tools. Use of barbeques within the park would not constitute an inconsistency with the Santa Clara County General Plan on the part of the proposed project. The impact is **less than significant with mitigation**.

## **2. Violate any Ambient Air Quality Standard, or Contribute Substantially to an Existing or Projected Air Quality Violation**

The CEQA Guidelines state that, where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make determinations regarding violations of air quality standards. The applicable current air quality guidelines, *California Environmental Quality Act Air Quality Guidelines* (Bay Area Air Quality Management District 2012) do not provide thresholds. However, thresholds were included in the 1999 and 2011 versions of the guidelines and the County is relying, in part, on those thresholds to evaluate potential violations in air standards. Therefore, for the purposes of this analysis, thresholds identified in the *California Environmental Quality Act Air Quality Guidelines* (Bay Area Air Quality Management District 1999, 2011) are utilized.

Table 6 in the 1999 air quality guidelines and Table 3-1 in the 2011 air quality guidelines both present minimum sizes for typical project types, below which, that type of project is considered to have a less than significant effect from criteria air pollutant. Based on Institute of Transportation Engineers daily trip generation rates (noted in the 1999 air quality guidelines), a typical air quality screening level is a project generating fewer than 3,000 to 4,000 daily trips.

**Existing Operational ADT/GHG Baseline.** Under existing conditions, the primary source of air emissions associated with the park is mobile source vehicle trips taken by visitors to the park. The traffic impact analysis memo prepared for the project (see [Appendix D](#)) includes an analysis of peak vehicle trip generation to the park and found that the worst-case, maximum trip generation occurs during peak weekends in the spring. Under existing conditions, maximum use of the 28 existing parking spaces at the Ranger Station generates about 154 vehicle trips per day. Criteria air emissions are generated by each of these vehicle trips. No existing trips are listed for other trailheads.

Other existing park activities are sources of negligible volumes of air emissions. These include electricity use at the Ranger Station/Visitor Center, disposal and treatment of wastewater from several existing portable restrooms, operation of park facility maintenance vehicles and equipment, and water pumping to fill a storage tank used for park-specific water supply and fire flow. Fuel-powered water activities (boating and jet skiing) on the reservoir within the park also generate emissions. However, improvements proposed as part of the park master plan are not expected to result in an increase in boating activity.

**Project Operational ADT/GHG Emissions.** Under post-project conditions, vehicle trips will continue to be the dominant source of air emissions generated by the use and operation of Calero County Park. The capacity of the park to accommodate visitors arriving by vehicle will increase significantly. As identified in the Transportation Memo prepared for the project (Fehr & Peers 2013), the proposed project would generate a maximum of approximately 1,019 new Average Daily Trips per day under the most heavy park use scenario and is assumed to average 611 Average Daily Trips over the course of an entire year.

Non-mobile sources of air emissions will also increase, but continue to represent a very minor percentage of the total air emissions volume. No new sources of non-mobile air emissions are expected under post-project conditions.

Table 3-1, Criteria Air Pollutants and Precursors and GHG Screening Level Sizes, contained in the Air District's *California Environmental Quality Act Air Quality Guidelines* (2011) does not provide a threshold for a "park" project. However, a list of representative project types (projects of similar size intensity) provides an Average Daily Trips range of 2,620 - 4,387 Average Daily Trips (Table 5, ADT Screening Comparison).

**Table 5 ADT Screening Comparison**

Representative Screening Project Type	Project Size/Intensity <sup>1</sup>	Trip Generation Rate <sup>2</sup>	Average Daily Trips <sup>2</sup>
Single-Family Residential	325 units	9.57 trips/unit	3,110
Condo/Townhouse	451 units	5.81 trips/unit	2,620
Hardware/Paint Store	83,000 sq. ft.	51.29 trips/1,000 sq. ft.	4,257
General Office Building	346,000 sq. ft.	11.01 trips/1,000 sq. ft.	3,809
Supermarket	42,000 sq. ft.	102.24 trips/1,000 sq. ft.	4,294
City Park	2,613 acres	1.59 trips/acre	4,155
Library	78,000 sq. ft.	56.24 trips/1,000 sq. ft.	4,387
Quality Restaurant	47,000 sq. ft.	89.95 trips/1,000 sq. ft.	4,228
Industrial Park	553,000 sq. ft.	6.96 trips/1,000 sq. ft.	3,849
Proposed Project (County Park)	185 new parking spaces	2.5-3.0 trips/parking space x 185 new spaces x 2 trips (in and out) <sup>3</sup> – worst case	1,019 - max <sup>4</sup> 611 – avg <sup>5</sup>

**Source:** Bay Area Air Quality Management District 2011; Institute of Traffic Engineers 2009.

**Note:** <sup>1</sup> Project size/intensity for is the screening threshold from the "Operational Criteria Screening Size" column in Table 3-1, Criteria Air Pollutants and Precursors and GHG Screening Level Sizes, contained in the air district's *California Environmental Quality Act Air Quality Guidelines*, 2011.

<sup>2</sup> Trip generation rates and daily trip generation based on Institute of Traffic Engineers' *ITE Trip Generation Rates – 8<sup>th</sup> Edition*, with spreadsheet calculator found at: <http://www.mikeontraffic.com/2009/08/trip-generation-8th-edition-spreadsheet.html>.

<sup>3</sup> A multiplier is used to convert horse trailer parking space size to average vehicle parking space size.

<sup>4/5</sup> The maximum 1,019 ADT is for worst-case conditions on a peak spring weekend when all available spaces are full for the entire day. It is conservatively assumed that the average ADT over the full year is 60 percent of the maximum spring weekend day demand, or approximately 611 ADT.

As identified in Table 5, above, the Average Daily Trips for the proposed project over an entire year is well within the range of Average Daily Trips for the representative project types. Further, as described previously, the volume of air emissions generated by the project from other sources (e.g. electricity consumption) would be significantly lower than most of the representative projects listed in Table 5.

Based on this information, it can be qualitatively concluded that, like many other project types included in Table 3-1 of the Air District guidelines, the proposed project would not generate annual operational air emissions that would have a significant impact on the environment.

**Project Construction Emissions.** The proposed project would include several construction aspects: expansion of the parking lot at the Ranger Station; construction of new parking lots at Rancho San Calero County Park Trails Master Plan  
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Vicente and Almaden Road; and construction of 14.7 miles of new trails. In accordance with the Air District's 2011 air quality guidelines (pages 3-5, 8-3) a project is considered to have a less than significant impact from construction activities if the following three criteria are met.

1. The project is below the applicable screening level size shown in Table 3-1.
2. All basic construction mitigation measures would be included in the project design and implemented during construction. The following are the Air District's basic construction mitigation measures:
  - a. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
  - b. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
  - c. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
  - d. All vehicle speeds on unpaved roads shall be limited to 15 mph.
  - e. 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.
  - f. Idling times shall be minimized 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.
  - g. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.
  - h. Post a publicly visible sign with the telephone number and person to contact at the lead agency 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.
3. Construction-related activities would not include any of the following:
  - a. Demolition activities inconsistent with District Regulation 11, Rule 2: Asbestos Demolition, Renovation and Manufacturing;
  - b. Simultaneous occurrence of more than two construction phases (e.g., paving and building construction would occur simultaneously);
  - c. Simultaneous construction of more than one land use type (e.g., project would develop residential and commercial uses on the same site) (not applicable to high density infill development);



- d. Extensive site preparation (i.e., greater than default assumptions used by the Urban Land Use Emissions Model [URBEMIS] for grading, cut/fill, or earth movement); or
- e. Extensive material transport (e.g., greater than 10,000 cubic yards of soil import/export) requiring a considerable amount of haul truck activity.

Construction emissions come from equipment exhaust and dust that is raised during grading. As such, the Air Quality Technical Memo prepared for the project evaluated construction emissions in terms of disturbance area. Based on the construction associated with the proposed project (185 new spaces including larger space to accommodate 43 trailer spaces) and average trail disturbance, it estimated that the proposed project disturbance area would be approximately 2.3 acres (parking areas) and approximately 14.25 acres (trail area).

Similar to the approach for operational air emissions, project construction was compared to sample project types in Table 3-1 in the Air District's *California Environmental Quality Act Air Quality Guidelines* (2011). [Table 6, Project Construction Screening Comparison](#), presents the proposed project's disturbance area in relation to the estimated disturbance area of the thresholds.

As identified in [Table 6. Project Construction Screening Comparison](#), the proposed project's total disturbance area is above the threshold equivalent calculated for two land uses, and at or below the threshold equivalent calculated for other seven sample land uses. Table 3-1 is designed for project development that typically occurs within a reasonably short timeframe, typically one year or less. The proposed project's ground disturbance would take place incrementally over a period of ten years. Spread over the ten-year implementation period, the disturbance area would be well below the thresholds. Additionally, most of the new trails to be constructed would be developed following existing road alignments, and the level of ground disturbance, and resulting dust emissions, would be low compared to the grading that would take place for an urban development project. Therefore, the proposed project is considered to fall below the thresholds presented in Table 3 of the Air District's 2011 air quality guidelines.

**Basic Air Quality Measures.** The Trails Master Plan includes one air quality best management practice (page 64):

The following best management practice would be implemented at all construction sites to minimize emissions during construction:

1. Sweep daily if visible soil material is carried out onto adjacent public streets, paved park access roads, parking areas, and staging areas at construction sites.

**Table 6 Project Construction Screening Comparison**

Representative Screening Project Type	Project Size/Intensity <sup>1</sup>	Approximate Disturbance Rate <sup>2</sup>	Disturbance Area
Single-Family Residential	114 units	One acre /four units	29 acres
Condo/Townhouse	78 units	One acre /eight units	10 acres
Hardware/Paint Store	277,000 sq. ft.	One acre /20,000 sq. ft.	14 acres
General Office Building	277,000 sq. ft.	One acre /20,000 sq. ft.	14 acres
Supermarket	277,000 sq. ft.	One acre /20,000 sq. ft.	14 acres
City Park	67 acres	One acre/ half acre	34 acres
Library	277,000 sq. ft.	One acre /20,000 sq. ft.	14 acres
Quality Restaurant	277,000 sq. ft.	One acre /20,000 sq. ft.	14 acres
Industrial Park	11 acres	One acre /acre	11 acres
Proposed Project (County Park)	185 new parking spaces and 14.7 miles of trails	185 new spaces plus additional size for 43 trailer spaces <sup>3</sup> . Trails average disturbance width 8 feet x 77,600 lineal feet = 621,000 sq. ft. = 14.25 acres <sup>4</sup>	±2.5 acres  ±14.25 acres

**Source:** Bay Area Air Quality Management District 2011; Institute of Traffic Engineers 2009.

**Note:** <sup>1</sup> Project size/intensity for is the screening threshold from the "Construction Criteria Screening Size" column in Table 3-1, Criteria Air Pollutants and Precursors and GHG Screening Level Sizes, contained in the air district 's *California Environmental Quality Act Air Quality Guidelines, 2011*.

<sup>2</sup> Disturbance area based on typical floor area ratios.

<sup>3</sup> Square feet per standard parking space 300 square feet, inclusive of drive aisles x 185 new spaces: 300 x 185 = 55,500 square feet; trailer parking spaces add 1,200 square feet x 43 spaces. 1,200 x 43 = 51,600 square feet.

<sup>4</sup> Trail widths vary from four to 12 feet, but most are 4 to 6 feet. Most trails will be developed on existing road alignments.

In addition, the Draft Trails Master Plan (pages 67-68) includes the following hydrologic best management practice and the following storm water pollution prevention plan best management practice, each of which would benefit air quality:

The following design guidelines would be followed for trails in areas of steep slopes or in areas adjacent to a creek or riparian area:

1. In order to reduce erosion and maintenance problems during construction, disturbance to the soil surface should be kept to a minimum.

To minimize the mobilization of sediment to creeks and other water bodies, the following erosion and sediment-control measures would be included in a Stormwater Pollution Prevention Plan (SWPPP) prepared for the project after final design. These measures are based on standard County measures and standard dust-reduction measures:

1. Enclose and cover exposed stockpiles of dirt or other loose, granular construction materials that could contribute sediment to waterways.

The best management practices presented in the Trails Master Plan do not adequately reflect the requirements of the Air District's basic construction mitigation measures. In addition, the air quality best management practice utilizes dry sweeping, which is specifically prohibited by the Air District. Therefore, the following mitigation measure is recommended.

### **Mitigation Measure**

*AQ-2. The following Air District basic construction mitigation measures will be incorporated into the Trails Master Plan and/or all future construction documents:*

- a. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. Material stockpiles may be covered in accordance with Trails Master Plan Stormwater Pollution Prevention Plan best management practices No. 1.*
- b. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.*
- c. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.*
- d. All vehicle speeds on unpaved roads shall be limited to 15 mph.*
- e. 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.*
- f. Idling times shall be minimized 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.*
- g. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.*
- h. Post a publicly visible sign with the telephone number and person to contact at the lead agency 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.*

The proposed project, with mitigation to add several of the Air District's basic construction mitigation measures, would meet the screening criteria for projects that have a less than significant construction phase air quality impact. The impact is **less than significant with mitigation**.

### 3. Result in a Cumulatively Considerable Increase of any Criteria Pollutant for which the Project Region is in Non-attainment

The Air District is in non-attainment for ozone, PM<sub>10</sub> and PM<sub>2.5</sub>. Although the EPA is reviewing the Air District's non-attainment status for PM<sub>2.5</sub>, even if the Air District were to be re-classified to attainment, the Air District would likely still be in non-attainment of the stricter State standard.

The proposed project's operational ozone, PM<sub>10</sub> and PM<sub>2.5</sub> emissions would not exceed the Air District's thresholds for significance. Refer to the discussion above regarding air quality standards violations. The proposed project's construction impacts could potentially exceed Air District thresholds for significance. However, the mitigation measure presented above to require additional basic construction mitigation measures would reduce potential air quality effects to a less than significant level. The impact is **less than significant with mitigation**.

### 4. Expose Sensitive Receptors to Substantial Pollutant Concentrations

Substantial pollution concentrations are typically in reference to concentrated acute emissions, such as particulate matter, or TACs such as carbon monoxide. The proposed project would not result in substantial particulate matter emissions outside of a brief construction period. There are no sensitive receptors close enough to the project sites to be affected by dust generated during construction. Carbon monoxide is generated in substantial quantities only when large numbers of vehicles are idling for a long period of time, and are significant only if there are sensitive receptors proximate to the idling vehicles. The proposed project would not result in large numbers of idling vehicles, and there are no sensitive receptors close enough to the project sites to be affected in any case.

The project site includes serpentine rock, which could have an asbestos component. Disturbance of this type of rock, or soils weathered from this type of rock, could result in the release of asbestos fibers, as is acknowledged in the Trails Master Plan (page 28-29). Several trail alignments are shown crossing areas of serpentine soils (page 31). The following mitigation measure shall be required:

#### Mitigation Measure

- AQ-3. *The following measures shall be incorporated into the Trails Master Plan and/or all future construction documents, applicable to areas identified as containing serpentine rock, if soil disturbance is anticipated during construction of the trail or abandonment of old ~~trail~~trails:*
- a. *Upon determination of a precise trail alignment, soil sampling shall be conducted in not less than one location for each one-half mile of alignment within the area identified as containing serpentine rock, and in any case, no less than one sample for any trail segment within the area identified as containing serpentine rock. California Air Resources Board Test Method 435 should be used unless otherwise directed by the Air District.*
  - b. *Soil samples shall be analyzed by an approved laboratory for asbestos materials content, and characterized as to concentration and resultant potential for adverse health effects to workers or trail users.*

- c. *If asbestos levels are high enough to warrant precautions, County Parks shall develop a mitigation plan in accordance with Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations (California Air Resources Board 2009).*

With implementation of the mitigation described above, the potential to expose sensitive receptors to substantial asbestos concentrations is less than significant. The impact is **less than significant with mitigation**.

## **5. Create Objectionable Odors Affecting a Substantial Number of People**

The proposed project would not be a significant source of odors. The proposed project could include minor features that would result in very localized odors, such as portable toilets, but would not emit odors that were detectable at off-site sensitive receptors. The impact is **less than significant**.

## **6. Alter Air Movement, Moisture, or Temperature, or Cause any Change in Climate**

The proposed Trails Master Plan will not change the climate of the project site (i.e. site air movement, moisture, or temperature). **No impact**.

D. BIOLOGICAL RESOURCES						
WOULD THE PROJECT:	IMPACT					SOURCE
	NO	YES				
	No Impact	Less Than Significant Impact	Less Than Significant With Mitigation Incorporated	Potentially Significant Impact	Cumulative	
<u>7.1.</u> 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 Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,43,44,45,46,47
<u>8.2.</u> 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 Wildlife or US Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,43,44,45
<u>9.3.</u> 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.) or tributary to an already impaired water body, as defined by section 303(d) of the Clean Water Act through direct removal, filling, hydrological interruption, or other means?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,43,44
<u>10.4.</u> Have a substantial adverse effect on oak woodland habitat as defined by Oak Woodlands Conservation Law (conversion/loss of oak woodlands) – Public Resource Code 21083.4?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,43,44
<u>11.5.</u> Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,43,44
<u>12.6.</u> Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,13,43,44
<u>13.7.</u> Impact a local natural community, such as a fresh water marsh, oak forest or salt water tide land?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,43,44
<u>14.8.</u> Impact a watercourse, aquatic, wetland, or riparian area or habitat?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,43,44
<u>15.9.</u> Adversely impact unique or heritage trees or a large number of trees over 12" in diameter?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,43,44,48

**46.10.** Conflict with any local policies or ordinances protecting biological resources:

i) Tree Preservation Ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,6,43,44,48
ii) Wetland Habitat?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,6,43,44
iii) Riparian Habitat?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,6,43,44

## Comments

This Biological Resources section is based on the project's *Biological Resources Evaluation Report*, prepared by EMC Planning Group in June 2013, included as [Appendix B](#) in this Initial Study.

EMC Planning Group biologists reviewed site maps, aerial photographs, electronic database accounts, technical reports, and relevant scientific literature describing natural resources on the project site and on adjacent lands. A search of the California Department of Fish and Wildlife (CDFW) *California Natural Diversity Database (CNDDDB)* and the California Native Plant Society (CNPS) *Inventory of Rare and Endangered Plants* for the San Jose West, San Jose East, Lick Observatory, Los Gatos, Santa Teresa Hills, Morgan Hill, Laurel, Loma Prieta, and Mount Madonna U.S. Geological Survey quadrangles was conducted in order to generate lists of potentially occurring special-status species in the project vicinity. Species listed by the U.S. Fish and Wildlife Service (USFWS) that occur in Santa Clara County were also reviewed. Special-status species in this report are those listed as Endangered, Threatened, or Rare, or as candidates proposed for listing by the USFWS and/or CDFW; as Species of Special Concern or Fully Protected species by CDFW; or as Rare Plant Rank 1B or 2 by the CNPS.

EMC Planning Group biologists Bill Goggin and Andrea Edwards conducted the biological reconnaissance field survey on March 28, 2013 to document existing plant communities and wildlife habitats, and to evaluate the potential for special-status species occurrence at the project site. Biological resources were documented in field notes, including species observed, dominant plant communities, and significant wildlife habitat characteristics. Qualitative estimations of plant cover, structure, and spatial changes in species composition were used to determine plant communities and wildlife habitats, and habitat quality and disturbance level were described. Additionally, observations of any potential wetlands and/or potential wildlife movement corridors were recorded. Representative site photographs were taken at several locations within the project site to document habitat conditions.

Plant community types present in the park include coast live oak, blue oak, mixed oak, interior live oak, valley oak, canyon live oak, California bay, California sycamore, California buckeye, scrub oak, black sage, coyote brush, chamise, serpentine chaparral, annual grassland, bullrush, creeping rye, purple needle grass, and foothill needle grass. The most prevalent plant communities at Calero County Park are annual grasslands and oak woodlands; these communities intermix.

Land cover throughout the park is depicted on Figure 13, Land Cover. Despite past grazing activities in some areas, Calero County Park supports extremely high quality wildlife habitat functions and values. These conditions are due mostly to the undeveloped characteristics of the site and its varied habitat types, high diversity of plant species, presence of available food and water, and provision of suitable escape cover; these factors provide optimal habitat conditions for many native species.



## Discussion/Mitigation

### 1. Special-Status Species

Special-status plant species known to occur in the general vicinity of the project site were evaluated for potential to occur on the project site. Santa Clara Valley Habitat Plan covered plant species with potential to be impacted by the proposed Trails Master Plan project include coyote ceanothus (*Ceanothus ferrisiae*); fragrant fritillary (*Fritillaria liliacea*); Loma Prieta hoita (*Hoita strobilina*); Metcalf Canyon jewel-flower (*Streptanthus albidus* ssp. *albidus*); most beautiful jewel-flower (*Streptanthus albidus* ssp. *peramoenus*); Mt. Hamilton fountain thistle (*Cirsium fontinale* var. *campylon*); Santa Clara Valley dudleya (*Dudleya abramsii* ssp. *setchellii*); smooth lessingia (*Lessingia micradenia* var. *glabrata*); and Tiburon paintbrush (*Castilleja affinis* ssp. *neglecta*). Appendix D of the Santa Clara Valley Habitat Plan provides detailed natural history accounts for each of these nine covered species.

In addition, the proposed project has potential to impact many plant species considered special-status by the CNPS (Rare Plant Rank 1B or 2). These species include arcuate bush-mallow (*Malacothamnus arcuatus*); bent-flowered fiddleneck (*Amsinckia lunaris*); big-scale balsamroot (*Balsamorhiza macrolepis*); bristly sedge (*Carex comosa*); chaparral harebell (*Campanula exigua*); chaparral ragwort (*Senecio aphanactis*); Congdon's tarplant (*Centromadia parryi* ssp. *congdonii*); Hall's bush-mallow (*Malacothamnus hallii*); Indian Valley bush-mallow (*Malacothamnus aboriginum*); Mt. Diablo phacelia (*Phacelia phacelioides*); pink creamsacs (*Castilleja rubicundula* ssp. *rubicundula*); round-leaved filaree (*California macrophylla*); saline clover (*Trifolium hydrophilum*); San Francisco collinsia (*Collinsia multicolor*); Santa Cruz Mountains beardtongue (*Penstemon rattanii* var. *kleei*); Santa Cruz Mountains pussypaws (*Calyptridium parryi* var. *hesseae*); showy golden madia (*Madia radiata*); and woodland woollythreads (*Monolopia gracilens*).

Finally, there is a federally listed Endangered and CNPS Rare Plant Rank 1B species with potential to be impacted by the proposed project due to the presence of suitable habitat: Contra Costa goldfields (*Lasthenia conjugens*). This species is not covered by the Valley Habitat Plan. This annual herb occurs in wet areas in cismontane woodland, alkaline playas, valley and foothill grassland, and vernal pools. Although it is presumed extirpated in Santa Clara County, it still has low potential to occur in the park. It is known in the project vicinity from a historical 1958 occurrence in San Jose, west of Capitol Avenue.

Due to the extensive, high quality habitat present at the project site, especially found on serpentine soils that support endemic species, construction of proposed new trails and other facilities has the potential to impact many special-status plant species that do or may occur on the site due to the presence of suitable habitat, as shown in Table 1 of the *Biological Resources Evaluation Report*. The remaining special-status plant species that are known to occur in the general vicinity of the project site are not expected to be impacted by the proposed project due to lack of suitable habitat in Calero County Park. In addition to the conditions for each Santa Clara Valley Habitat Plan covered plant species with potential to be impacted by the proposed project listed below in Table 7, the proposed project has potential to impact many plant species considered special-status by the CNPS, and a very low potential to impact federally listed Endangered and CNPS Rare Plant Rank 1B Contra Costa goldfields.

## Mitigation Measure

*BIO-1. To avoid impacts to special-status plants, for the impact area of each project phase, focused botanical surveys will be conducted prior to construction by a qualified biologist or County Parks Natural Resource Program staff for all special-status plant species with potential to occur in the various plant communities as identified above. The surveys will conform to current protocols established by the CDFW and CNPS, and will include surveys during the appropriate blooming periods for every target species (which will overlap for many species during spring months). Optimal survey times vary from year to year depending on temperature, rainfall amount and timing, etc., so will be confirmed by the monitoring of known reference populations for as many target species in the project vicinity as possible. The final field positioning of each project component will avoid all observed special-status plant species occurrences.*

Special-status animal species known to occur in the general vicinity of the project site were evaluated for potential to occur on the project site. Santa Clara Valley Habitat Plan covered animal species with potential to be impacted by the proposed Trails Master Plan project include Bay checkerspot butterfly (*Euphydryas editha bayensis*); burrowing owl (*Athene cunicularia*); California red-legged frog (*Rana draytonii*); California tiger salamander (*Ambystoma californiense*); foothill yellow-legged frog (*Rana boylei*); tricolored blackbird (*Agelaius tricolor*); and western pond turtle (*Emys marmorata*). Appendix D of the Santa Clara Valley Habitat Plan provides detailed natural history accounts for each of these seven covered species.

In addition, the proposed project also has low potential to impact six species that are not federally or state-listed, but considered Species of Special Concern or Fully Protected Species by the CDFW. These species include American badger (*Taxidea taxus*); black swift (*Cypseloides niger*); coast horned lizard (*Phrynosoma blainvillii*); golden eagle (*Aquila chrysaetos*); northern harrier (*Circus cyaneus*); and white-tailed kite (*Elanus leucurus*).

Finally, the federally Delisted and state-listed Endangered and Fully Protected bald eagle (*Haliaeetus leucocephalus*) was observed on the site during the survey; however the proposed project has a low potential to impact this species. Its diet consists mainly of fish, especially salmon, but also includes waterfowl, seagulls, small mammals, and carrion. Due to its preference for salmon, the species chooses aquatic ecosystems for nesting and over-wintering. In rare instances the species may also choose prairies, if adequate food is available. Bald eagles usually choose nest sites in large trees near a relatively undisturbed shoreline. The nesting site must be able to support a very large nest that is five feet wide and three feet deep, and is often used repeatedly. Bald eagle courtship begins in late winter or early spring and lasts about a month before egg-laying. Incubation lasts about a month and fledging takes place when the young are about three months old; parental care may last between another month and three months. Bald eagles have phased plumage, with adults not gaining the distinctive white head until after the fourth or fifth season. Most bald eagles migrate from their breeding area hundreds of miles to their wintering grounds, taking several months to make the journey, while some remain near their breeding grounds, depending upon prey availability. Potential threats to bald eagles include habitat destruction, shooting, and human disturbance at nest sites. An adult bald eagle was observed during the field survey and it is possible, but not currently known if bald eagles are breeding in the park. The project site contains suitable breeding habitat and foraging opportunities for this species.

Further, vegetation on the project site provides suitable foraging and nesting opportunities for bird species protected under the Migratory Bird Treaty Act. Human disturbance, such as proximity to the nest, excessive noise around the nest, and loss of foraging grounds, may lead to nest failure. There is a moderate to high probability that nesting birds, including raptors, could occur in and/or adjacent to proposed impact areas during the breeding bird season (February 1 to August 31).

Due to the site's extensive high quality habitat, the construction of proposed new trails and other facilities will have the potential to impact several special-status animal species (and/or their habitats) that may occur or which are known to occur at the site. However, due to the incorporation of recommended mitigation measures (listed below), none of the proposed Trails Master Plan habitat impacts are expected generate long-term adverse affects. The conditions for each Santa Clara Valley Habitat Plan covered plant species with potential to be impacted by the proposed project that will be implemented are listed in Table 7. In addition, as shown in Table 2 of the *Biological Resources Evaluation Report*, the proposed project has low potential to impact the state-listed Endangered and Fully Protected bald eagle, and six species that are considered Species of Special Concern or Fully Protected Species by the CDFW: American badger, black swift, coast horned lizard, golden eagle, northern harrier, and white-tailed kite. The remaining special-status animal species that are known to occur in the general vicinity of the project site are not expected to be impacted by the proposed project due to lack of suitable habitat in Calero County Park.

## **Mitigation Measures**

*BIO-2. To avoid potential adverse impacts to nesting birds (including raptors), trail building/construction activities (including any tree trimming/removal or generation of loud, sustained noises) should be scheduled to take place outside the breeding bird season (February 1 through August 31). If trail building/construction activities will occur during the breeding bird season, then a qualified biologist or County Parks Natural Resource Program staff will conduct a pre-construction survey for nesting birds to ensure that no nests would be disturbed during project implementation. This survey will be conducted no more than 15 days prior to the initiation of disturbance activities during the early part of the nesting season (February 1 through April 30) and no more than 30 days prior to the initiation of disturbance activities during the late part of the nesting season (May 1 through August 31).*

*If no active nests are present within 500 feet of project activities, then activities can proceed as scheduled. However, if an active nest is detected during the survey within 500 feet of project activities, then the establishment of a protective buffer zone around each active nest (typically 250 to 500 feet for raptors but possibly 1,000 to 1,300 feet for ground-nesting and/or special-status raptors, with appropriate setback distance to be determined by a qualified biologist or County Parks Natural Resource Program staff) and 75 to 250 feet for passerines [perching and songbird species]) will be clearly delineated or fenced by the qualified biologist or County Parks Natural Resource Program staff until the juvenile bird(s) have fledged (left the nest), unless the biologist determines that proposed activities would not impact nesting success or fledgling/juvenile rearing. Limited*

*monitoring of active nests located within 500 feet of trail or facility construction is recommended in order to monitor nesting activities and to prevent nest failure or abandonment.*

*BIO-3. To avoid/minimize impacts to special-status animals, for each project phase, impact areas will be positioned away from high quality habitat features such as burrows or wetlands as determined prior to construction by a qualified biologist or County Parks Natural Resource Program staff through a trail location survey. In particular, new trails and facilities will be sited in the field prior to construction to avoid potential American badger den sites/active burrows, seasonal wetlands, and other features that could provide habitat for special-status species. Further, temporary exclusion barriers will be utilized to keep wildlife out of construction sites, as deemed appropriate by a qualified biologist or Parks Natural Resource Program staff. Construction monitoring will be conducted periodically by a qualified biologist or Parks Natural Resource Program staff to ensure that disturbance limits are correctly established and that avoidance/minimization measures are implemented properly.*

Implementation of mitigation measures BIO-1 through BIO-3 would ensure that the proposed project's potential impacts to special-status species not covered by the Santa Clara Valley Habitat Plan (which are addressed separately below) would be reduced to a less than significant level. The impacts would be less than significant with mitigation.

## **2. Sensitive Natural Communities**

Special-status natural communities are those that are considered rare in the region, support special-status plant or animal species, or receive regulatory protection (i.e., wetlands under Section 404 of the Clean Water Act and/or Section 1600 of the California Fish and Game Code). In addition, the CDFW has designated a number of communities as rare; these communities are given the highest inventory priority. Special-status natural communities present on the site include oak woodlands, riparian/marsh/wetland areas, and serpentine grassland and chaparral plant communities.

Impacts to sensitive natural communities will require the enrollment of appropriate parkland areas into the proposed Santa Clara Valley Habitat Plan Reserve System as determined through the Valley Habitat Plan application package process. In addition, new trail segments will be aligned in the field to purposely minimize impacts to special-status natural communities present on the site, including oak woodlands, riparian/marsh/wetland areas, and serpentine grassland and chaparral plant communities. Through such avoidance and minimization as part of the phased project design, impacts to special-status natural communities will be less than significant and therefore no mitigation is required (in addition to compliance with the Valley Habitat Plan).

## **3. Wetlands/Waterways**

Wetlands/waterways and associated riparian habitats are considered special-status by several regulatory agencies including the U.S. Army Corps of Engineers (USACE), CDFW, Regional Water Quality Control Board (RWQCB), and USFWS. There are wetlands and natural drainages on the project site; however,

in regards to the proposed bridges and culverts for trail crossings, the County Parks Department would implement policies, trail maintenance guidelines for bridge design, design guidelines and BMPs to avoid and minimize potential impacts to the creek and would ensure that no impacts to riparian habitat would occur with maintenance activities within or adjacent to water courses. These include the following:

#### **Countywide Trails Master Plan Design Guidelines**

D-1.3.3.2 Trail crossings of freshwater stream zones and drainages shall be designed to minimize disturbance, through the use of bridges and culverts, whichever is least environmentally damaging

D- 1.3.1.4 Biological resource assessments shall be conducted as specific trail routes are implemented. These assessments will include mitigation recommendations as appropriate. These guidelines do not substitute or replace any existing codes, rules, or regulations of land managing and permitting agencies that may govern trail development, but in addition to them. Necessary permits from these agencies will be obtained when trail alignments result in impacts to their jurisdictional areas.

#### **Santa Clara Valley Habitat Plan Conditions**

Condition 3. Maintain Hydrologic Conditions and Protect Water Quality

Condition 4. Avoidance and Minimization for In-Stream Projects

Condition 5. Avoidance and Minimization Measures for In-Stream Operations and Maintenance

Included in the above Habitat Plan conditions are aquatic avoidance and minimization measures (Table 6-2 of the Santa Clara Valley Habitat Plan) that address stream crossings, trail crossings of freshwater stream zones and drainages, appropriate design, placement and sizing of culverts, which the County Parks Department would implement as part of the project's compliance with the Habitat Plan.

~~project improvements in these areas will be limited to span bridge stream crossings installed above high water mark, and therefore, the proposed project is not to impact any potentially jurisdictional wetland features or Waters of the U.S. or State.~~

Because the proposed project would implement policies, trail maintenance guidelines for bridge design, design guidelines and BMPs to avoid and minimize potential impacts to the creek and would ensure that no impacts to riparian habitat would occur with maintenance activities within or adjacent to ~~will install span bridges above ordinary high water mark levels at the new stream crossings and avoid seasonal wetlands, there will be no impact to~~ jurisdictional wetlands features or waterways ~~waters of the U.S. or State, the impact is considered to be less than significant and therefore~~ no mitigation is required.

## **4. Oak Woodlands**

The proposed project will not substantially convert or remove oak woodland habitat as defined by Oak Woodlands Conservation Law (Public Resource Code 21083.4). Because new trails and associated facilities will be sited in the field to purposely avoid and retain native trees, only limited oak tree removal will be necessary. Through such avoidance and minimization as part of the phased project design, Calero County Park Trails Master Plan August 2013  
Final Initial Study/Mitigated Negative Declaration

impacts to oak woodlands will be less than significant and therefore no mitigation is required. However, mitigation will be required for removal of any protected oak trees, as addressed separately below.

## **5. Wildlife Movement**

Wildlife movement includes migration (i.e., usually movement one way per season), inter-population movement (i.e., long-term dispersal and genetic flow), and small travel pathways (i.e., daily movement within an animal's territory). While small travel pathways usually facilitate movement for daily home range activities such as foraging or escape from predators, they also provide connection between outlying populations and core populations, allowing an increase in gene flow between populations. These linkages among habitats can extend for miles and occur on a large scale throughout the greater region. Habitat linkages facilitate movement between populations located in discrete locales and populations located within larger habitat areas.

The access roads, trails, and natural drainages present at Calero County Park offer important regional wildlife movement opportunities throughout the project site. Project implementation is not expected to adversely impact wildlife movement through the park, and actually is expected to benefit wildlife movement by greatly expanding the existing trail system to better link the park to adjacent open space areas. The new trails will not be fenced and will not have night lighting.

Therefore, the creation of new regional trail linkages due to project implementation will have long-term beneficial impacts on wildlife movement. However, creation of these new trails will include an increase in human presence during daylight hours (plus the presence of horses and dogs on-leash on certain trails). This increase in human and horse/dog presence would have only less than significant adverse impacts on wildlife movement, and therefore no mitigation is required. The project will not impede the use of native wildlife nursery sites.

## **6. Habitat Conservation Plans**

The Santa Clara Valley Habitat Plan ("Valley Habitat Plan") was designed "to protect, enhance, and restore natural resources in specific areas of Santa Clara County, while improving and streamlining the environmental permitting process for impacts on threatened and endangered species". Local partners for the Valley Habitat Plan include the County of Santa Clara, City of San José, City of Morgan Hill, City of Gilroy, Santa Clara Valley Water District, and Santa Clara Valley Transportation Authority. This Valley Habitat Plan, which is a Habitat Conservation Plan/Natural Community Conservation Plan, was developed in collaboration with the USFWS and the CDFW. The Valley Habitat Plan's study area encompasses 519,506 acres, or approximately 62 percent of Santa Clara County.

"Covered activities" in the Valley Habitat Plan include projects or ongoing activities that will receive incidental take authorization for potential impacts to covered species. The Valley Habitat Plan provides conservation measures to protect and maintain habitat areas to support 18 special-status "covered species": nine wildlife species and nine plant species within the study area. In addition, the Valley Habitat Plan sets forth a comprehensive, coordinated, and standardized mitigation and compensation program



that would ensure that conservation actions, which include the creation, management, and monitoring of a new Reserve System in Santa Clara County, will be accomplished to streamline future mitigation requirements and achieve the biological goals and objectives of the Valley Habitat Plan.

The Valley Habitat Plan and its accompanying permits provide assurances that the USFWS and CDFW will not require any additional conservation or mitigation to address changed circumstances that are not identified in the Valley Habitat Plan, without the consent of the permittee, as long as the Valley Habitat Plan is found to be properly implemented. Consistent with the provisions of these assurances, the understanding is that the Valley Habitat Plan provides adequate mitigation for the effects of the covered activities, and there is no need for additional mitigation requirements beyond the provisions of the Valley Habitat Plan and associated permits nor modifications to the conservation measures. It is expected that the conservation measures provided in the Valley Habitat Plan will be sufficient to meet all CEQA mitigation standards for impacts on the special-status species and natural communities that are covered in the Valley Habitat Plan.

The Calero County Park Trails Master Plan is a covered activity as described in Chapter 2 (pages 2-91 through 2-93), County Parks Projects, of the Valley Habitat Plan. This section covers “trail and fire road development, and installation of related infrastructure such as bridges, staging areas, restrooms, parking lots, and signage” and “development of regional recreation opportunities and supporting infrastructure including ... staging areas including restrooms, equestrian staging areas including water troughs, parking ... gateway sites (e.g., trailheads, park entrances, kiosks), paved and dirt roads...”, etc. The County, as a Valley Habitat Plan permittee, will need to submit a Valley Habitat Plan Application Package, and receive a permit, prior to project implementation.

In support of the Valley Habitat Plan, the County park system will be enrolling portions of certain parks in the proposed Reserve System. Table 5-5 of the Valley Habitat Plan estimates that 1,690 of the 4,455 total acres of Calero County Park and up to all 966 acres of Rancho San Vicente are proposed for the Valley Habitat Plan Reserve System. However, the final number of acres to be enrolled will be based upon further refinement of areas appropriate for Reserve System designation.

The project design and analysis process included a detailed review of the conditions for covered activities under the Valley Habitat Plan (Chapter 6), ensuring that the Trails Master Plan project design practices and features would incorporate special-status resource impact avoidance and minimization measures directly into plans for new park infrastructure. This information is summarized below.

Most conditions on covered activities that are applicable to the proposed project would be met by standard Best Management Practices regularly followed by park management and maintenance staff. To protect natural resources within its parks, the County of Santa Clara, Parks and Recreation Department follows established Natural Resource Management Guidelines for different resource categories, such as wetlands, special-status species, non-native and invasive plant/pest management, etc. In addition, the Department follows refined trail maintenance and closure procedures, along with numerous detailed Best Management Practices specific to performing maintenance activities in and adjacent to water courses.

The Department also has a CDFW lake/streambed alteration agreement (No. 1600-2012-0013-3) permitting routine maintenance for 28 County park units, including Calero. It allows specific activities including culvert replacement, repair/maintenance, relocation, and removal; bridge/ford replacement and repair/maintenance; road and trail drainage/erosion control and minor relocation; dam maintenance;

vegetation removal/routine clearing for water supplies and park facilities/structures; fire control; lake/pond/channel maintenance; and habitat enhancement activities. These approvals are subject to numerous measures and conditions to protect biological resources.

To protect special-status biological resources, on-the-ground alignment of each new trail segment or facility footprint will be defined in phases and determined/flagged prior to construction. For each trail/facility construction phase, focused species surveys will be conducted concurrent with the determination of trail positioning to avoid any special-status plant populations, minimize tree removals, limit impacts to sensitive communities and wildlife habitats, etc.

For example, to protect water quality, project construction in riparian areas will be scheduled to avoid the wet season (generally November through April). Regarding rural development design, new kiosks and restrooms would have low-intensity lighting and would comply with the Green Building Policy and Leadership in Energy and Environmental Design (LEED) program requirements and the County's Green Building Policy for Government Buildings (adopted by the Board of Supervisors on April 25, 2006 and amended on September 29, 2009).

As the County (including the Parks and Recreation Department) is a Valley Habitat Plan permittee that helped to develop the detailed compliance conditions to protect natural resources, all applicable Valley Habitat Plan conditions for the Trails Master Plan project will be met through continued implementation of standard Best Management Practices and County policies employed by County Park staff.

The Valley Habitat Plan's conditions on covered activities would apply to proposed trail routes that have potential impacts to the covered species. During project implementation, specific trail alignments will be designed to avoid and minimize impacts to sensitive habitat communities. Once further refinements in the field have been identified with these specific trail alignments, it is anticipated that the conditions will be applied if potential impacts are anticipated to the species covered under the Valley Habitat Plan.

Implementation of applicable covered species conditions required by the Valley Habitat Plan shown in [Table 7](#) below as project design features will minimize/avoid potential project impacts to covered species.

### **Mitigation Measure**

*BIO-4. To minimize/avoid impacts to Santa Clara Valley Habitat Plan covered species, all applicable conditions listed in Table 7, Valley Habitat Plan Covered Species: Conditions on Covered Activities, for each covered species with potential to be impacted will be implemented during each phase of the project.*

Implementation of mitigation measure BIO-4 would ensure that potential impacts to special-status species covered by the Santa Clara Valley Habitat Plan due to the proposed project would be less than significant with mitigation.

**Table 7 Valley Habitat Plan Covered Species: Conditions on Covered Activities**

<b>Covered Species</b>	<b>Applicable Valley Habitat Plan Condition(s), Tables, and Figures</b>	<b>Species Conditions on Covered Activities Excerpted from Final Santa Clara Valley Habitat Plan Executive Summary (Table ES-2)</b>
Coyote ceanothus	Condition 20: Avoid and Minimize Impacts to Covered Plant Occurrences; Condition 19: Plant Salvage when Impacts are Avoidable; Condition 9: Prepare and Implement a Recreation Plan; Condition 13: Serpentine and Associated Covered Species Avoidance and Minimization; Table 6-9: Survey Periods for Covered Plant Species; Table 3-6: Covered Plant Species and Land Cover Types; Figure 3-10: Santa Clara Valley Habitat Plan Land Cover	Development guidelines will ensure that impacts from covered activities are minimized (Condition 20). Plant surveys will be required during appropriate survey period (Table 6-9) if the project site occurs in an area mapped as land cover associated with coyote ceanothus (Table 3-6; Figure 3-10). Individuals to be removed by covered activities will be salvaged to the extent possible using appropriate plant salvage techniques and a new separate occurrence will be established in suitable habitat (Condition 19). The condition of each covered plant occurrence will be documented to ensure that occurrences are protected within the Reserve System are in as good or better condition than those lost to covered activities. Exotic plants and recreational use will be controlled within reserves to benefit the species (Condition 9). Covered activities will avoid serpentine land cover types whenever feasible during project planning (Condition 13). If serpentine cannot be avoided, minimization measures described in Condition 13 will be followed.
Fragrant fritillary	Condition 20: Avoid and Minimize Impacts to Covered Plant Occurrences; Condition 19: Plant Salvage when Impacts are Avoidable; Condition 9: Prepare and Implement a Recreation Plan; Condition 13: Serpentine and Associated Covered Species Avoidance and Minimization; Table 6-9: Survey Periods for Covered Plant Species; Table 3-6: Covered Plant Species and Land Cover Types; Figure 3-10: Santa Clara Valley Habitat Plan Land Cover	Development guidelines will ensure that impacts from covered activities are minimized (Condition 20). Plant surveys will be required during the appropriate survey period (Table 6-9) if the project site occurs in an area mapped as land cover associated with fragrant fritillary (Table 3-6; Figure 3-10). Occurrences to be removed by covered activities will be salvaged to the extent possible using appropriate plant salvage techniques and a new separate occurrence will be established in suitable habitat (Condition 19). The condition of each covered plant occurrence will be documented to ensure that occurrences are protected within the Reserve System are in as good or better condition than those lost to covered activities. Exotic plants and recreational use will be controlled in reserves to benefit the species (Condition 9). Covered activities will avoid serpentine land cover types whenever feasible during project planning (Condition 13). If serpentine cannot be avoided, minimization measures described in Condition 13 will be followed.

<b>Covered Species</b>	<b>Applicable Valley Habitat Plan Condition(s), Tables, and Figures</b>	<b>Species Conditions on Covered Activities Excerpted from Final Santa Clara Valley Habitat Plan Executive Summary (Table ES-2)</b>
Loma Prieta hoita	Condition 20: Avoid and Minimize Impacts to Covered Plant Occurrences; Condition 19: Plant Salvage when Impacts are Avoidable; Condition 9: Prepare and Implement a Recreation Plan; Table 6-9: Survey Periods for Covered Plant Species; Table 3-6: Covered Plant Species and Land Cover Types; Figure 3-10: Santa Clara Valley Habitat Plan Land Cover	Development guidelines will ensure that impacts from covered activities are minimized (Condition 20). Plant surveys will be required during the appropriate survey period (Table 6-9) if the project site occurs in an area mapped as land cover associated with Loma Prieta hoita (Table 3-6; Figure 3-10). Occurrences to be removed by covered activities will be salvaged to the extent possible using appropriate plant salvage techniques and a new separate occurrence will be established in suitable habitat (Condition 19). The condition of each covered plant occurrence will be documented to ensure that occurrences are protected within the Reserve System are in as good or better condition than those lost to covered activities. Exotic plants and recreational use will be controlled in reserves to benefit the species (Condition 9).
Metcalf Canyon jewel-flower	Condition 20: Avoid and Minimize Impacts to Covered Plant Occurrences; Condition 19: Plant Salvage when Impacts are Avoidable; Condition 9: Prepare and Implement a Recreation Plan; Condition 13: Serpentine and Associated Covered Species Avoidance and Minimization; Table 6-9: Survey Periods for Covered Plant Species; Table 3-6: Covered Plant Species and Land Cover Types; Figure 3-10: Santa Clara Valley Habitat Plan Land Cover	Development guidelines will ensure that impacts from covered activities are minimized (Condition 20). Plant surveys will be required during the appropriate survey period (Table 6-9) if the project site occurs in an area mapped as land cover associated with Metcalf Canyon jewelflower (Table 3-6; Figure 3-10). Occurrences to be removed by covered activities will be salvaged to the extent possible using appropriate plant salvage techniques, and a new separate occurrence will be established in suitable habitat (Condition 19). The condition of each covered plant occurrence will be documented to ensure that occurrences are protected within the Reserve System are in as good or better condition than those lost to covered activities. Exotic plants and recreational use will be controlled within reserves to benefit the species (Condition 9). Covered activities will avoid serpentine land cover types whenever feasible during project planning (Condition 13). If serpentine cannot be avoided, minimization measures described in Condition 13 will be followed.
Most beautiful jewel-flower	Condition 20: Avoid and Minimize Impacts to Covered Plant Occurrences; Condition 19: Plant Salvage when Impacts are Avoidable; Condition 9: Prepare and Implement a	Development guidelines will ensure that impacts from covered activities are minimized (Condition 20). Plant surveys will be required during the appropriate survey period (Table 6-9) if the project site occurs in an area mapped as land cover associated with most beautiful jewel-flower (Table 3-6; Figure 3-10). Occurrences to be removed by covered activities will be salvaged to the extent possible using appropriate plant salvage

<b>Covered Species</b>	<b>Applicable Valley Habitat Plan Condition(s), Tables, and Figures</b>	<b>Species Conditions on Covered Activities Excerpted from Final Santa Clara Valley Habitat Plan Executive Summary (Table ES-2)</b>
	Recreation Plan; Condition 13: Serpentine and Associated Covered Species Avoidance and Minimization; Table 6-9: Survey Periods for Covered Plant Species; Table 3-6: Covered Plant Species and Land Cover Types; Figure 3-10: Santa Clara Valley Habitat Plan Land Cover	techniques and a new separate occurrence will be established in suitable habitat (Condition 19). The condition of each covered plant occurrence will be documented to ensure that occurrences are protected within the Reserve System are in as good or better condition than those lost to covered activities. Exotic plants and recreational use will be controlled in reserves to benefit the species (Condition 9). Covered activities will avoid serpentine land cover types whenever feasible during project planning (Condition 13). If serpentine cannot be avoided, minimization measures described in Condition 13 will be followed.
Mt. Hamilton fountain thistle	Condition 20: Avoid and Minimize Impacts to Covered Plant Occurrences; Condition 19: Plant Salvage when Impacts are Avoidable; Condition 9: Prepare and Implement a Recreation Plan; Condition 13: Serpentine and Associated Covered Species Avoidance and Minimization; Table 6-9: Survey Periods for Covered Plant Species; Table 3-6: Covered Plant Species and Land Cover Types; Figure 3-10: Santa Clara Valley Habitat Plan Land Cover	Development guidelines will ensure that impacts from covered activities are minimized (Condition 20). Plant surveys will be required during the appropriate survey period (Table 6-9) if the project site occurs in an area mapped as land cover associated with Mt. Hamilton thistle (Table 3-6; Figure 3-10). Occurrences to be removed by covered activities will be salvaged to the extent possible using appropriate plant salvage techniques and a new separate occurrence will be established in suitable habitat (Condition 19). The condition of each covered plant occurrence will be documented to ensure that occurrences are protected within the Reserve System are in as good or better condition than those lost to covered activities. Exotic plants and recreational use will be controlled within reserves to benefit the species (Condition 9). Covered activities will avoid serpentine land cover types whenever feasible during project planning (Condition 13). If serpentine cannot be avoided, minimization measures described in Condition 13 will be followed.
Santa Clara Valley dudleya	Condition 20: Avoid and Minimize Impacts to Covered Plant Occurrences; Condition 19: Plant Salvage when Impacts are Avoidable; Condition 9: Prepare and Implement a Recreation Plan; Condition 13: Serpentine and Associated Covered Species Avoidance and Minimization;	Development guidelines will ensure that impacts on Santa Clara Valley dudleya from covered activities are minimized (Condition 20). Plant surveys will be required during the appropriate survey period (Table 6-9) if the project site occurs in an area mapped as land cover associated with Santa Clara Valley dudleya (Table 3-6; Figure 3-10). Occurrences to be removed by covered activities will be salvaged to the extent possible using appropriate plant salvage techniques, and a new separate occurrence will be established in suitable habitat (Condition 19). The condition of each covered plant occurrence will be documented to ensure that occurrences are protected within the

<b>Covered Species</b>	<b>Applicable Valley Habitat Plan Condition(s), Tables, and Figures</b>	<b>Species Conditions on Covered Activities Excerpted from Final Santa Clara Valley Habitat Plan Executive Summary (Table ES-2)</b>
	Table 6-9: Survey Periods for Covered Plant Species; Table 3-6: Covered Plant Species and Land Cover Types; Figure 3-10: Santa Clara Valley Habitat Plan Land Cover	Reserve System are in as good or better condition than those lost to covered activities. Exotic plants and recreational use will be controlled within reserves to benefit the species (Condition 9). Covered activities will avoid serpentine land cover types whenever feasible during project planning (Condition 13). If serpentine cannot be avoided, minimization measures described in Condition 13 will be followed.
Smooth lessingia	Condition 20: Avoid and Minimize Impacts to Covered Plant Occurrences; Condition 19: Plant Salvage when Impacts are Avoidable; Condition 9: Prepare and Implement a Recreation Plan; Condition 13: Serpentine and Associated Covered Species Avoidance and Minimization; Table 6-9: Survey Periods for Covered Plant Species; Table 3-6: Covered Plant Species and Land Cover Types; Figure 3-10: Santa Clara Valley Habitat Plan Land Cover	Development guidelines will ensure that impacts from covered activities are minimized (Condition 20). Plant surveys will be required during the appropriate survey period (Table 6-9) if the project site occurs in an area mapped as land cover associated with smooth lessingia (Table 3-6; Figure 3-10). Occurrences to be removed by covered activities will be salvaged to the extent possible using appropriate plant salvage techniques and a new separate occurrence will be established in suitable habitat (Condition 19). The condition of each covered plant occurrence will be documented to ensure that occurrences are protected within the Reserve System are in as good or better condition than those lost to covered activities. Exotic plants and recreational use will be controlled in reserves to benefit the species (Condition 9). Covered activities will avoid serpentine land cover types whenever feasible during project planning (Condition 13). If serpentine cannot be avoided, minimization measures described in Condition 13 will be followed.
Tiburon paintbrush	Condition 9: Prepare and Implement a Recreation Plan; Condition 13: Serpentine and Associated Covered Species Avoidance and Minimization; Table 6-9: Survey Periods for Covered Plant Species; Table 3-6: Covered Plant Species and Land Cover Types; Figure 3-10: Santa Clara Valley Habitat Plan Land Cover	Plant surveys will be required during appropriate survey period (Table 6-9) if a project site occurs in an area mapped as land cover associated with Tiburon Indian paintbrush (Table 3-6; Figure 3-10). The condition of any new occurrences that may be found during the permit as a result of project surveys will be documented to ensure they are not affected. Exotic plants and recreational use will be controlled in reserves to benefit the species (Condition 9). Covered activities will avoid serpentine land cover types whenever feasible during project planning (Condition 13).

<b>Covered Species</b>	<b>Applicable Valley Habitat Plan Condition(s), Tables, and Figures</b>	<b>Species Conditions on Covered Activities Excerpted from Final Santa Clara Valley Habitat Plan Executive Summary (Table ES-2)</b>
Bay checkerspot butterfly	Condition 13: Serpentine and Associated Covered Species Avoidance and Minimization	Development guidelines will ensure that impacts on this species from covered activities are minimized (Condition 13). This includes design measures to limit project footprint, buffer establishment, and landscaping restrictions. Surveys will be conducted to evaluate habitat quality and allow for development to occur as far as possible from high-quality habitat.
Burrowing owl	Condition 15: Western Burrowing Owl	Development and operations and maintenance guidelines will ensure that impacts from covered activities are avoided or minimized (Condition 15). Species-specific surveys will be conducted during project planning phase, and potential impacts to occupied breeding habitat will be mapped. Preconstruction surveys will establish species presence/absence. Project monitoring will be coordinated with other regional efforts. Avoidance and minimization measures, including the establishment of a 250-foot buffer zone, will avoid all nest sites that could be disturbed by project construction throughout the breeding season. During the non-breeding season, active burrows will be avoided by the establishment of a 160-foot border, and exclusion doors will be put in place for 48 hours prior to excavation. All project monitoring will be conducted by a qualified biologist.
California red-legged frog	Condition 4: Avoidance and Minimization for In-Stream Projects; Condition 5: Avoidance and Minimization Measures for In-Stream Operations and Maintenance; Condition 11: Stream and Riparian Setbacks; Condition 12: Wetland and Pond Avoidance and Minimization; Condition 14: Valley Oak and Blue Oak Woodland Avoidance and Minimization; Condition 9: Prepare and Implement a Recreation Plan	Development guidelines for wetlands, ponds, and streams (breeding habitat) and valley oak and blue oak woodlands (upland habitat) will ensure that impacts from covered activities are minimized (Conditions 4, 5, 11, 12, 14). Project planning guidelines include maintenance of landscape connectivity, maintenance of site hydrology to the extent possible, and establishment of buffer/setback requirements. Construction guidelines include buffer zone establishment and fencing; staking of wetlands/ponds during construction; staff training by professional biologist; erosion control measures; and restrictions on seasonality of activities, vegetative management, use of heavy machinery, access points, and ground disturbance. Recreational use guidelines include leash law restrictions and public access limitations within reserve recreational use areas to prevent potential species impacts from domestic dogs (Condition 9).



<b>Covered Species</b>	<b>Applicable Valley Habitat Plan Condition(s), Tables, and Figures</b>	<b>Species Conditions on Covered Activities Excerpted from Final Santa Clara Valley Habitat Plan Executive Summary (Table ES-2)</b>
California tiger salamander	Condition 12: Wetland and Pond Avoidance and Minimization; Condition 14: Valley Oak and Blue Oak Woodland Avoidance and Minimization; Condition 11: Stream and Riparian Setbacks; Condition 9: Prepare and Implement a Recreation Plan	Development guidelines for wetlands and ponds (breeding habitat) and valley oak and blue oak woodlands (upland habitat) will minimize effects of covered activities (Conditions 12, 14). Stream and Riparian Setbacks, may also have ancillary benefits to this species. Although the streams themselves do not provide habitat, aquatic breeding sites and dispersal corridors may be located within the riparian areas protected by the setbacks (Condition 11). Project planning guidelines include maintenance of landscape connectivity, maintenance of site hydrology to the extent possible, and establishment of buffer/setback requirements. Construction guidelines include buffer zone establishment and fencing; staking of wetlands/ponds during construction; staff training by professional biologist; erosion control measures; and restrictions on seasonality of activities, vegetative management, use of heavy machinery, access points, and ground disturbance (Conditions 12, 14). Recreational use guidelines include leash law restrictions and public access limitations within reserve recreational use areas to prevent potential species impacts from domestic dogs (Condition 9).
Foothill yellow-legged frog	Condition 3: Maintain Hydrologic Conditions; Condition 4: Avoidance and Minimization for In-Stream Projects; Condition 5: Avoidance and Minimization Measures for In-Stream Operations and Maintenance; Condition 7: Rural Development Design and Construction Requirements; Condition 9: Prepare and Implement a Recreation Plan; Condition 11: Stream and Riparian Setbacks	Development and operations and maintenance guidelines will ensure that impacts from covered activities are avoided or minimized through maintenance of hydrologic conditions and protection of water quality (Condition 3), stream avoidance and minimization for in-stream projects (Condition 4), BMPs for in-stream operations and maintenance (Condition 5), rural development design requirements (Condition 7), preparation and implementation of a Reserve System recreation plan (Condition 9), and riparian setbacks (Condition 11). Conditions include but are not limited to: creation of landscape features to maintain preproject hydrograph, remove pollutants and sediments from surface runoff prior to stream entry, and reduce runoff velocity; development of construction sediment and erosion management plans; installation of fish passage mechanisms during in-stream work; and bank stabilization. Recreational use guidelines include leash law restrictions and public access limitations within reserve recreational use areas to prevent potential species impacts from domestic dogs (Condition 9).

<b>Covered Species</b>	<b>Applicable Valley Habitat Plan Condition(s), Tables, and Figures</b>	<b>Species Conditions on Covered Activities Excerpted from Final Santa Clara Valley Habitat Plan Executive Summary (Table ES-2)</b>
Tricolored blackbird	Condition 17: Tricolored Blackbird	Development and operations and maintenance guidelines ensure that impacts from covered activities are avoided or minimized (Condition 17). During the project planning phase, a qualified biologist will survey and map potential species nesting habitat. Potential nesting habitat identified by these or any other surveys, will be mapped and direct impacts to potential nesting habitat avoided and other impacts minimized. Avoidance measures include relocating impacts away from the potential nesting habitat. If a project is unable to avoid impacts on species nest colonies by locating construction and staging activities at least 250 feet from the outer edge of all hydric vegetation associated with the colony, preconstruction surveys will be required. Preconstruction surveys will conclude no more than two calendar days prior to construction. Covered activities must avoid species nesting colonies (currently occupied or occupied within the past five years) and associated habitat with a 250-foot no-activity buffer zone around the outer edge of all hydric vegetation associated with the colony. Required buffers may be adjusted on a case-by-case basis as evaluated by the Implementing Entity in coordination with the Wildlife Agencies. A construction monitor will be present during breeding season construction when an active colony is present.
Western pond turtle	Condition 4: Avoidance and Minimization for In-Stream Projects; Condition 5: Avoidance and Minimization Measures for In-Stream Operations and Maintenance; Condition 11: Stream and Riparian Setbacks; Condition 12: Wetland and Pond Avoidance and Minimization; Condition 14: Valley Oak and Blue Oak Woodland Avoidance and Minimization; Condition 9: Prepare and Implement a Recreation Plan	Development guidelines for wetlands, ponds, and streams and valley oak and blue oak woodlands will ensure that impacts from covered activities are avoided and minimized (Conditions 4, 5, 11, 12 & 14). Project planning guidelines include maintenance of landscape connectivity, maintenance of site hydrology to the extent possible, and establishment of buffer/setback requirements. Construction guidelines include buffer zone establishment and fencing; staking of wetlands/ponds during construction; staff training by professional biologist; erosion control measures; and restrictions on seasonality of activities, vegetative management, use of heavy machinery, access points, and ground disturbance. Recreational use guidelines include leash law restrictions and public access limitations within reserve recreational use areas to prevent potential species impacts from domestic dogs (Condition 9).

**Note:** All information contained in this table refers to the Final Santa Clara Valley Habitat Plan (ICF International 2012).

## 7. Local Natural Communities

The proposed project has been designed to result in minimal impacts to local natural communities, such as freshwater marshes and oak woodlands. Because new trails and associated facilities will be sited in the field to purposely avoid sensitive biological resources and retain existing habitat values, only limited impacts to natural communities will be necessary. In fact, beneficial impacts to local natural communities will also result from project implementation as some existing trails that are located in sensitive habitat areas will be closed and restored to native vegetation. With natural resource avoidance and impact minimization as part of the phased project design, adverse impacts to local natural communities will be less than significant and therefore no mitigation is required.

## 8. Wetlands/Waterways

As stated above in response number 3, because the proposed project would implement policies, trail maintenance guidelines for bridge design, design guidelines and BMPs to avoid and minimize potential impacts to the creek and would ensure that no impacts to riparian habitat would occur with maintenance activities within or adjacent to jurisdictional wetland features or waters of the U.S. or State, the impact is considered to be less than significant and no mitigation is required.~~the project will not impact any watercourse or aquatic, wetland, or riparian area or habitat. Because the proposed project will install span bridges above ordinary high water mark levels at the new stream crossings and avoid seasonal wetlands, there will be no impact to wetlands or waterways, and therefore no mitigation is required.~~

## 9. Unique/Heritage Trees

According to the Santa Clara County Tree Preservation Ordinance, a heritage tree is defined as “any tree which, because of its history, girth, height, species, or other unique quality, has been recommended for inclusion on the heritage resource inventory by the historic heritage commission and found by the Board of Supervisors to have special significance to the community.”

To the greatest extent practicable, new trails will be sited to avoid and retain native trees. However, limited tree removal will be necessary to build the new trail along the south side of the reservoir in the vicinity of Cherry Cove. Any tree removals will be subject to the County’s tree removal permitting process and will likely require mitigation, which is addressed separately below. No unique or heritage trees will be removed by the proposed project. It should be noted that the Trails Master Plan includes Best Management Practices to discourage the spread of Sudden Oak Death Syndrome (SOD), which is not currently known to occur in the park.

There will be no impact to unique or heritage trees, or to a large number of trees over 12 inches in diameter, due to project implementation and therefore no mitigation is required.

## 10. Local Policies/Ordinances

The Santa Clara County General Plan, Book A, Part 2, Resource Conservation section, Habitat and Biodiversity subsection contains these strategies:

- Strategy #1: Improve Current Knowledge and Awareness of Habitats;
- Strategy #2: Protect the Biological Integrity of Critical Habitat Areas;
- Strategy #3: Encourage Habitat Restoration; and
- Strategy #4: Evaluate the Effectiveness of Environmental Mitigations.

The proposed project is consistent with these local policies protecting biological resources.

The Santa Clara County Tree Preservation Ordinance is contained in the municipal code Division C16: Tree Preservation and Removal. An administrative permit must be obtained from the County Planning Department prior to removal of protected trees, which are defined as applicable to the project site as “any tree which measures over thirty-seven and seven-tenths (37.7) inches in circumference (twelve (12) inches or more in diameter) measured four and one-half (4.5) feet above the ground, or which exceeds twenty (20) feet in height”. Tree removal permits typically require mitigation, usually through the planting of replacement trees in appropriate sites.

Although proposed project trail and facility impact areas will be positioned purposely to avoid trees as much as possible, some protected trees will need to be removed. As stated earlier, to the greatest extent practicable, new trails will be sited to avoid and retain native trees. However, limited tree removal will be necessary to build the new trail along the south side of the reservoir in the vicinity of Cherry Cove.

### **Mitigation Measure**

*BIO-5. Mitigation will be required for the removal of any tree which measures over thirty-seven and seven-tenths (37.7) inches in circumference (twelve (12) inches or more in diameter) measured four and one-half (4.5) feet above the ground, or which exceeds twenty (20) feet in height. In compliance with the Santa Clara County Tree Preservation Ordinance, an administrative permit will be obtained from the County Planning Department prior to removal of protected trees on the project site and any stipulated mitigation will be completed, such as the planting of replacement trees in appropriate sites.*

Implementation of mitigation measure BIO-5 would ensure that potential impacts to trees protected by the Santa Clara County Tree Preservation Ordinance due to the proposed project would be less than significant with mitigation. Finally, as stated earlier, no impacts are anticipated to wetland or riparian habitats due to the proposed project.

E. CULTURAL/ HISTORICAL/ ARCHAEOLOGICAL RESOURCES						
WOULD THE PROJECT	IMPACT					SOURCE
	NO	YES				
		No Impact	Less Than Significant Impact	Less Than Significant With Mitigation Incorporated	Potentially Significant Impact	
1. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5 of the CEQA Guidelines, or the County's Historic Preservation Ordinance (i.e. relocation, alterations or demolition of historic resources)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,5,38
2. Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5 of the CEQA Guidelines?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,5,38
3. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,5,38
4. Be located in a Historic District (e.g., New Almaden Historic District)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,5,8
5. Disturb a historic resource or cause a physical change which would affect unique ethnic cultural values or restrict existing religious or sacred uses within the potential impact area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,5,38
6. Disturb potential archaeological resources?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,5,38
7. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,5,9,15

## Comment

This section incorporates the findings of the cultural resource evaluation entitled *Archival Review and Limited Evaluation of Select Areas of the Calero County Parks Trails Master Plan Project in the County of Santa Clara Trail* (Archeological Resource Management June 2013) (Archaeological Investigation) was prepared for the project. The cultural resource evaluation was carried out to determine the presence or absence of any significant cultural resources. This report is exempt from the Public Records Act and therefore, is not included as an appendix to this initial study.

The Archaeological Investigation included a document review of previously completed archival research on record with the state archaeological office, limited surface reconnaissance including trailheads, staging areas, and areas of previously recorded archaeological sensitivity, an evaluation of the potential significance of the property according to the California Register of Historic Resources (CRHR), and a written report of the findings with appropriate recommendations.

The archival research revealed that there are a total of twelve previously recorded sites within the Calero County Park boundaries. These sites include: CA-SCL-209, CA-SCL-205, CA-SCL-208, CA-SCL-364H, CA-SCL-365, CA-SCL-366, CA-SCL-405H, CA-SCL-486, CA-SCL-487, CA-SCL-488H, CA-SCL-489H, and CA-SCL-570. Four additional sites are located within the immediate vicinity of the park boundaries. Surface reconnaissance was carried out in the area of proposed trail heads, staging areas, and areas of recorded archaeological sensitivity. Two additional previously unrecorded historic resources known to County staff were identified in the field.

Calero County Park as a whole contains multiple areas of archaeological sensitivity for both prehistoric and historic resources. This includes previously recorded sites, the areas immediately surrounding them, all areas within the vicinity of seasonal drainages, and other specific areas highlighted in the Archaeological Investigation. However, County of Santa Clara Parks and Recreation Department best management practices include site-appropriate design for trail design and construction that avoid known historical or archaeological sites and areas of potential sensitivity unless specifically designed to provide access to areas for interpretation. Staff members receive certified training in the identification, avoidance, and protection of historic, archaeological, and paleontological resources.

In addition, the Trails Master Plan provides additional guidelines specific to the character and the nature of the park. Trail layouts are schematic only; trail alignments represent general routes rather than actual marked trails. As trails are scheduled for implementation, more detailed design studies will be initiated and exact trail alignments will be determined in the field at the time of construction. (Bellinger Foster Steinmetz, 2013)

Thus, while a comprehensive evaluation and recordation of all possible cultural resources has not been completed, preliminary research, field investigation, and known information were used to identify trail routes that would best avoid or mitigate any adverse effects. These resources will be reviewed again at the time of construction.

## ***Discussion/Mitigation***

### **1. Cause a Substantial Adverse Change in the Significance of a Historical Resource**

As identified above, there are several recorded historic resources in the project area. In addition, two previously unrecorded historic resources, a home site and a wooden barn were noted during the archaeological survey. No alterations to these sites are proposed. However, without additional cultural resource evaluations, trail construction and other ground disturbing activities have the potential to disturb known and unknown historic resources at Calero County Park. Therefore, the following mitigation measures will be required:

#### **Mitigation Measures**

- CR-1. County of Santa Clara Parks and Recreation Department will ensure that the two previously unrecorded historic resources (home site and a wooden barn) noted during the archaeological survey are documented on Department of Parks and Recreation (DPR) forms and recorded to the California Historic Resources Information System (CHRIS).*

- CR-2. *Prior to construction, staging areas and trails plans will be finalized in consultation with a qualified historian to avoid areas of known historic sensitivity.*
- CR-3. *Due to the possibility that significant previously unknown historic resources might be found during future construction activities, the following language will be incorporated into the Trails Master Plan and/or all future construction documents:*

*“If historic resources (i.e. historic sites, and/or isolated historic objects that appear likely to have historic or cultural significance) are discovered during construction, work shall be halted at a minimum of 200 feet from the find, County of Santa Clara, Parks and Recreation Department shall be notified, and the area shall be staked off. County of Santa Clara, Parks and Recreation Department shall retain a qualified professional historian that meets the Secretary of the Interior’s Standards and Guidelines for Professional Qualifications in history, to evaluate and determine the significance of the find. If the find is determined to be significant, appropriate mitigation measures shall be formulated and implemented.”*

Implementation of mitigation measures CR-1 through CR-3 would ensure that potential impacts due to substantial adverse change in the significance of an historic resource would be reduced to a less than significant level by formally recording the historic sites recently identified in the Archaeological Evaluation, avoiding areas of known historic sensitivity and ensuring that in the event of accidental discovery of an historic resource, work is stopped and appropriate mitigation is formulated and implemented. The impact would be **less than significant with mitigation**.

## **2. Cause a Substantial Adverse Change in the Significance of an Archaeological Resource**

As identified above, there are several recorded archeological resources in the project area. In addition, the area as a whole is recognized possibly containing multiple, yet-undiscovered areas of archaeological sensitivity. Without additional cultural resource evaluations, trail construction and other ground disturbing activities have the potential to disturb known and unknown archeological resources at Calero County Park. Therefore, the following mitigation measures will be required:

### **Mitigation Measures**

- CR-4. *Prior to construction, staging areas and trails plans will be finalized in consultation with a qualified archaeologist to avoid areas of known archaeological sensitivity. Where this is not feasible, archaeological monitoring shall be carried out during earthmoving activities for trail construction within sensitive areas, as defined in the Archaeological Investigation. In the event that proposed trails pass through recorded archaeological resources, an archaeological testing program will be developed for these areas consistent with professional archeological standards and State and County requirements. The nature and extent of the testing program will be dependent on the level of site disturbance, and topological and environmental factors.*



CR-5. *Due to the possibility that significant buried prehistoric cultural resources might be found during future construction and trail improvement activities, the following language will be incorporated into the Trails Master Plan and/or all future construction documents:*

*“If prehistoric archaeological resources (including but not limited to dark soil containing shellfish or groundstone) are discovered during construction, work within the immediate vicinity of the find will be halted at a minimum of 200 feet from the find and the area will be staked off. County of Santa Clara, Parks and Recreation Department will then determine if it is feasible to relocate the trail to avoid and/or minimize impacts. If the trail cannot be rerouted and impacts cannot be avoided, then work will cease in the area until the archaeological evaluation has been completed. The County of Santa Clara Parks and Recreation Department will retain a qualified professional historian and/or archaeologist that meets the Secretary of the Interior’s Standards and Guidelines for Professional Qualifications in archaeology to evaluate and determine the significance of the find. If the find is determined to be significant, appropriate mitigation measures will be formulated and implemented.”*

Implementation of mitigation measures CR-4 and 5 would ensure that potential impacts due to substantial adverse change in the significance of a archaeological resource would be reduced to a less than significant level by avoiding areas of known archaeological sensitivity and ensuring that in the event of accidental discovery of a buried archaeological resource, work is stopped and appropriate mitigation is formulated and implemented. The impact would be **less than significant with mitigation**.

### **3. Disturb Human Remains**

There is the possibility of an accidental discovery of human remains during construction activities associated with implementation of the proposed Trails Master Plan. Therefore, implementation of the following mitigation measure will be required:

#### **Mitigation Measure**

CR-6. *In the event of an accidental discovery or recognition of any human remains, the following language will be incorporated into the Trails Master Plan and/or all future construction documents in accordance with CEQA Guidelines section 15064.5(e):*

*“If human remains are found during construction there will be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the coroner of Santa Clara County is contacted to determine that no investigation of the cause of death is required and procedures outlined in the County Ordinance Relating to Indian Burial Grounds (County of Santa Clara, 1987) and State Public Resources Code can be implemented. If the coroner determines the remains to be Native American the coroner will contact the Native American Heritage Commission within 24 hours.*

*The Native American Heritage Commission will identify the person or persons it believes to be the most likely descendent from the deceased Native American. The most likely*

*descendent may then make recommendations to County of Santa Clara or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and associated grave goods as provided in Public Resources Code Section 5097.98. The County of Santa Clara or its authorized representative will reburial the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further disturbance if: a) the Native American Heritage Commission is unable to identify a likely descendent or the likely descendent failed to make a recommendation within 24 hours after being notified by the commission; b) the descendent identified fails to make a recommendation; or c) the County or its authorized representative rejects the recommendation of the descendent, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.”*

Implementation of mitigation measure CR-6 would ensure that potential impacts due to a disturbance of human remains would be reduced to a less than significant level by requiring that in the event of accidental discovery or recognition of any human remains during construction, work will be stopped and the human remains and any associated grave goods will be treated or disposed of with appropriate dignity and not subject to future disturbance. The impact would be **less than significant with mitigation**.

Additionally, a Sacred Lands Check was initiated for the project by ARM in May of 2013. The response from the Native American Heritage Commission was received on June 20<sup>th</sup> identifying the Check as negative. Letters were sent out to all of the Native American representatives June 21<sup>st</sup>. To date, no responses have been received.

#### **4. Be Located in a Historic District**

Calero County Park is not located in a Historic District. **No Impact.**

#### **5. Cause a Physical Change which would Affect Unique Ethnic Cultural Values or Restrict Existing Religious or Sacred Uses within the Potential Impact Area**

There are no ethnic or religious facilities located within Calero County Park. Therefore, implementation of the Draft Trails Master Plan would not Affect Unique Ethnic Cultural Values or Restrict Existing Religious or Sacred Uses within the Potential Impact Area. **No Impact.**

#### **6. Disturb Potential Archaeological Resources**

See discussion under Impact 2 above. **Less than significant with mitigation.**

#### **7. Directly or Indirectly Destroy a Unique Paleontological Resource or Site or Unique Geologic Feature**

The San Jose General Plan does not identify the project site area as paleontologically sensitive (City of San Jose General Plan, Figure 3.11-1). The soils and geology report prepared for the Trails Master Plan in 2011 (*Geologic and Hydrologic Opportunities and Constraints for Trail Planning*, Balance Hydrologics)

did not identify the presence of the geologic unit known in the County of Santa Clara to be high in paleontological resources in the project area. **No Impact.**

F. ENERGY						
WOULD THE PROJECT	IMPACT					SOURCE
	NO	YES				
	No Impact	Less Than Significant Impact	Less Than Significant With Mitigation Incorporated	Potentially Significant Impact	Cumulative	
1. Use non-renewable resources in large quantities or in a wasteful manner?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2, 3,4,5
2. Involve the removal of vegetation capable of providing summer shade to a building or significantly affect solar access to adjacent property?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2, 3,4,5

### Discussion/Mitigation

#### 1. Use of Non-renewable Resources

Heavy equipment such as bulldozers and trucks could be used to create the two new staging areas and to reconfigure and expand the Ranger Station Staging area. Automobiles would also be used by construction workers to get to and from the site during construction. However, these activities would be only occur once, during the construction phase, so large quantities of fuels would not be used. No other non-renewable resources would be used. **No Impact.**

#### 2. Removal of vegetation capable of providing summer shade to a building or significantly affect solar access to adjacent property

The proposed Draft Trails Master Plan does not include removing trees adjacent to buildings. While there may be a few trees removed for trail construction, this removal would not affect solar access to any adjacent properties. **No Impact.**

<b>G. GEOLOGY AND SOILS</b>						
	<b>IMPACT</b>					<b>SOURCE</b>
<b>WOULD THE PROJECT:</b>	<b>NO</b>	<b>YES</b>				
	<u>No Impact</u>	<u>Less Than Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporated</u>	<u>Potentially Significant Impact</u>	<u>Cumulative</u>	
1. 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.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,5,6,7,9,
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,5,6,7,9, 15
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,5,6,7,9, 15
iv) Landslides?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,5,6,7,9, 15
2. Result in substantial soil erosion or siltation or the loss of topsoil?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,5,6,7,9, 15
3. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, collapse, shrink/ swell potential, soil creep or serve erosion?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,5,6,7,9, 15
4. Be located on expansive soil, as defined in the report, <i>Soils of Santa Clara County</i> or California Building Code, creating substantial risks to life or property?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15,37,48
5. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15,37,48
6. Cause substantial compaction or over-covering of soil either on-site or off-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15,37,48
7. Cause substantial change in topography or unstable soil conditions from excavation, grading, or fill?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15,37,48
8. Be located in an area designated as having a potential for major geological hazard?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,5,6,7,9, 15,37,48
9. Be located on, or adjacent to a known earthquake fault?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,5,6,7,9, 15,37,48

10. Be located in a Geologic Study Zone?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,5,6,7,9,15
11. Involve construction of a building, road or septic system on a slope of:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,5,6,7,9,15
a. 30% or greater?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
b. 20% to 30%?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c. 10% to 20%?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

## Comment

The analysis below is based in part on the memo prepared for Calero County Park: *Geologic and Hydrologic Opportunities and Constraints for Trail Planning* (Balance Hydrologics 2011).

## Discussion/Mitigation

### 1. Expose People or Structures to Substantial Adverse Effects Involving Earthquake Fault Rupture, Seismic Ground Shaking/Failure, or Landslides

The project is located in a seismically active area and visitors to the park would be exposed to seismic and earthquake related hazards. However, implementation of the proposed Draft Trails Master Plan would not significantly increase exposure of people to these types of hazards.

The active San Andreas Fault System is located approximately seven miles southwest of Calero County Park. A major earthquake in the region could have serious impacts to the park including damage to park structures, rupture of utilities crossing the fault, earthquake-induced flooding and/or landslides and potential loss of life. However, damages would be of much smaller scale than in densely urbanized areas (where the threat from falling buildings and earthquake-induced fire is high). All trails users would be recreating outdoors, and since it is impossible to anticipate a seismic event, there are no precautions that can be taken to avoid or reduce seismic events for trail users in Calero County Park. The impact is considered to be **less than significant**.

### 2. Impact - Soil Erosion, Siltation or the Loss of Topsoil

The project would be constructed using the BMPs presented in the draft Trails Master Plan to protect areas from substantial soil erosion and loss of topsoil during and after construction. These BMPs include the following as identified on pages 65-67 of the Draft Trails Master Plan:

**Design Phase.** The following design guidelines would be followed during detailed design of the trails so that the trails avoid geologic hazards and minimize erosion.

1. All trails should be designed in accordance with the Countywide Trails Master Plan Design and Management Guidelines.

2. Trails should not follow the fall line of a slope; they should contour along side slopes. Fall-line trails become watercourses, erode easily and then are difficult to maintain. Even low-slope (less than 10 percent) fall-line trails usually become the preferential flow path for water. Trails following the contour along side slopes, versus fall-line trails, help to moderate the speed of trail users.
3. Trails should be out-sloped in most cases (except for short sections at outside bends). This encourages water to run off the side of the trail, rather than along the trail. Trails should be built to have about 3 to 5 percent outslope after trail compaction has occurred, so initial outsliping should be greater than 5 percent. After a year or two, it should be expected that maintenance would be needed to return and “deberm” sections of trail where soil compaction and displacement have exceeded the designed outslope.
4. Frequent rolling dips should be built into a trail (as a backup to outsliping), to avoid water flow along a trail. These should be placed to enhance natural grade dips. Rolling grade dips are long and gentle features (12 to 20 feet long) that avoid the short and abrupt style of traditional “water bars” (Klein, 2003; Riter and Riter, 2005). Having the outside bend of a trail as a relative high point helps reduce erosion; this is achieved because the upslope naturally slows a bicycle rider, which reduces the need to brake or skid.
5. Trail widths should be minimized to reduce the amount of bare soil subject to erosion. Contour trails should be cut on a full bench, rather than a combination of cut and fill. The cut material should be broadcast downslope, unless the trail is near a creek. Cut material can also be utilized for the ramp section of rolling dips if it is compacted one layer at a time.
6. For mountain biking trails, climbing turns or switchbacks should be located whenever possible where the side-slope is 10 percent or less, in order to create a sustainable, low-erosion trail. The actual trail gradient should be determined by site geology and terrain. The wider the turn and the lower the slope of the turn itself, the less braking and skidding (going downhill) is needed, and less wheel spinning (going uphill) is likely (Schmidt and Woolner, 2004).
7. Reduce locations where bicycles tend to brake heavily and/or have to climb steep hills, which could cause erosion. Make a conscious effort to design trails with consistent “flow” (IMBA, 2004). Exaggerate grade reversals at outside bends. Gradual flow transitions should also reduce user conflicts.

**Construction and Operational Phase.** The following BMPs would be incorporated during the construction and operational phase as appropriate:

1. If landslides or slope failure occurs, cut a temporary ramp through the edge of the scarp, have the trail traverse across the slide, and then cut another ramp to go up the scarp on the other side. This would reduce the tendency for users to create volunteer trails around the head of the landslide scarp.
2. All trails in areas with active landslides should be considered for closure during wet weather and storm events.



3. Close more erodible trails during wet weather and storm events per the County Parks Department's trail closure policy and procedures.
4. Maintain the trail corridor by trimming encroaching vegetation; a bush leaning into a trail can lead users to travel outside the trail to avoid brushing against the bush, which would eventually widen the trail over time.
5. If a trail area is too sandy, adding clay can help the tread be more cohesive.
6. Where deemed beneficial by County Parks Department Staff, reapplication of the forest duff layer, peeled back from the site at the beginning of construction, will be used on top of the new trail bed to help reduce erosion.
7. As trails approach one another they should rise gently to the junction with other trails, which will reduce water collection at the junction, and moderate the speed of trail users.

Specific Countywide Trails Master Plan BMPs (included as Design Phase BMP 1 above) related to soil erosion during the construction phase include the following:

**D - 3.5.3 Soil Disturbance.** In order to reduce erosion and maintenance problems, disturbance to the soil surface shall be kept to a minimum. Only those rocks, stumps, and roots which interfere with safe passage shall be removed.

**D - 3.5.5 Erosion Control Plans.** Where a potential for significant soil erosion exists along a new trail alignment, specific erosion control plans shall be developed by a Registered Civil or Soils Engineer as part of the trail construction documentation. Criteria to be used in determining the erosion potential include: slope; soil type; soil composition and permeability; and the relative stability of the underlying geologic unit as identified on local General Plans or other adopted planning documents.

**D - 3.6 Planting of Disturbed Areas.** Any cut or fill slopes shall be immediately reseeded or replanted with vegetation native to the general area.

**D - 4.1.1 Drainage Crossings.** Trails crossing creeks and drainages may require a bridge or culvert. Structures over water courses shall be carefully placed to minimize disturbance. Erosion control measures shall be taken to prevent erosion at the outfalls of drainage structures.

In addition, control measures included in the Hydrological BMPs as identified to reduce erosion in areas of steep slopes or in areas adjacent to a creek or riparian area in the Hydrology and Water Quality Section of this Initial Study would be included in a SWPPP prepared for the project after final design.

Future development and operation of the site consistent with the BMPs within the proposed Draft Trails Master Plan will reduce the potential of exposure of people or structures to hazards due to soil erosion and/or the loss of topsoil. The impact is **less than significant**

### 3. 4. Unstable or Expansive, Soils

With implementation of the proposed geologic BMPs (identified in the discussion under Impact 2 above) future development and operation of the site consistent with the proposed Draft Trails Master Plan would not expose people or structures to significant hazards due to unstable soils. **No Impact.**

### 5. Septic Tanks or Alternative Waste Water Disposal Systems

The proposed Draft Trails Master Plan includes a new restroom at the Ranger Station and the Rancho San Vicente staging area. Table 4 of the Draft Trails Master Plan identifies the new restroom(s) as “Vault system, septic hook up, or sanitary sewer.” An existing leach field is identified on the conceptual map for the Ranger Station. County Parks has indicated that the preferred restroom option is installation of a septic system rather than sanitary sewer line hookup since they are outside of City of San Jose services. Installation of septic system would require a permit by the County of Santa Clara Health Department.

Prior to construction, County Parks will be required to submit a site-specific, design-level septic (or sanitary hookup) plan, which includes soil testing results, percolation test, and measures of compliance with all applicable state and local code requirements.

These requirements will ensure that the septic system is designed to function adequately based on site specific soils conditions **No Impact.**

### 6. Soil Compaction

The proposed Draft Trails Master Plan includes BMPs to address the potential of soil compaction (see Hydrologic BMPs listed in the Hydrology Water Quality Section of this Initial Study and Geologic BMPs listed under Impact 1 above). In addition, the Draft Trails Master Plan includes the following BMP:

The trail bed of the volunteer trail should also be rehabilitated, especially with volunteer trails with high historic usage. Entrenched trails must be filled and reshaped to the natural contours. If soil compaction has occurred, the soil must be scarified and aerated. The volunteer tread must be revegetated by planting native vegetation transplanted from the vicinity, or seeded with native species found in the area. Abandoned Trail Obliteration and Restoration - BMP's, BMP 4. Draft Trails Master Plan page 68.

With implementation of these proposed BMPs, future development and operation of the site would not cause substantial compaction or over-covering of soil either on-site or off-site. The impact is **less than significant.**

### 7. Change in Topography or Unstable Soil Conditions from Excavation, Grading, or Fill

The proposed Draft Trails Master Plan does not include large amounts of grading, excavation or fill that could cause a change in topography. Based on the construction associated with the proposed project (185 new spaces plus additional size for 43 trailer spaces) and average trail disturbance, it estimated that the proposed project disturbance area would be approximately 2.5 acres (parking areas) and approximately 14.25 acres (trail area). BMPs have been included in the Draft Trails Master Plan to ensure

construction activities and future operation does not result in unstable soil conditions (see Hydrologic BMPs listed in the Hydrology Water Quality Section of this Initial Study and Geologic BMPs listed under Impact 1. above). The impact is **less than significant**.

### **8. 9. 10. Potential for Major Geological Hazard, Earthquake, Geologic Study Zone**

The project is located in a seismically active area and visitors to the park would be exposed to seismic and earthquake related hazards. See the discussion under Impact 1 above. This impact is **less than significant**.

### **11. Involve Construction on a Slope of 10 Percent or Greater**

Slopes within Calero County Park vary from flat (0 percent) to very steep (40 percent+). Trail development is directly related to the limitations presented by degree of slope. As land disturbance is also directly related to potential habitat disturbance, as a component of the Draft Trails Master Plan, trail development along steep slopes will be minimized in Calero County Park.

A digital elevation model for Calero County Park has been used to create a percent slope map. The slope is divided into the following categories: 0-5 percent, 5-12 percent, 12-20 percent, 20-20 percent, 30-40 percent, and 40 percent +. Areas of steeper slope are typically less suitable for trail building, so they were given a higher constraint value. Map 5, Terrain Slope, of the Draft Trails Master Plan identifies the slope categories with the park.

Based on identified slope constraint, design guidelines would be followed as outlined in the Draft Trails Master Plan during detailed design of the trails so that the trails avoid geologic hazards and minimize erosion associated with steep slopes (refer to BMPs identified in the discussion of Impact 1 above, and Hydrological BMP's identified in the Hydrology and Water Quality section of this Initial Study). The impact is **less than significant**.

H. GREENHOUSE GAS EMISSIONS						
WOULD THE PROJECT	IMPACT					SOURCE
	NO	YES				
		No Impact	Less Than Significant Impact	Less Than Significant With Mitigation Incorporated	Potentially Significant Impact	
1. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,17,18
2. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,17,18
3. Would the project increase greenhouse gas emissions that hinder or delay the State's ability to meet the reduction target (25% reduction by 2020) contained in CA Global Warming Solutions Act of 2006 (AB 32)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,17,18

## Comments

This section is based on the *Greenhouse Gas Technical Memo*, prepared by EMC Planning Group in June 2013, included as [Appendix C](#) in this Initial Study. The Greenhouse Gas Technical Memo provides a qualitative assessment of the potential greenhouse gas emission impacts of implementing the proposed Draft Calero County Park Trails Master Plan. The methodology employed includes an evaluation of the proposed project against greenhouse gas impact significance screening criteria provided by the *California Environmental Quality Act Air Quality Guidelines* (Bay Area Air Quality Management District 2011). The Greenhouse Technical Memo also relied on traffic data provide in the *Focused Transportation Analysis for Calero County Park Trails Master Plan* prepared by Fehr & Peers in June 2013 (Transportation Memo) which is included in this Initial Study as [Appendix D](#).

## Discussion/Mitigation

### 1. Greenhouse Gas Emissions

Implementation of the proposed Draft Trails Master Plan would generate greenhouse gas emissions that would contribute to global climate change.

#### Existing Operational ADT/GHG Baseline

Under existing conditions, the primary source of greenhouse gas (GHG) emissions associated with the park is mobile source vehicle trips taken by visitors to the park. The Transportation Memo prepared for the project found that the worst-case, maximum Average Daily Trip (ADT) volume occurs during peak weekends in the spring. Under existing conditions, maximum use of the existing 28 existing parking

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spaces at the Ranger Station generates about 154 ADT. GHG emissions are generated by each of these vehicle trips.

Other existing park activities are sources of negligible volumes of GHGs. These include electricity use at the Ranger Station/Visitor Center, disposal and treatment of wastewater from several existing portable restrooms, operation of park facility maintenance vehicles and equipment, and periodic water pumping to fill a storage tank used for park-specific water supply and fire flow. Fuel-powered boating activities on the reservoir within the park also generate GHGs. However, improvements proposed as part of the park master plan are not expected to result in an increase in boating activity.

### **Proposed Project Operational ADT/GHG Emissions**

Under post-project conditions, vehicle trips will continue to be the dominant source of GHG emissions generated by the use and operation of Calero County Park. The capacity of the park to accommodate visitors arriving by vehicle will increase significantly. A net of up to 185 new parking spaces will be provided at the existing and new staging areas (65 new spaces at Ranger Station, and 115 new spaces at Rancho San Vicente, and five new spaces at Almaden Road).

Table 4 in the Transportation Memo includes a summary of the worst-case, maximum total daily volume of new daily traffic trips that would be generated with the addition of 185 new parking spaces. The 185 new spaces would enable up to a maximum total of 1,019 ADT.

It must be re-emphasized that this is the worst-case ADT volume that is assumed to occur during a limited number of weekends during a limited season of the year. The weighted average of seasonal use is about 60 percent of the maximum peak season. Therefore, it is assumed that over the course of an entire year, average ADT is 60 percent of the peak season ADT. At this average rate of use, vehicle trips would average about 611 ADT.

Non-mobile sources of GHG emissions will also increase, but continue to represent a very minor percentage of the mobile sources volume. These sources would mirror those noted under existing conditions (e.g. electricity demand at the Ranger Station, energy to dispose and treat wastewater, and energy to pump water). As noted previously, use of fuel-powered boats at the park reservoir will continue, but are not expected to intensify relative to existing conditions. No new sources of GHGs are expected under post-project conditions that do not currently exist.

### **Operational GHG Impact Screening Analysis**

As described above, the proposed project would generate a maximum of approximately 1,019 new ADT per day under the most heavy park use scenario and is assumed to average 611 ADT over the course of an entire year. As a means to compare project ADT to the ADT of representative projects listed in Table 3-1 of the Air District guidelines, [Table 8, ADT Screening Comparison](#), shows representative project types from Table 3-1, along with trip generation rates and estimates of ADTs for each.

**Table 8 ADT Screening Comparison**

Representative Screening Project Type	Project Size/Intensity <sup>1</sup>	Trip Generation Rate <sup>2</sup>	Average Daily Trips <sup>2</sup>
Single-Family Residential	56 units	9.57 trips/unit	536
Condo/Townhouse	78 units	5.81 trips/unit	453
Hardware/Paint Store	16,000	51.29 trips/1,000 sq. ft.	821
General Office Building	53,000	11.01 trips/1,000 sq. ft.	584
Supermarket	8,000	102.24 trips/1,000 sq. ft.	818
City Park	600 acres	1.59 trips/acre	954
Library	15,000	56.24 trips/1,000 sq. ft.	844
Quality Restaurant	9,000	89.95 trips/1,000 sq. ft.	810
Industrial Park	65,000	6.96 trips/1,000 sq. ft.	452
Proposed Project (County Park)	185 new parking spaces	2.5-3.0 trips/parking space x 185 new spaces x 2 trips (in and out) <sup>3</sup> – worst case	1,019 - max <sup>4</sup> 611 – avg <sup>5</sup>

**Sources:** Bay Area Air Quality Management District. 2010 *California Environmental Quality Act Guidelines*, Table 3-1. Fehr & Peers. *Focused Transportation Analysis for the Calero County Park Trails Master Plan*. 2013.

**Note:** <sup>1</sup>Project size/intensity for is from the “Operational GHG Screening Size” column in Table 3-1, Criteria Air Pollutants and Precursors and GHG Screening Level Sizes, contained in the Air District’s *California Environmental Quality Act Air Quality Guidelines*, 2010.

<sup>2</sup>Trip generation rates and daily trip generation based on Institute of Traffic Engineers’ *ITE Trip Generation Rates – 8<sup>th</sup> Edition*, with spreadsheet calculator found at: <http://www.mikeontraffic.com/2009/08/trip-generation-8th-edition-spreadsheet.html>.

<sup>3</sup>A multiplier is used to convert horse trailer parking space size to average vehicle parking space size.

<sup>4/5</sup>The maximum 1,019 ADT is for worst-case conditions during the peak use season when all available spaces are full for the entire day. It is conservatively assumed that the average ADT over the full year is 60 percent of the maximum peak season demand, or approximately 611 ADT.

The average ADT for the proposed project is shown as the last entry in [Table 8, ADT Screening Comparisons](#). As shown, the daily 611 ADT for the proposed project is well within the range of ADT for the representative project types illustrated. Further, as described previously, the volume of GHG emissions generated by the project from other sources (e.g. electricity consumption) would be significantly lower than most of the representative projects listed in [Table 8](#). Based on this information, it can be qualitatively concluded that, like many other project types included in Table 3-1, the proposed project would not generate annual operational GHG emissions that would have a significant impact on the environment.

### Construction Phase GHG Emissions

Construction of the proposed project will result in GHG emissions during the short-term construction period. Table 3-1 in the Air District guidelines also includes screening criteria for construction emissions.

However, due to the highly variable construction processes, and equipment types and durations of use involved in constructing the diverse types of projects listed, the construction screening criteria are not particularly useful for screening the proposed project.

The primary demand for use of construction equipment, the primary source of GHG emissions during the construction process, would be in site preparation and construction of parking facilities at the new staging areas and for expanding the existing Ranger Station parking facilities. These activities would involve use of construction equipment that is typical of most construction project types. Construction of new trails may also involve limited use of typical, fossil-fuel powered equipment. But given that many proposed trail locations are within existing fire road locations or along other previously graded/manipulated locations, extensive or intensive use of heavy, fuel-powered equipment for trail construction is not anticipated. Based on the limited improvements proposed (e.g. no construction of significant structures, above- or below-ground utilities/infrastructure, etc.), the types and duration of use of fossil-fueled construction equipment would be similar to or lower than required to construct the project types shown in Table 3-1. It can be qualitatively assumed that construction emission volume for the proposed project would be within or below that generated by the threshold project sizes shown in Table 3-1. Therefore, construction emissions for the proposed project are not anticipated to have a significant impact on the environment.

### **Conclusions**

Based on the analyses conducted in Greenhouse Gas Technical Memo and summarized above, , the proposed project would have a less than significant impact on the environment from generation of GHGs during its operational phase. Greenhouse gas emissions generated during the construction phase of the proposed project would also have a **less than significant impact** on the environment.

## **2. Conflict with an Applicable Plan, Policy or Regulation Adopted for the Purpose of Reducing the Emissions of Greenhouse Gases**

As discussed above, the proposed project would generate GHG emissions during the construction and operational phases; however, the emissions are considered to be less than significant. Therefore, the proposed project would not generate a significant level of GHG emissions, and would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. **No Impact.**

## **3. Hinder or Delay the State's Ability to Meet the Reduction Target Contained in AB 32**

As discussed above, the proposed project would generate GHG emissions during the construction and operational phases; however, the emissions are considered to be less than significant. Therefore, the proposed project would not generate a significant level of GHG emissions, and would not hinder or delay the State's ability to meet the reduction target (25 percent reduction by 2020) contained in AB 32. **No Impact.**



I. HAZARDS & HAZARDOUS MATERIALS						
WOULD THE PROJECT	IMPACT					SOURCE
	NO	YES				
	<u>No Impact</u>	<u>Less Than Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporated</u>	<u>Potentially Significant Impact</u>	<u>Cumulative</u>	
1. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2, 25, 26
2. 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2, 25, 26
3. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2, 4
4. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	27
5. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
6. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2, 6, 28
7. Involve risk of explosion or release of hazardous substances (including pesticides, herbicides, toxic substances, oil, chemicals or radioactive materials)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2, 25, 26
8. Provide breeding grounds for vectors?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2, 5
9. Proposed site plan result in a safety hazard (i.e., parking layout, access, closed community, etc.)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
10. Involve construction of a building, road or septic system on a slope of 30% or greater?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
11. Involve construction of a roadway greater than 20% slope for a distance of 300' or more?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2

12. Be located within 200' of a 230KV or above electrical transmission line	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,4
13. Create any health hazard?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,3,4,5
14. Expose people to existing sources of potential health hazards?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,4
15. Be located in an Airport Land Use Commission Safety Zone?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2, 29, 30
16. Increase fire hazard in an area already involving extreme fire hazard?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2, 6, 28
17. Be located on a cul-de-sacs over 800 ft. in length and require secondary access which will be difficult to obtain?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
18. Employ technology which could adversely affect safety in case of a breakdown?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2

## Discussion/Mitigation

### 1. Significant Hazard through Transport, Use, or Disposal of Hazardous Materials

The only hazardous materials to be used at the project site will be during construction, and include fuels, oils and lubricants associated with various on-site vehicles and construction machinery. The *Santa Clara Countywide Trails Master Plan Update*, adopted by the County Board of Supervisors in 1995, and the *Santa Clara County Parks Trail Maintenance Manual* (County of Santa Clara 2005) establish the Draft County Parks Department best management practices (BMPs) for trail siting, trail construction, and trail maintenance. Furthermore, a Stormwater Pollution Prevention Plan (SWPPP) will be prepared for the project after final design. The implementation of the BMPs and the SWPPP would minimize the risks associated with transport, use, or disposal of hazardous materials to the public or the environment at the project site. This impact is **less than significant**.

### 2. Significant Hazard through Release of Hazardous Materials

See discussion for impact #1, above. This impact is **less than significant**.

### 3. Hazardous Emissions, Materials, Substances, or Waste within One-Quarter Mile of a School

There are no existing or proposed schools within one-quarter mile of Calero County Park. **No Impact**.

### 4. Located on a Site which is Included on a List of Hazardous Materials Sites

The Calero County Park is not 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 not create a significant hazard to the public or the environment. **No Impact**.

## 5. Adopted Emergency Response Plan or Emergency Evacuation Plan

The proposed project is a Trails Master Plan for Calero County Park. The Draft Trails Master Plan proposes expansion of existing park facilities including new staging areas and additional trails. A use of this nature would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. The addition of trails could help to serve as evacuation routes. **No Impact.**

## 6. Wildland Fires

The proposed project provides additional trails for public access and travel within Calero County Park, which includes large areas that have been identified by the California Department of Forestry and Fire Protection as high and very high fire hazard zones. The Draft Parks Master Plan was developed according to the Santa Clara County General Plan Policies C-PR-12 and C-PR-32. Implementing these policies will avoid or reduce impacts associated with wildland fires to **less than significant** levels. The policies are listed as follows:

*C-PR-12: Parks and trails in remote areas, fire hazardous areas, and areas with inadequate access should be planned to provide the services or improvements necessary to provide for the safety and support of the public using the parks and to avoid negative impacts on the surrounding area.*

*C-PR 32: Parks and trails in remote areas, fire hazardous areas, and areas with inadequate access shall be planned to:*

- a. provide the services or improvements necessary to provide for the safety and support of the public using the parks and trails; and*
- b. avoid negative impacts on the surrounding areas.*

## 7. Explosion or Release of Hazardous Substances

See discussion for impact #1, above. This impact is **less than significant**.

## 8. Vector Breeding Grounds

Potential vectors of disease found within Calero County Park include species such as mosquitoes, ticks, and various mammal species. Project activities would likely not increase populations of these species due to the implementation of standard Country maintenance practices (e.g. keeping trash containers sealed shut and cleaned out on a regular basis, constructing trails to avoid pooling of water, posting education signs regarding the dangers of ticks). The County Parks Maintenance Division has been installing wildlife-proof trashcans to prevent impact by vectors and wildlife in use areas. **No Impact.**

## 9. Safety Hazard

The proposed project is a Trails Master Plan for Calero County Park. The Draft Trails Master Plan proposes expansion of existing park facilities including new staging areas, improvements to existing staging areas, and additional trail mileage. The proposed improvements, including new staging areas

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would reduce minor safety hazards that currently exist related to controlling access and parking. No element of the Draft Trails Master Plan would result in new safety hazards. **No Impact.**

## **10. Slopes 30 Percent or Greater**

The Draft Trails Master Plan does not contain any provisions to build a habitable structure, road, or septic system on any slopes within the project site. **No Impact.**

## **11. Roadway Construction on Greater than 20 Percent Slope for a Distance of 300' or More**

See discussion for impact #10, above. **No Impact.**

## **12. Location within 200' of a 230KV or Above Electrical Transmission Line**

Two high voltage power lines pass through the Rancho San Vicente area, in the northwest portion of the park. Various existing and proposed trails cross within 200' of these transmission lines. These trails include the Cherry Cove Trail and other yet to be named 4'-6' multiuse trails. Although these trails may be within 200' of the transmission lines, the nature of trail use is temporary. Park visitors move through the landscape and are temporarily exposed to transmission lines. This indicates that there is no significant impact to park users or power transmission. This impact would be **less than significant.**

## **13. Health Hazard**

A variety of potential health hazards currently exist at the park such as exposure to seismic hazards, wild animals, toxic and poisonous plants, and exposure to weather. However, implementation of the Draft Trails Master Plan would not significantly increase exposure of people to these types of potential hazards. This impact would be **less than significant.**

## **14. Exposure to Existing Sources of Potential Health Hazards**

See discussion for impact #13, above. This impact would be **less than significant**

## **15. Airport Land Use Commission Safety Zone**

The closest airports to the Calero County Park include the San Jose International Airport (13 miles north of the project site), the Reid Hillview County Airport (9.5 miles northeast of the project site), and the San Martin County Airport (10 miles southeast of the project site) The Calero County Park is not within any of these Airport Land Use Commission Safety Zone. **No Impact.**

## **16. Increased Fire Hazard in an Area Already Involving Extreme Fire Hazard**

See discussion for impact #6, above. This impact would be **less than significant**

### **17. Be Located on a Cul-De-Sac over 800 Feet in**

The Draft Trails Master Plan does not include any provisions to build on a cul-de-sac. **No Impact.**

### **18. Employment of Technology which Could Adversely Affect Safety in Case of a Breakdown**

There are no elements of the Draft Trails Master Plan that would employ technology which could adversely affect safety in case of a breakdown. **No Impact.**

<b>J. HYDROLOGY AND WATER QUALITY</b>						
<b>WOULD THE PROJECT:</b>	<b>IMPACT</b>					<b>SOURCE</b>
	<b>NO</b>	<b>YES</b>				
	<u>No Impact</u>	<u>Less Than Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporated</u>	<u>Potentially Significant Impact</u>	<u>Cumulative</u>	
1. Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4,5,8,11,40
2. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4,5
3. 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4,5
4. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,4,5,15
5. Create or contribute increased impervious surfaces and associated runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,4,5,15
6. Degrade surface or ground water quality or public water supply? (Including marine, fresh and wetland waters.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,4,5,15
7. Place a structure within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,24
8. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,24
9. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,24
10. Result in an increase in pollutant discharges to receiving waters?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,4,5

11. Be located in an area of special water quality concern (e.g., Los Gatos or Guadalupe Watershed)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,4,5,15
12. Result in use of well water previously contaminated by nitrates, mercury, asbestos, etc. existing in the groundwater supply?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,4,5
13. Result in a septic field being constructed on soil with severe septic drain field limitations or where a high water table extends close to the natural land surface?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3
14. Result in a septic field being located within 50 feet of a drainage swale; 100 feet of any well, water course or water body or 200 feet of a reservoir at capacity?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3
15. Conflict with Water Resources Protection Collaborative Guidelines and Standards for Land Uses near Streams?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,34
16. Result in extensions of a sewer trunk line with capacity to serve new development?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3
17. Require a NPDES permit for construction [Does it disturb one (1) acre or more]?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,4,5,9
18. Result in significant changes to receiving waters quality during or following construction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,4,5,15,39,40,
19. Is the project a tributary to an already impaired water body? If so will the project result in an increase in any existing pollutants?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	39,40
20. Substantially change the direction, rate of flow, or quantity, or quality of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,40
21. Interfere substantially with ground water recharge or reduce the amount of groundwater otherwise available for public water supplies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3
22. Involve a surface water body, natural drainage channel, streambed or water course such as to alter the amount, location, course, or flow of its waters?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3

## Comment

The analysis of hydrology and water quality is based in part on the memo prepared for Calero County Park: *Geologic and Hydrologic Opportunities and Constraints for Trail Planning* (Balance Hydrologics 2011).



## ***Discussion/Mitigation***

### **1. Violate Water Quality Standards**

Regarding construction-related impacts, projects disturbing more than one acre of land during construction are required to file a notice of intent to be covered under the State NPDES Construction General Permit for discharges of storm water associated with construction activities. Based on the construction associated with the proposed Draft Trails Master Plan (185 new spaces plus additional size for 43 trailer spaces) and average trail disturbance, it estimated that the proposed project disturbance area would be approximately 2.5 acres (parking areas between three staging areas) and approximately 14.25 acres (total trail area throughout the park) incrementally over approximately a 10-year period.

As the proposed Trails Master Plan would disturb more than one acre of land, County Parks would be required to obtain a State NPDES Construction General Permit. Specifically the Construction General Permit requires incorporation of Low Impact Design techniques to ensure that future runoff does not exceed the rate and duration of existing, and the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) that details how water quality would be protected during construction activities. The SWPPP must contain a site map(s) that shows the construction site perimeter, existing and proposed buildings, lots, roadways, storm water collection and discharge points, general topography (both before and after construction), and drainage patterns across the project. Best Management Practices (BMPs), which are detailed within each permit, are to be implemented to protect water quality.

To minimize the mobilization of sediment to creeks and other water bodies potentially affecting water quality, the Draft Trails Master Plan has identified several erosion and sediment-control BMPs that would be included in the SWPPP prepared for the project after final design. The SWPPP BMPs are based on standard County measures and standard dust-reduction measures and include the following:

1. Enclose and cover exposed stockpiles of dirt or other loose, granular construction materials that could contribute sediment to waterways.
2. Contain soil and filter runoff from distributed areas by berms, vegetated filters, silt fencing, straw wattles, plastic sheeting, catch basins, or other means necessary to prevent the escape of sediment from the disturbed areas.
3. Prohibit the placement of earth or organic material where it may be directly carried into a stream, swale, ditch, marsh, pond, or body of standing water.
4. Prohibit the following types of materials from being rinsed or washed into streets, shoulder areas, or ditches: concrete, solvents and adhesives, fuels, dirt, gasoline, asphalt, and concrete saw slurry.
5. Conduct dewatering activities according to the provisions of the SWPPP. Prohibit placement of dewatered materials in local water bodies or in storm drains leading to such bodies without implementation of proper construction water quality control measures.
6. The County Parks Department and its contractors should implement a monitoring program to verify effectiveness of the best management practices implemented as part of the SWPPP. The monitoring program would begin at the outset of construction activities and terminate upon completion of the project.

By complying with the Construction General Stormwater Permit requirements outlined above, and incorporating the BMPs outlined in the Draft Trails Master Plan, the potential water quality impacts from construction activities would be minimized and the impact of excessive runoff water or polluted runoff will be less than significant. The impact is **less than significant**.

## **2. Substantially Deplete or Interfere with Groundwater**

Under existing conditions, park activities require groundwater pumping only to supply a water tank used for fire suppression purposes. The proposed project would not result in an increase in demand for groundwater as no new sources of such demand would be created. **No Impact.**

## **3. 4. Alter Drainage Resulting in Erosion, Siltation, or Flooding On or Off Site**

The floodplain of any stream or river is an important part of flow conveyance during periods of high water. In order to protect these areas, the hydrologic opportunities and constraints of Calero County Park were evaluated in a study conducted in 2011 (*Park Geologic and Hydrologic Opportunities and Constraints for Trail Planning, Calero County Park, Santa Clara County, California* Balance Hydrologics). The findings of the evaluation have been incorporated into the project's hydrological BMPs into the plan for trails in areas of steep slopes or in areas adjacent to a creek or riparian areas. The BMPs as identified in the Draft Trails Master Plan (pages 67-68) include:

1. In order to reduce erosion and maintenance problems during construction, disturbance to the soil surface should be kept to a minimum.
2. Where a potential for significant soil erosion exists along a new trail alignment, specific erosion control plans should be developed by a Registered Civil or Soils Engineer as part of the trail construction documentation. Criteria to be used in determining the erosion potential include: slope; soil type; soil composition and permeability; and the relative stability of the underlying geologic unit as identified on local General Plans or other adopted planning documents.
3. Keep "tread watersheds" small. A tread watershed is the amount of area that drains to a specific spot off of a trail (Parker, 2004). Increasing the frequency of rolling dips is an easy way to reduce the area of each tread watershed. Reducing tread width of the trail is another way to reduce the tread watershed. Compacted trail surfaces produce more surface runoff than the uncompacted soil next to the trail; narrow trails would produce less concentrated runoff than wide trails (with all other factors being equal).
4. Frequent grade reversals should be built into a trail (as a backup to out-sloping), to avoid water flow along a trail. Also known as "rolling grade dips", they should be placed to enhance natural grade dips. Rolling grade dips are long and gentle features (12 to 20 feet long) that avoid the short and abrupt style of traditional "water bars" (Klein, 2003; Riter and Riter, 2005).
5. Contour trails should be cut on a full bench, rather than a combination of cut and fill. The cut material should be broadcast downslope, unless the trail is near a creek. Cut material can also be utilized for the ramp section of rolling dips if it is compacted one layer at a time.

6. If trails are located in riparian zones extra precautions should be taken, such as using paving stones or other rock work to armor the trail surface. Provide settling areas for trail drainage where water can infiltrate and sediment can settle out, such as brush boxes.
7. Rock drains and gravel surfaces should be used where trails cross seep areas. This is better than having trail users bypass the soggy area in ever-increasing arcs. Use soil amendments such as sand, crushed rock, or gravel to make a trail less prone to compaction and displacement; amendments can also help the tread drain better.
8. Constructed creek crossings should not greatly alter the cross-sectional shape of the channel or floodplain.
9. The approach to a creek crossing should slope downward toward the creek, and climb when traveling away from the creek, so that in the event of a blockage in the channel, the creek water would not be diverted to flow along the trail.
10. The source of water for horse troughs will only come from seeps and springs; water will not be diverted from creeks or other waterways.

The *Countywide Trails Master Plan* requires the preparation of an erosion control plan where there is potential for significant erosion along a new trail alignment and this has been included in the BMPs for this project. Adherence to these policies as part of the implementation of the Hydrological BMPs, and erosion control measures as part of the SWPPP (see discussion under Impact 1 above) would avoid or reduce potential impacts to less than significant levels. The impact is considered to be **less than significant**.

## **5. Increase Impervious Surfaces and Associated Runoff Exceeding the Capacity of Drainage Systems or Provide Substantial Additional Sources of Polluted Runoff**

Implementation of the Draft Trails Master Plan will not create large amounts of impervious surfaces that would change absorption rates, drainage patterns or the rate and amount or quality of surface runoff. All parking surfaces will be an all weather aggregate surface on a compacted rock base. Surface storm water will be directed to swales for on-site infiltration. Due to storm water contact with horse manure, storm water may be directed to a storm water detention pond. Trails are constructed of native soils, compacted and sloped for drainage. Gravel or crushed rock reinforcement and stabilization may be required in some locations. Some existing trails which have proven difficult to maintain due to erosion or hydrologic activity are classified for abandonment and restoration. Restoring almost five acres would increase absorption rates and result in a beneficial effect.

As described above under water quality impacts (Impact 1) and drainage and flooding impacts (Impact 3 and 4), the Construction General Stormwater Permit requires that measures are incorporated to ensure that post-development runoff does not exceed the rate and duration of pre-development runoff. Prior to construction, County Parks will be required to submit a site-specific, design level drainage and hydrology plan, which includes a SWPPP in compliance with all applicable state and local code requirements.

These requirements will ensure that the proposed project would not create or contribute run-off water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff. Therefore, the impact is **less than significant**.

## **6. Degrade Surface or Ground Water Quality or Public Water Supply**

The requirements outlined under Impact 1-5 above, will ensure that implementation of the proposed Draft Trails Master Plan will not result in substantial additional sources of polluted runoff that would have the potential to degrade water quality. The impact is **less than significant**.

## **7. 8. Place Structures within a 100-year Flood Hazard Area**

Based on Flood Insurance Rate Maps of the area prepared by the Federal Emergency Management Agency, a small portion of Calero County Park is within the 100-year Flood Zone. This is the area along Calero Creek below the Calero Reservoir. One existing trail is located below the reservoir; however no structures are proposed to be constructed in the 100-Flood Zone. **No Impact**.

## **9. Expose People or Structures to Flooding**

The only dam that would potentially cause flooding is the Calero Park Reservoir Dam. The implementation of the Draft Trails Master Plan would not add new residents or structures downstream of this dam. One existing trail is located below the dam on a service road. A seismic event could cause localized flooding as a result of dam failure at the Calero Reservoir. Localized flooding of trail crossings is also possible during heavy storms. When deemed necessary due to public safety, trails in areas of localized flooding will be temporarily closed per the County Parks Department's trail closure policy and procedures. This impact is **less than significant**.

## **10. Increase in Pollutant Discharges to Receiving Waters**

The impact is **less than significant**. See Discussion under Impacts 1, 3, and 6 above.

## **11. Area of Special Water Quality Concern (e.g., Los Gatos or Guadalupe Watershed)**

The project is not within an area of special water concern. **No Impact**.

## **12. Use of Previously Contaminated Well Water**

Implementation of the Draft Trails Master Plan would not involve the use of a previously contaminated well. **No Impact**.

### **13. 14. Construction of a Septic Field with Field Limitations or in Proximity of a Water Feature**

The Draft Trails Master Plan identifies that new restrooms will be provided at the Ranger Station and the new Rancho San Vicente staging area. County Parks has indicated that the preferred restroom option is installation of a septic system rather than sanitary sewer line hookup since they are outside of City of San Jose services. Installation of septic system would require a permit by the County of Santa Clara Health Department.

Prior to construction, County Parks will be required to submit a site-specific, design-level septic plan, which includes percolation test and measures of compliance with all applicable state and local code requirements. The septic plan will be required to identify location and proximity of any water features and ensure that the septic field is not located within 50 feet of a drainage swale; 100 feet of any well, water course or water body or 200 feet of a reservoir at capacity. It is unlikely that field limitation will be an issue as the Park has ample open space and options for septic system location and design.

These requirements will ensure that the proposed project would not create or contribute to potential impacts associated with septic with field limitations or proximity of water features. Therefore, there is **no impact**.

### **15. Conflict with Water Resources Protection Collaborative Guidelines and Standards for Land Uses Near Streams**

The Draft Trails Master Plan will not conflict with Water Resources Protection Collaborative Guidelines and Standards for Land Uses near Streams (Santa Clara Valley Water District, 2007). **No Impact**. Please also see response to Impact 1, 3 and 4 above.

### **16. Sewer Trunk Extension**

The Draft Trails Master Plan will not result in extensions of a sewer trunk line with capacity to serve new development. **No Impact**.

### **17. Require a NPDES Permit**

See discussion under Impact 1. Water Quality, above. The proposed Trails Master Plan will disturb more than one acre and will be required to secure an NPDES permit. Upon obtaining the permit and implementing required permit conditions, the impact would be considered **less than significant**.

### **18. Changes to Receiving Waters Quality**

See discussion under Impact 1, 3 and 4 above. The impact is considered **less than significant**.

### **19. Tributary to an Already Impaired Water Body**

The Draft Trails Master Plan area is not a tributary to an already impaired water body. **No Impact**.

## **20. Substantially Change the Direction, Rate of Flow, or Quantity, or Quality of Ground Waters**

Implementation of the Draft Calero Trails Master Plan will not substantially change the direction, rate of flow, or quantity, or quality of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations. See also discussion under Impact 2 above. **No Impact.**

## **21. Interfere Substantially with Ground Water**

This impact was discussed earlier as Impact 2. The impact is **less than significant.**

## **22. Alter the Flow of Water**

The Draft Calero Trails Master Plan does not involve the alteration of the amount, location, course, or flow of a surface water body, natural drainage channel, streambed, or water course. **No Impact**

<b>K. LAND USE AND PLANNING</b>						
<b>WOULD THE PROJECT:</b>	<b>IMPACT</b>					<b>SOURCE</b>
	<b>NO</b>	<b>YES</b>				
	<u>No Impact</u>	<u>Less Than Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporated</u>	<u>Potentially Significant Impact</u>	<u>Cumulative</u>	
1. Physically divide an established community?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2, 4, 5
2. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,7,8,10, 11
3. Conflict with general plan designation or zoning?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,7,8,10, 11
4. Conflict with special policies?						
a. San Martin and/or South County	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,7,8,10, 11
b. Los Gatos Specific Plan or Lexington Watershed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,7,8,10, 11
c. East Foothills Policy Area	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,7,8,10, 11
d. New Almaden Historic Area/Guadalupe Watershed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,7,8,10, 11
e. Stanford	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,7,8,10, 11
f. San Jose	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,7,8,10, 11
5. Be incompatible with existing land use in the vicinity?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2,3

## ***Discussion/Mitigation***

### **1. Divide an Established Community**

The project is the implementation of a Trails Master Plan within an existing County Park. The proposed improvements would not disrupt or divide the physical arrangement of an established community.

**No Impact.**

## 2. Conflict with Applicable Plans or Policies Adopted by Agencies with Jurisdiction over the Project

The Draft Trails Master Plan project involves trail design and construction, infrastructure modification and park improvements within an existing park within Santa Clara County's jurisdiction. These activities do not conflict with any applicable County's General Plan, policies, or regulations. However, the proposed project is located within the permit area of the Santa Clara Valley Habitat Plan (Valley Habitat Plan) and identified as a "covered activity" under the Valley Habitat Plan.

The project design and analysis process included a detailed review of the conditions for covered activities under the Valley Habitat Plan (Chapter 6), ensuring that the Trails Master Plan project design practices and features would incorporate special-status resource impact avoidance and minimization measures directly into plans for new park infrastructure.

Mitigation measure BIO-4 (Biological Resources section of this Initial Study) requires that applicable covered species conditions required by the Valley Habitat Plan be incorporated as project design features. Implementation of mitigation measure BIO-4 will ensure that the proposed Trails Master Plan will be consistent with the Valley Habitat Plan and will minimize/avoid potential project impacts to covered species. The impact is **less than significant with mitigation**.

## 2. Conflict with General Plan Designation or Zoning

The Draft Trails Master Plan project involves trail design and construction, infrastructure modification and park improvements within an existing park within Santa Clara County's jurisdiction. These activities do not conflict with any applicable general plan designation or zoning. **No Impact.**

## 3. Conflict with Special Policies

### a. San Martin and/or South County

The project is not located in San Martin or South County. **No Impact.**

### b. Los Gatos Specific Plan or Lexington Watershed

The project is not located in an area covered by the Los Gatos Specific Plan. The project also does not propose alteration or new sewage facilities as regulated by the County Lexington Basin Ordinance relating to sewage disposal. **No Impact.**

### c. East Foothills Policy Area

The project is not located in the East Foothills Policy Area. **No Impact.**

### d. New Almaden Historic Area/Guadalupe Watershed

The project is not located in the New Almaden Historical Area or in the Guadalupe Watershed. **No Impact.**



#### e. Stanford

The project is not located on Stanford-owned land. **No Impact.**

#### f. San Jose

Much of Calero County Park lies within the limits of the City of San Jose, but is outside the boundary of the City's Urban Service Area. The park is within the County's jurisdiction. The proposed Draft Trails Master Plan does not conflict with any special Policies of the City of San Jose. **No Impact.**

### 4. Incompatibility with Existing Land Use

The majority lands in Calero County Park have been open to the public for recreation for many years. The recently acquired Rancho San Vicente portion of the park is leased for grazing to a private operator. Access for the grazing operation is from McKean Road, near the intersection of Fortini Road. Atop the major knoll within Rancho San Vicente, a small portion of land is leased to another private entity for a radio transmission tower. Access to the radio tower is provided by the same service road as the grazing operation. The Rancho San Vicente portion of the park is also bisected by the Almaden Calero Canal. Owned by the Santa Clara Valley Water District, this concrete-lined canal is part of the District's raw water distribution system and transports water from the Almaden Valley Watershed into Calero Reservoir. The canal is not fenced and no public access is allowed along its service road. San Jose Water Company has a 2.8 acre in-holding on the western edge of the park, above the Almaden Calero Canal. Two power transmission lines cross the Rancho San Vicente area.

The proposed Rancho San Vicente staging area will provide a new park entrance off McKean Road. Aligned with Fortini Road, it will accommodate public access to a portion of the park that is currently closed to the public. It will also preserve service access for the existing cattle grazing operation, the Almaden Calero Canal (operated by the Santa Clara Valley Water District), and the radio tower leasehold. The southwestern portion of Calero County Park, previously part of Cañada del Oro, is slated for grazing operations starting within the next two years.

The proposed Trails Master Plan complies with natural resource management goals and practices, including managed grazing, as were established in relevant natural resource and grazing management plans for the park.

Proposed improvements associated with the Draft Trails Master Plan will open the Rancho San Vicente area to the public, but historic uses such as grazing, the canal, and the radio tower will continue. This does not represent a significant change in land use and is compatible with existing land uses, and uses in surrounding parks and open space preserves. Where trails leave Calero County Park and pass into the parks of neighboring agencies, signage will be erected to inform park users of changes in permissible trail uses and regulations. The impact is **less than significant.**

<b>L. MINERAL RESOURCES</b>						
	<b>IMPACTS</b>					<b>SOURCE</b>
<b>WOULD THE PROJECT:</b>	<b>NO</b>	<b>YES</b>				
	<u>No Impact</u>	<u>Less Than Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporated</u>	<u>Potentially Significant Impact</u>	<u>Cumulative</u>	
1. Result in the loss of availability of a known mineral resource that would be of value to the region or the residents of the state?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,7,10
2. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,7,10
3. Result in substantial depletion of any non-renewable natural resource?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,7,10

## ***Discussion/Mitigation***

### **1. Loss of Availability of a Known Mineral Resource**

Calero County Park is not currently mined for minerals and the proposed project does not propose any mining activities. The proposed Draft Trails Master Plan would not preclude future mining operations should the County decide to do so. **No Impact.**

### **2. Loss of Availability of a Locally Important Mineral Site Delineated on a Land Use Plan**

There are no mineral recovery sites delineated within Calero County Park. **No Impact.**

### **3. Result in Substantial Depletion of any Non-Renewable Natural Resource**

Heavy equipment such as bulldozers and trucks would be used to create the two new staging areas and to reconfigure and expand the Ranger Station Staging area. However, this equipment would be only used once, during the construction phase, so large quantities of fuels would not be used. No other non-renewable resources would be used. **No Impact.** See also Section F, Energy, of this Initial Study.

<b>M. NOISE</b>						
<b>WOULD THE PROJECT:</b>	<b>IMPACTS</b>					<b>SOURCE</b>
	<b>NO</b>	<b>YES</b>				
	<u>No Impact</u>	<u>Less Than Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporated</u>	<u>Potentially Significant Impact</u>	<u>Cumulative</u>	
1. 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2,3,5,8,11,18
2. Result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2,3,5,8,11,18
3. Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2,3,5,8,11,18
4. Increase substantially the ambient noise levels for adjoining areas during and/or after construction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2,3,5,8,11,18

### Comment

Calero County Park is located in a rural setting. With the exception of Rancho Cañada del Oro Open Space Preserve on its southwest border, Calero Park is surrounded by private small ranches and rural residences. The Cinnabar Hills Golf Course is adjacent to the southern end of the park east of McKean Road.

The only potential sensitive noise receptors would be residences along McKean and Almaden Road. The majority of the trails in Draft Trails Master Plan are situated away from these homes. However, there are several single-family homes located along Fortini Road north of McKean Road in the vicinity of the proposed new San Vicente Staging Area. There are also single-family homes along Almaden Road in the vicinity of the proposed new staging area.

Santa Clara County has a noise ordinance (Chapter VII of the code). Under the ordinance, construction activities are allowed from 7:00 am to 7:00 pm, Monday through Saturday.

### ***Discussion/Mitigation***

#### **1. Exposure of Persons to, or Generation of, Excessive Noise**

There would be temporary and periodic increases in the ambient noise levels at Calero County Park resulting from project construction. However, because the noise would be temporary, and would be limited to daytime hours per the County's noise ordinance, the impact is considered **less than significant**. Once construction is completed, the project would not affect ambient noise levels.

## **2. Exposure of Persons to, or Generation of, Excessive Noise Groundborne Vibration or Noise**

Since the County would comply with the Santa Clara County noise ordinance, which limits construction noise to the hours of 7:00 am and 7:00 pm Monday through Saturday, the effect of the machine noise would be less than significant. Construction vibration is considered a less than significant impact because of the temporary nature of the noise and the remoteness of the locations where the construction activity would take place.

### **3. 4. Permanent Increase in Ambient Noise in Vicinity and Adjoining Areas**

As presented in the transportation/traffic section of this initial study, the proposed project could result in additional park visitors, which would result in a small increase in vehicle trips. The additional vehicle trips are considered minimal and any changes in the ambient noise levels in the vicinity of the staging areas are not anticipated to be noticeable. This impact is considered **less than significant**.

N. POPULATION AND HOUSING						
WOULD THE PROJECT:	IMPACT					SOURCE
	NO	YES				
	No Impact	Less Than Significant Impact	Less Than Significant With Mitigation Incorporated	Potentially Significant Impact	Cumulative	
1. 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)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,4,5
2. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,4,5
3. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,4,5

## Discussion

### 1. Induce Substantial Population Growth

Implementation of the proposed Draft Trails Master Plan would not result in substantial population growth either directly or indirectly. No new residential development will occur as a result of the project as the proposed improvements. **No Impact.**

### 2. Displace Housing

Implementation of the proposed Draft Trails Master Plan would not displace housing necessitating the development of new residential development elsewhere. **No Impact.**

### 3. Displace People

Implementation of the proposed Draft Trails Master Plan will not displace the local population or necessitate the construction of replacement housing. **No Impact.**

O. PUBLIC SERVICES						
WOULD THE PROJECT:	IMPACT					SOURCE
	NO	YES				
	No Impact	Less Than Significant Impact	Less Than Significant With Mitigation Incorporated	Potentially Significant Impact	Cumulative	
1. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered government 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:						
i) Fire Protection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 3, 5
ii) Police Protection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 3, 5
iii) School facilities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 3, 5
iv) Parks?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 3, 5
v) Other public facilities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 3, 5
2. Induce substantial growth or concentration of population? (Growth inducing?)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 3, 5
3. Employ equipment which could interfere with existing communications or broadcast systems?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 3, 5
4. Increase the need for new systems or supplies, or cause substantial alterations to the following utilities:						
a. Electricity or Natural gas	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 3, 5
b. Local or regional water treatment or distribution facilities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 3, 5
c. Local or regional water supplies	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 3, 5
d. Sewage disposal	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 3, 5
e. Storm water drainage	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 3, 5
f. Solid waste or litter	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2, 31

## Discussion

### 1. Adverse Physical Impacts Associated with the Provision of New or Physically Altered Government Facilities

#### a. Fire Protection

Implementation of the Draft Trails Master would not result in substantial adverse physical impacts requiring new or physical alterations to existing governmental fire protection facilities. **No Impact.**

### **b. Police Protection**

The Draft Trails Master Plan recommended a new full-time Park Ranger position be added for implementation of the plan. But it also identified that Partnership opportunities with volunteers and docents to assist in trails watch and education programs may offset additional ranger staffing needs for the Trails Master Plan (Draft Trails Master Plan, page 77). Regardless, this minor staffing addition will not require new or physical alterations to existing police protection facilities. **No Impact.**

### **c. School Facilities**

The proposed project does not include the construction of any new housing units or induce population growth and therefore would not increase the need for additional schools. **No Impact.**

### **d. Parks**

The redesign of the Ranger Station staging area and the two new Staging areas have been planned to increase the efficiency of parking spaces that will maximize the carrying capacity of several parking lots. A significant benefit will result from the improved parking areas including accessibility to the park. Implementation of the proposed Draft Trails Master Plan will not increase the use of the park such that substantial physical deterioration of the facility would occur or be accelerated. **No Impact.**

### **e. Other Government Facilities**

The Draft Trails Master Plan will not require new or physical alterations other government facilities. **No Impact.**

## **2. Growth Inducement**

Implementation of the proposed Draft Trails Master Plan would not result in substantial population growth either directly or indirectly. No new residential development will occur as a result of the project as the proposed improvements. **No Impact.** Also see Section N. Population and Housing, above.

## **3. Equipment which Could Interfere with Existing Communications or Broadcast Systems**

The proposed Draft Trails Master Plan does not employ any equipment that would interfere with existing communications or broadcast systems in the plan implementation. **No Impact.**

## **4. Increase the Need for New or Altered Utilities**

### **a. Electricity or Natural Gas**

The proposed Draft Trails Master Plan does not contain new facilities that would use electricity or natural gas. **No Impact.**

**b. Local or Regional Water Treatment or Distribution Facilities**

No Impact. The proposed Draft Trails Master Plan does not propose additional facilities that would generate water requiring water treatment or distribution facilities. **No Impact.**

**c. Local or Regional Water Supplies**

The proposed Draft Trails Master Plan does not contemplate new water fountains, or water uses that would affect Calero County Park water entitlements. **No Impact.**

**d. Sewage Disposal**

The project would not increase demand on existing public services providers. The need for and potential effects of installation of a new septic system are described in Section G. Geology, Section J. Hydrology and Water Quality above. **No impact.**

**e. Storm Water Drainage**

The Draft Trails Master Plan includes new staging areas, including parking areas with all weather aggregate surface on a compacted rock base surface. Surface storm water will be directed to swales for on-site infiltration. Due to storm water contact with horse manure, contact storm water may be directed to a storm water detention pond. All drainage from surface areas would be retained on-site, therefore, implementation of the Draft Trails Master Plan would not result in the need to construct new storm water treatment facilities. **No Impact.**

**f. Solid Waste or Litter**

The Kirby Canyon Landfill, located at 910 Coyote Creek Golf Drive in Morgan Hill is the closest landfill, approximately 5.5 miles east of the project site. According to a study by the California Integrated Waste Management Board, in 2004, the Kirby Canyon Landfill had a remaining lifespan of 29 years. Post-project solid waste volumes generated at the project site are expected to increase; however, this increase is negligible. Therefore, of the Draft Trails Master Plan would not affect the ability of the local landfill to serve Calero County Park and would not require the construction of new solid waste facilities. **No Impact.**



P. RECREATION						
WOULD THE PROJECT:	IMPACT					SOURCE
	NO	YES				
	No Impact	Less Than Significant Impact	Less Than Significant With Mitigation Incorporated	Potentially Significant Impact	Cumulative	
1. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 2, 3, 4, 5
2. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 2, 3, 4, 5
3. Be on, within or near a public or private park, wildlife reserve, or trail (includes those proposed for the future) or affect existing or future recreational opportunities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 2, 3, 4, 5
4. Result in loss of open space rated as high priority for acquisition in the "Preservation 20/20" report?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	47

## Discussion

### 1. Increase the Use of Recreational Facilities

It is anticipated that expanding the trail system, increasing trail mileage, and providing access to additional types of users, including walkers with dogs on-leash will accommodate the public demand for multiple-use trails and increase park attendance. The Trails Master Plan provides a framework for encouraging increased use of the park while supporting protection and enhancement of the sensitive cultural and environmental within the park and ensuring that park facilities are adequate and sufficiently maintained over a ten-year time frame.

Implementation of the proposed Draft Trails Master Plan will not increase the use of the park such that substantial physical deterioration of the facility would occur or be accelerated. Removing the dogs on-leash restriction on most trails in the park will not increase the use of the park such that substantial physical deterioration of the facility would occur or be accelerated. It will create compliance with current County of Santa Clara Parks and Recreation policies that allow dogs in parks and on trails under the provisions outlined in County of Santa Clara Ordinance Code (Section B14-34.1 Pets in Parks). The impact **is less than significant**.

## **2. New or Expanded Recreational Facilities that Have an Adverse Physical Effect on the Environment**

The proposed project is a Trails Master Plan for Calero County Park. The Draft Trails Master Plan proposes expansion of existing park facilities including opening public access to the newly acquired Rancho San Vicente portion of the park, new staging areas and additional trail mileage. The potential for impacts as a result of park expansion is evaluated throughout this Initial Study. Where project implementation is identified to result in environmental impacts, mitigation is provided to ensure that impacts are reduced to a less than significant level. **Less Significant with Mitigation.**

## **3. Be on an Existing Recreation Area or Affect Existing or Future Recreational Opportunities**

The project is the implementation of the Draft Trails Master Plan at an existing County park. Implementation of the project would improve accessibility, open public access to the newly acquired Rancho San Vicente portion of the park, expand the trail system within the park and provide regional trail linkages. The Draft Trails Master Plan would increase recreational opportunities at Calero County Park resulting in a significant beneficial impact. **Less than Significant.**

## **4. Result in Loss of Open Space Rated as High Priority for Acquisition in the “Preservation 20/20” Report**

Implementation of the Draft Trails Master Plan will not result in the loss of Open Space. **No Impact.**

Q. TRANSPORTATION/ TRAFFIC						
WOULD THE PROJECT:	IMPACT					SOURCE
	NO	YES				
		No Impact	Less Than Significant Impact	Less Than Significant With Mitigation Incorporated	Potentially Significant Impact	
1. 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 freeway, pedestrian and bicycle paths and mass transit.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,5,18
2. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,5,18
3. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,5,18
4. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,5,18
5. Result in inadequate emergency access?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,5,18
6. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,5,18
7. Not provide safe access, obstruct access to nearby uses or fail to provide for future street right of way?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,5,18
8. Increase traffic hazards to pedestrians, bicyclists and vehicles?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,5,18
9. Cause increases in demand for existing on or off-street parking because of inadequate project parking?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,5,18

## Comment

This section is based on the *Focused Transportation Analysis for Calero County Park Trails Master Plan* prepared by Fehr & Peers in June 2013 (Transportation Memo) which is included in this Initial Study as

[Appendix D](#). The traffic analysis focuses on the operations of Almaden Road and McKean Road at the access points to the two new proposed staging areas. Methodology employed includes: traffic counts to determine the existing vehicle volumes; estimates of maximum traffic generated by the proposed project; estimates of future traffic conditions with the proposed project; an evaluation of sight distance; an evaluation of bicycle, pedestrian and equestrian travel; and an evaluation of the staging area site plans.

## ***Discussion/Mitigation***

### **1. Conflict with an Applicable Plan, Ordinance or Policy Establishing Measures of Effectiveness for the Performance of the Circulation System**

#### **Existing Vehicle Volumes**

Five-day traffic counts (Wednesday through Sunday) were conducted on Almaden Road and McKean Road adjacent to the proposed staging areas to determine the existing vehicle volumes. The data survey results indicate an average of 1,930 vehicles per day (vpd) use Almaden Road and 5,092 vpd use McKean Road on a typical weekday, and 2,182 vpd use Almaden Road and 3,953 vpd use McKean Road on a typical weekend day. The peak hours vary by direction. Almaden Road has the highest volume of traffic at 7:45am (125 vehicles) and 5:00pm (155 vehicles) on weekdays, and 10:30am (186 vehicles) and 12:15pm (187 vehicles) on weekend days. McKean Road has the highest volume of traffic at 7:30am (396 vehicles) and 4:30pm (398 vehicles) on weekdays, and 11:15am (327 vehicles) and 2:15pm (344 vehicles) on weekend days. These counts represent the maximum total combined number of vehicles traveling in both directions within a one hour period. The 2010 Highway Capacity Manual (HCM) states that a two-lane highway has the capacity of up to 1,700 vehicles per hour in a peak direction. The average peak hour volumes on Almaden Road and McKean Road are well within their capacity.

The Transportation Memo prepared for the project also evaluated peak vehicle trip generation to the park and found that the worst-case, maximum trip generation occurs during peak weekends in the spring. Under existing conditions, maximum use of the 28 existing parking spaces at the Ranger Station generates about 154 vehicle trips per day.

#### **Maximum Traffic Generated by the Proposed Project**

In total, the proposed staging areas will provide approximately 185 net new automobile and trailer parking spaces: five at Almaden Road, 115 at Rancho San Vicente, and 65 at the Ranger Station. As identified in Table 4 of the Transportation Memo, the proposed new parking spaces would enable up to a maximum total of 1,019 new daily traffic trips (28 on Almaden Road, and 990 on McKean Road). Of these trips, three are expected on Almaden Road and 99 on McKean Road during the peak AM hour. It is noted that this is the worst-case condition that is assumed to occur during a limited number of weekends during a limited portion of the year.

#### **Future Traffic Conditions with the Proposed Project**

The trip generation estimates were added to the existing traffic volumes to arrive at the future vehicle volumes, which are shown in Table 5 of the Transportation Memo. On an average weekday, peak morning hour traffic volumes are estimated to be 128 trips (25 existing + 3 future) on Almaden Road, and

495 trips (396 existing + 99 future) on McKean Road. On an average weekend, peak morning hour traffic volumes are estimated to be 189 trips (186 existing + 3 future) on Almaden Road, and 426 trips (327 existing + 99 future) on McKean Road. The roadway volumes with the staging area projects are still well within the roadway's peak hour capacity of 1,700 trips per peak direction on both Almaden Road and McKean Road.

## **Conclusion**

The amount of traffic generated by the proposed new and modified staging areas is not expected to substantially affect the traffic operations of the surrounding roadway system. Therefore the proposed project would not conflict with any plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system. **No Impact.**

## **2. Conflict with an Applicable Congestion Management Program**

The *Valley Transportation Plan 2040* (Santa Clara Valley Transportation Authority, 2013) is the countywide long-range transportation plan for Santa Clara County. As the Congestion Management Agency for the county, the Santa Clara Valley Transportation Authority periodically updates this 25-year plan. The Valley Transportation Plan 2040 provides a planning and policy framework for developing and delivering future transportation projects and provides input to the Regional Transportation Plan for the Bay Area that is prepared by the Metropolitan Transportation Commission.

As discussed above, the proposed project is expected to generate three peak hour trips on Almaden Road and 99 on McKean Road during the peak AM hour. It is re-emphasized that this is the worst-case condition that is assumed to occur during a limited number of weekends during a limited portion of the year. As identified in the Transportation Memo, because the project would generate fewer than 100 peak-hour trips, a comprehensive Congestion Management Plan analysis, or Transportation Impact Analysis consistent with requirements of the *Valley Transportation Plan 2040* and the Santa Clara Valley Transportation Authority is not required. As such, future development and operation of the site consistent with the proposed Trails Master Plan would not conflict with the Congestion Management Program. **No Impact.**

## **3. Result in a Change in Air Traffic Patterns**

The project site is not located within two miles of a public airport or within the vicinity of a private airstrip and therefore would not result in a change in air traffic patterns. **No Impact.**

## **4. Substantially Increase Hazards Due to a Design Feature or Incompatible Uses**

Due to the increase in vehicles with trailers accessing the staging area locations, the Transportation Memo included an analysis of stopping sight distance. As defined by the Caltrans Highway Design manual, sight distance is the continuous length of highway ahead, visible to the highway user. Stopping sight distance is the minimum sight distance for a given design speed to be provided on multilane highways and on 2-lane roads. The available stopping sight distance was measured in the field.

The Highway Design Manual requires a stopping sight distance of 250 for roadways with a design speed of 35 MPH, and 300 feet for roadways with a design speed of 40 mph. However, sight observations indicate that vehicles on McKean Road typically exceed the posted speed limit. Therefore, a design speed of 50 mph was used, which corresponds to a minimum stopping sight distance of 430 feet. The results of the sight distance review are presented in Table 6 of the Transportation Memo.

As identified in Table 6 of the Transportation Memo, the sight distance from the Ranger Station entrance south on McKean Road is approximately 400 feet, which is less than the required sight distance of 430 feet. This is considered a significant impact. All other sight distances were determined to be adequate.

### **Mitigation Measure**

The following mitigation measure shall be incorporated into the Trails Master Plan and/or all future construction documents:

- T-1. The tree located about 400 feet south the Ranger Station entrance on the east edge of McKean Road of the entrance shall be trimmed to increase and sight distance to a minimum distance of 430 feet. The trimming shall be regularly maintained to ensure sight distance is preserved.*

Implementation of this mitigation measure shall ensure that adequate sight distance to the Ranger Station entrance is established and maintained. Therefore, this impact is less than significant with mitigation incorporated.

### **5. Result in Inadequate Emergency Access**

Implementation of the proposed Trails Master Plan would not result in inadequate emergency access. **No Impact.**

### **6. Conflict with Adopted Policies, Plans, or Programs Regarding Public Transit, Bicycle, or Pedestrian Facilities, or Otherwise Decrease the Performance or Safety of Such Facilities**

The Santa Clara Countywide Trails Master Plan Update (1995) proposes bicycle facilities for both McKean Road and Almaden Road. An on-street bicycle route is proposed for Almaden Road and an on-street bicycle route with a parallel trail is proposed for McKean Road. The project will not conflict with adopted alternative transportation plans or facilities related to alternative transportation (bus/train routes or facilities, bicycle routes, etc.), but will enhance alternative transportation opportunities as the regional trail linkages are implemented. **No Impact.**

### **7. Not provide safe access, obstruct access to nearby uses or fail to provide for future street right of way.**

Providing access and connectivity is a key component in the Trails master Plan. No future street rights-of-way are needed to implement the Draft Trails Master Plan. **No Impact.**

## 8. Increase Traffic Hazards to Pedestrians, Bicyclists and Vehicles

As identified above under Impact 6, the Santa Clara Countywide Trails Master Plan Update (1995) proposes bicycle facilities for both McKean Road and Almaden Road. Currently bicyclists typically traveled on the right side of the travel lane, or in the shoulder when space allowed. As noted in the Transportation Memo, the existing daily volumes indicate that the number of conflicts with bicycles and vehicles are low. Due to the minimal amount of traffic added by the proposed staging areas, the number of conflicts between these two modes would not substantially increase.

The Transportation Memo also identified that pedestrian activity on McKean Road is very low. McKean Road is a rural roadway and there are no pedestrian facilities near the staging areas. The proposed Rancho San Vicente staging area is expected to generate cross traffic to Fortini Road as pedestrians access Santa Teresa County Park. Due to the high speed limit on McKean Road and the low pedestrian volumes, the Transportation Memo recommend installing a Rectangular Rapid Flashing Beacon (RRFB), a device which includes small rectangular yellow flashing lights that are deployed with pedestrian crossing warning signs. The lights are actuated by a pedestrian pushbutton and flash for a predetermined amount of time to allow the pedestrian to cross the roadway. RRFBs help warn drivers of crossing pedestrians ahead. The Transportation Memo also recommended that a high-visibility crosswalk be placed adjacent to the RRFB to direct pedestrians to the proper place to cross the street. In addition, a pedestrian and equestrian warning sign (W11-2 and W11-7) should be provided to warn drivers of the potential for pedestrians and equestrians in the roadway. In addition, to further ensure safety, the entrance should separate inbound/outbound traffic and deceleration lanes should be added along McKean Road. While these measures may be recommended, County of Santa Clara Roads and Airports Department may require additional or alternative provisions to provide safe pedestrian crossing prior to final design and implementation.

Almaden Road runs through a rural residential neighborhood and field observations indicated very low pedestrian activity. However, because the staging area will be located within vicinity of several residences, it is expected that some pedestrians will walk to the staging area and the appropriate signage (W11-2 and W11-7) should be provided to warn drivers of the potential for pedestrians and equestrians in the roadway.

### Mitigation

To ensure that potential hazards to pedestrians, equestrians, bicyclists and vehicles associated with the proposed new San Vicente Staging Area and improvements at the Almaden Road Staging area are reduced, the following mitigation measure is required.

#### New San Vicente Staging Area

- T-2. The following improvements will be incorporated into the Trails Master Plan and implemented prior to opening the [Rancho San Vicente Staging Area](#):*
- a. A Rectangular Rapid Flashing Beacon (RRFB) or other pedestrian crossing provisions to be developed in coordination with County of Santa Clara Roads and Airports Department prior to final design and implementation shall be installed on McKean Road at the Fortini Road intersection to alert drivers of crossing pedestrians.*

- b. *A high-visibility crosswalk adjacent to the RRFB or other pedestrian crossing provisions to be developed in coordination with County of Santa Clara Roads and Airports Department prior to final design and implementation shall be installed to direct pedestrians to the proper crossing location on McKean Road.*
- c. *Pedestrian and equestrian warning signs (W11-2 and W11-7) shall be placed approximately 20 feet in advance of the high-visibility crosswalk on McKean Road. Actual configuration to be further coordinated with County of Santa Clara Roads and Airports Department prior to implementation.*
- d. *The Rancho San Vicente driveway entrance shall include one inbound and one outbound lane.*
- e. *Remove a vehicle parking space at the trail entrance to provide adequate space to enter and exit the trail.*
- f. *An eastbound right-turn deceleration lane and a westbound left-turn pocket shall be added on McKean Road. The deceleration lane and turn-pocket shall extend approximately 200 feet from the intersection. Actual configuration to be further coordinated with County of Santa Clara Roads and Airports Department prior to final design and implementation.*
- g. *The Rancho San Vicente entrance sign shall be installed perpendicular to McKean Road to maximize its visibility.*

### **Almaden Road Staging Area Improvements**

- T-3. *The following improvements will be incorporated into the Trails Master Plan and implemented prior to completing improvements at the Almaden Road Staging Area:*
  - a. *Pedestrian and equestrian warning signs (W11-2 and W11-7) shall be installed on Almaden Road to alert drivers for pedestrians and equestrians in the roadway. Actual configuration to be further coordinated with County of Santa Clara Roads and Airports Department prior to implementation.*
  - b. *The Almaden Road staging driveway entrance shall include one inbound and one outbound lane.*
  - c. *The Almaden Road staging area entrance sign shall be installed perpendicular to Almaden Road to maximize its visibility.*

Implementation of the mitigation identifies above will reduce potential safety impacts to pedestrians, equestrians, and bicyclists to a less than significant level by incorporating necessary safety mechanisms and facilities identified in the Transportation Memo. The impact is **less than significant with mitigation**.



## **9. Increased Demand for On or Off-street Parking Because of Inadequate Project Parking**

A net of up to 185 new parking spaces will be provided at the existing and new staging areas (65 new spaces at Ranger Station, 115 new spaces at Rancho San Vicente, and five new spaces at Almaden Road). Implementation of the Draft Trails Master Plan will not require additional parking beyond what has been proposed therefore, there will be no increased demand for additional project parking. Parking has not been identified as an impact in the Transportation Memo Reference Transportation Memo.

**No Impact.**

<b>R. UTILITIES AND SERVICE SYSTEMS</b>						
<b>WOULD THE PROJECT:</b>	<b>IMPACT</b>					<b>SOURCE</b>
	<b>NO</b>	<b>YES</b>				
	<u>No Impact</u>	<u>Less Than Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporated</u>	<u>Potentially Significant Impact</u>	<u>Cumulative</u>	
1. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,5,7,9
2. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,5,7,9
3. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,5,7,9
4. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,5,7,9
5. 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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,5,7,9
6. Not be able to be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,5,7,9,31
7. Comply with federal, state, and local statutes and regulations related to solid waste?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,5,7,9,31

## ***Discussion/Mitigation***

### **1. Exceed Wastewater Treatment Requirements**

The proposed Draft Trails Master Plan includes a new restroom at the Ranger Station and the Rancho San Vicente staging area. Table 4 of the Draft Trails Master Plan identifies the new restroom(s) as "Vault system, septic hook up, or sanitary sewer." A leach field is identified on the conceptual map for the Ranger Station. County Parks has indicated that the preferred restroom option is installation of a septic system rather than sanitary sewer line hookup since they are outside of City of San Jose services. Installation of septic system would require a permit by the County of Santa Clara Health Department. In the unlikely event of sanitary sewer hookup, permits would be required from the City of San Jose. The County or City permits would require that the Permittee agrees to operate in accordance with all applicable state and local regulations, laws, and inspection procedures needed to ensure compliance.

Prior to construction, County Parks will be required to submit a site-specific, design-level septic (or sanitary hookup) plan, which includes a percolation test and measures of compliance with all applicable state and local code requirements. These requirements will ensure that the proposed project would not exceed wastewater treatment requirements. **No impact.** Also refer to Section J. Hydrology and Water Quality and Section O. Public Services.

## **2. Result in Construction of New Water or Wastewater Facilities**

The proposed project is a Trails Master Plan. The project does not propose additional facilities that would generate water requiring new or expanded water treatment or distribution facilities. **No Impact.** Also refer Section G. Geology, Section J. Hydrology and Water Quality and Section O. Public Services.

## **3. Result in the Construction of New Storm Water Facilities**

The Draft Trails Master Plan includes new staging areas, including parking areas with all weather aggregate surface on a compacted rock base surface. Surface storm water will be directed to swales for on-site infiltration. Due to storm water contact with horse manure, contact storm water may be directed to a storm water detention pond. All drainage from surface areas would be retained on-site. Therefore, implementation of the Draft Trails Master Plan would not result in the need to construct new storm water treatment facilities. **No Impact.**

## **4. Sufficient Water Supplies to Serve the Project**

The proposed Draft Trails Master Plan does not contemplate new water fountains, or other water uses that would affect Calero County Park water entitlements. **No Impact.**

## **5. Adequate Wastewater Treatment Capacity**

The proposed project is a Trails Master Plan. The project does not propose additional facilities that would generate water requiring new or expanded water treatment facilities. **No Impact.**

## **6. Sufficient Landfill Capacity**


The Kirby Canyon Landfill, located at 910 Coyote Creek Golf Drive in Morgan Hill is the closest landfill, approximately 5.5 miles east of the project site. According to a study by the California Integrated Waste Management Board, in 2004, the Kirby Canyon Landfill had a remaining lifespan of 29 years. Post-project solid waste volumes generated at the project site are expected to increase; however, this increase is negligible. Therefore, implementation of the Draft Trails Master Plan would not affect the ability of the local landfill to serve Calero County Park. **No Impact.**

## **7. Comply with Solid Waste Statutes and Regulations**

The proposed Draft Trails Master Plan does not contemplate new solid waste practices. **No Impact.**

<b>S. MANDATORY FINDINGS OF SIGNIFICANCE</b>		
<b>DOES THE PROJECT:</b>	<b>NO</b>	<b>YES</b>
a. Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	X	
b. Have the potential to achieve short-term environmental goals, to the disadvantage of long-term environmental goals? (A short-term impact on the environment is one which occurs in a relatively brief, definitive period of time, while long-term impacts will endure well into the future.)	X	
c. Have environmental impacts which are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probably future projects.)	X	
d. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	X	
<p><b>DISCUSSION OF ENVIRONMENTAL EVALUATION</b></p> <p>The mitigation measures listed in this document will ensure that the project does not substantially degrade the quality of the environment or sensitive habitats or eliminate important examples of the major periods of California history or prehistory.</p> <p>Best management practices and mitigation measures have been incorporated that short-term as well as long-term environmental impacts are avoided or reduced to a less than significant level.</p> <p>The project will not have environmental impacts that are individually limited but cumulatively considerable because it does not cause any long-term or growth-related impacts.</p> <p>Best Management Practices (BMPs) and mitigation measures contained in this document will avoid substantial adverse impacts on human beings or reduce them to less than significant levels.</p> <p><b>DETERMINATION:</b> (To be completed by the Lead Agency) <u>On the basis of this initial evaluation:</u></p> <p><input type="checkbox"/> I find that the proposed project COULD NOT have a significant effect on the environment, and a <b>NEGATIVE DECLARATION</b> will be prepared.</p> <p><input checked="" type="checkbox"/> 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 mitigation measures are included as part of the proposed project. A <b>MITIGATED NEGATIVE DECLARATION</b> will be prepared.</p> <p><input type="checkbox"/> I find that the proposed project MAY have a significant effect on the environment, and an <b>ENVIRONMENTAL IMPACT REPORT</b> is required.</p> <p><input type="checkbox"/> 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 <b>ENVIRONMENTAL IMPACT REPORT</b> is required, but it must analyze only the effects that remain to be addressed.</p> <p><input type="checkbox"/> I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or <b>NEGATIVE DECLARATION</b> pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or <b>NEGATIVE DECLARATION</b>, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.</p>		

Signature



July 8, 2013

Print name & title: Polaris Kinison Brown, Project Manager, EMC Planning Group (Consultant)

## INITIAL STUDY SOURCE LIST

1. Field Visit May 8<sup>th</sup> 2013
2. Bellinger Foster Steinmetz, "Draft Calero County Park Master Plan," May 2013.
3. Bellinger Foster Steinmetz, Supplemental Project Description, April 25, 2013
4. Planner's Knowledge of Area
5. Experience With Other Project of This Size and Nature
6. Santa Clara County, "Santa Clara County General Plan, 1995-2010," adopted December 20, 1994
7. Santa Clara County, "Santa Clara County General Plan, Draft Environmental Impact Report," September 1994
8. Santa Clara County Zoning Regulations (Ordinance)
9. City of San Jose, "Envision San Jose 2040 General Plan," 2007
10. City of San Jose, "Draft Program Environmental Impact Report for the Envision San Jose 2040 General Plan," June 2011
11. City of San Jose Title 20 Zoning Ordinance
12. County of Santa Clara, Department of Parks and Recreation, "Santa Clara County Parks Trails Maintenance Manual," revised November 2005
13. ICF International, "Santa Clara Valley Habitat Plan," 2012.
14. Soil Geographic (SSURGO) Data Base 2010
15. Balance Hydrologics, Memo: "Geologic and Hydrologic Opportunities and Constraints for Trail Planning," August 2011.
16. EMC Planning Group, "Air Quality Technical Memo," June 2013
17. EMC Planning Group, "Green House Gas Technical Memo," June 2013
18. Fehr & Peers "Focused Transportation Analysis for the Calero Park Trails Master Plan." June 2013.
19. Bay Area Air Quality Management District, "Air Quality Standards and Attainment Status," 2012.
20. Bay Area Air Quality Management District, "California Environmental Quality Act Air Quality Guidelines," December 1999
21. Bay Area Air Quality Management District, "California Environmental Quality Act Air Quality Guidelines," May 2011
22. Bay Area Air Quality Management District, "California Environmental Quality Act Air Quality Guidelines," May 2012
23. Balance Hydrologics, Inc "Geologic and Hydrologic Opportunities and Constraints for Trail Planning, Calero County Park, Santa Clara County, California.." 2011.
24. FIRM Santa Clara County Panel 420 of 830 Panel Map ID 06085C0420H and 06085C0408H. May 18, 2009. Viewed on line at <http://map1.msc.fema.gov/idms/IntraView.6/13/13>
25. Santa Clara Countywide Trails Master Plan Update
26. Santa Clara County Parks Trail Maintenance Manual (County of Santa Clara 2005)
27. California Department of Toxic Substance Control, Hazardous Waste and Substances List, accessed online at <http://www.calepa.ca.gov/sitecleanup/corteselist/SectionA.htm>, on June 13, 2013.
28. California Department of Forestry and Fire Protection, Fire Hazard Severity Zone Maps, accessed online at [http://www.fire.ca.gov/fire\\_prevention/fhsz\\_maps\\_santaclaraphp](http://www.fire.ca.gov/fire_prevention/fhsz_maps_santaclaraphp), on June 13, 2013.
29. Santa Clara, County ALUC, Airport Safety Zones Map, accessed online at <http://www.sccgov.org/sites/planning/PlansPrograms/ALUC/Pages/ALUC.aspx>, on June 14, 2013
30. Santa Clara County Airports. Accessed online at <http://www.countyairports.org/index.html>, on June 14, 2013.
31. California Integrated Waste Management Board, "Five-Year CIWMP/RAIWMP Review Report for Santa Clara County," December 2004
32. Santa Clara County Land Use Plan (Map) May 2008 1995 Santa Clara County General Plan
33. CALTRANS. List of State Scenic Highways. Accessed on line June 2013. [www.dot.ca.gov/hq/LandArch/scenic/schwy.htm](http://www.dot.ca.gov/hq/LandArch/scenic/schwy.htm)
34. Santa Clara Valley Water District. Santa Clara Valley Water District Water Resources Protection Collaborative Guidelines and Standards for Land Use Near Streams. Updated July 2007. Accessed on line June 2013 at : <http://www.valleywater.org/Programs/WRPC.aspx>
35. County Development Guidelines for Design Review
36. USDA, SCS, "Soils of Santa Clara County"
37. USDA, SCS, "Soil Survey of Eastern Santa Clara County"
38. Archeological Resource Management (ARM), "Archival Review and Limited Evaluation of Select Areas of the Calero County Parks Trails Master Plan Project in the County of Santa Clara Trail," June 2013.
39. California Building Code (2007)
40. 2009 NPDES Storm Water Discharge Permit
41. 2002 Clean Water Act Section 303(d)
42. Open Space Preservation, Report of the Preservation 2020 Task Force, April 1987 (Chapter IV)

## E MITIGATION MONITORING AND REPORTING PLAN

Mitigation Measures	Party Responsible for Implementation	Implementation Trigger/Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency	Verified Implementation
<b>AIR QUALITY</b>						
<b>AQ-1:</b> The Master Plan will be revised to include best management practices for dust control on unpaved parking lots.	County Parks staff, Contractor	Prior to construction	County Parks staff	Review best management practices to ensure consistency with County's air quality policy. Perform site inspections as necessary to verify compliance.	Once	Initials: _____ Date: _____
<b>AQ-2:</b> The following Air District basic construction mitigation measures will be incorporated into the Trails Master Plan and/or all future construction documents:	County Parks staff, Contractor	Prior to construction	County Parks staff	Review construction specifications materials and retain for administrative record.	Once	Initials: _____ Date: _____
<ul style="list-style-type: none"> <li>a. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. Material stockpiles may be covered in accordance with Trails Master Plan Stormwater Pollution Prevention Plan best management practices No. 1.</li> <li>b. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.</li> <li>c. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.</li> <li>d. All vehicle speeds on unpaved roads shall be limited to 15 mph.</li> <li>e. 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.</li> <li>f. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the</li> </ul>						

CALERO COUNTY PARK  
 TRAILS MASTER PLAN INITIAL STUDY  
 MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MONITORING AND REPORTING PROGRAM (CONTINUED)

Mitigation Measures	Party Responsible for Implementation	Implementation Trigger/Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency	Verified Implementation
<p>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.</p> <p>g. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.</p> <p>h. Post a publicly visible sign with the telephone number and person to contact at the lead agency 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.</p>	County Parks staff, Contractor	Prior to construction	County Parks staff	Soil sampling, analysis, and mitigation in accordance with Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations (California Air Resources Board 2009) if necessary	Once	Initials: _____ Date: _____
<p><b>AQ-3:</b> The following measures shall be incorporated into the Trails Master Plan and/or all future construction documents, applicable to areas identified as containing serpentine rock, if soil disturbance is anticipated during construction of the trail or abandonment of old trails:</p> <p>a. Upon determination of a precise trail alignment, soil sampling shall be conducted in not less than one location for each one-half mile of alignment within the area identified as containing serpentine rock, and in any case, no less than one sample for any trail segment within the area identified as containing serpentine rock. California Air Resources Board Test Method 435 should be used unless otherwise directed by the Air District.</p> <p>b. Soil samples shall be analyzed by an approved laboratory for asbestos materials content, and characterized as to concentration and resultant potential for adverse health effects to workers or trail users.</p> <p>c. If asbestos levels are high enough to warrant precautions, County Parks shall develop a mitigation plan in</p>	County Parks staff, Contractor	Prior to construction	County Parks staff	Soil sampling, analysis, and mitigation in accordance with Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations (California Air Resources Board 2009) if necessary	Once	Initials: _____ Date: _____



CALERO COUNTY PARK  
 TRAILS MASTER PLAN INITIAL STUDY  
 MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measures	Party Responsible for Implementation	Implementation Trigger/Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency	Verified Implementation
accordance with Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations (California Air Resources Board 2009).						
<b>BIOLOGICAL RESOURCES</b>						
<b>BIO-1:</b> To avoid impacts to special-status plants, for the impact area of each project phase, focused botanical surveys will be conducted prior to construction by a qualified biologist or County Parks Natural Resource Program staff for all special-status plant species with potential to occur in the various plant communities as identified above. The surveys will conform to current protocols established by the CDFW and CNPS, and will include surveys during the appropriate blooming periods for every target species (which will overlap for many species during spring months). Optimal survey times vary from year to year depending on temperature, rainfall amount and timing, etc., so will be confirmed by the monitoring of known reference populations for as many target species in the project vicinity as possible. The final field positioning of each project component will avoid all observed special-status plant species occurrences.	County Parks Natural Resource Program staff or qualified biologist	Prior to construction	County Parks staff	Review survey findings and retain for administrative record	Once during blooming season for targeted species	Initials: _____ Date: _____
<b>BIO-2:</b> To avoid potential adverse impacts to nesting birds (including raptors), trail building/construction activities (including any tree trimming/removal or generation of loud, sustained noises) should be scheduled to take place outside the breeding bird season (February 1 through August 31). If trail building/construction activities will occur during the breeding bird season, then a qualified biologist or County Parks Natural Resource Program staff will conduct a pre-construction survey for nesting birds to ensure that no nests would be disturbed during project implementation. This survey will be conducted no more than 15 days prior to the initiation of disturbance activities during the early part of the nesting season (February 1 through April 30) and no more than 30 days prior to the initiation of disturbance activities during the late part of the nesting season (May 1 through August 31).  If no active nests are present within 500 feet of project activities, then activities can proceed as scheduled. However, if an active nest is detected during the survey within 500 feet of project activities, then the establishment of a protective buffer zone	County Parks staff or qualified biologist	Prior to construction	County Parks staff and qualified biologist	Perform site inspections to verify compliance	Once during each phase of construction	Initials: _____ Date: _____

CALERO COUNTY PARK  
TRAILS MASTER PLAN INITIAL STUDY  
MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MONITORING AND REPORTING PROGRAM (CONTINUED)

Mitigation Measures	Party Responsible for Implementation	Implementation Trigger/Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency	Verified Implementation
around each active nest (typically 250 to 500 feet for raptors but possibly 1,000 to 1,300 feet for ground-nesting and/or special-status raptors, with appropriate setback distance to be determined by a qualified biologist or County Parks Natural Resource Program staff) and 75 to 250 feet for passerines (perching and songbird species)) will be clearly delineated or fenced by the qualified biologist or County Parks Natural Resource Program staff until the juvenile bird(s) have fledged (left the nest), unless the biologist determines that proposed activities would not impact nesting success or fledgling/juvenile rearing. Limited monitoring of active nests located within 500 feet of trail or facility construction is recommended in order to monitor nesting activities and to prevent nest failure or abandonment.						
<b>BIO-3:</b> To avoid/minimize impacts to special-status animals, for each project phase, impact areas will be positioned away from high quality habitat features such as burrows or wetlands as determined prior to construction by a qualified biologist or County Parks Natural Resource Program staff through a trail location survey. In particular, new trails and facilities will be sited in the field prior to construction to avoid potential American badger den sites/active burrows, seasonal wetlands, and other features that could provide habitat for special-status species. Further, temporary exclusion barriers will be utilized to keep wildlife out of construction sites, as deemed appropriate by a qualified biologist or Parks Natural Resource Program staff. Construction monitoring will be conducted periodically by a qualified biologist or Parks Natural Resource Program staff to ensure that disturbance limits are correctly established and that avoidance/minimization measures are implemented properly.	County Parks staff or qualified biologist	Prior to construction	County Parks staff and/or qualified biologist	Review construction specifications and monitor construction site to verify compliance	Periodically	Initials: _____ Date: _____
<b>BIO-4:</b> To minimize/avoid impacts to Santa Clara Valley Habitat Plan covered species, all applicable conditions listed in Table 7, Valley Habitat Plan Covered Species: Conditions on Covered Activities, for each covered species with potential to be impacted will be implemented during each phase of the project.	County Parks staff	Prior to construction	County Parks staff	Review construction specifications and monitor construction site to verify compliance. Review compliance requirements	During each phase of the project	Initials: _____ Date: _____

CALERO COUNTY PARK  
TRAILS MASTER PLAN INITIAL STUDY  
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measures	Party Responsible for Implementation	Implementation Trigger/Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency	Verified Implementation
				with the Habitat Conservation Plan permit and submit Habitat Plan application package to the Santa Clara Valley Habitat Agency.		
<b>BIO-5:</b> Mitigation will be required for the removal of any tree which measures over thirty-seven and seven-tenths (37.7) inches in circumference (twelve (12) inches or more in diameter) measured four and one-half (4.5) feet above the ground, or which exceeds twenty (20) feet in height. In compliance with the Santa Clara County Tree Preservation Ordinance, an administrative permit will be obtained from the County Planning Department prior to removal of protected trees on the project site and any stipulated mitigation will be completed, such as the planting of replacement trees in appropriate sites.	County Parks staff	Prior to tree removal	County Parks staff	Review compliance requirements and obtain permit from County Planning	Once	Initials: _____ Date: _____
<b>CULTURAL RESOURCES</b>						
<b>CR-1:</b> County of Santa Clara Parks and Recreation Department will ensure that the two previously unrecorded historic resources (home site and a wooden barn) noted during the archaeological survey are documented on Department of Parks and Recreation (DPR) forms and recorded to the California Historic Resources Information System (CHRIS).	County Parks staff	Prior to construction	County Parks staff	Complete DPR form and submit to CHRIS	Once	Initials: _____ Date: _____
<b>CR-2:</b> Prior to construction, staging areas and trails plans will be finalized in consultation with a qualified historian to avoid areas of known historic sensitivity.	County Parks staff and qualified historian	Prior to construction	County Parks staff	Retain consultation records with qualified historian, and implementation for administrative records	Once	Initials: _____ Date: _____
<b>CR-3:</b> Due to the possibility that significant previously unknown historic resources might be found during future construction activities, the following language will be incorporated into the Trails Master Plan and/or all future construction documents: “If historic resources (i.e. historic sites, and/or isolated historic objects that appear likely to have historic or cultural significance) are discovered during construction, work shall be halted at a minimum of 200 feet from the find, County of Santa Clara, Parks and Rec-	County Parks staff	Prior to construction	County Parks staff	Review construction specifications and retain for administrative record	Once	Initials: _____ Date: _____

CALERO COUNTY PARK  
TRAILS MASTER PLAN INITIAL STUDY  
MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MONITORING AND REPORTING PROGRAM (CONTINUED)

Mitigation Measures	Party Responsible for Implementation	Implementation Trigger/Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency	Verified Implementation
<p>reation Department shall be notified, and the area shall be staked off. County of Santa Clara, Parks and Recreation Department shall retain a qualified professional historian that meets the Secretary of the Interior's Standards and Guidelines for Professional Qualifications in history, to evaluate and determine the significance of the find. If the find is determined to be significant, appropriate mitigation measures shall be formulated and implemented."</p>						
<p><b>CR-4:</b> Prior to construction, staging areas and trails plans will be finalized in consultation with a qualified archaeologist to avoid areas of known archaeological sensitivity. Where this is not feasible, archaeological monitoring shall be carried out during earthmoving activities for trail construction within sensitive areas, as defined in the Archaeological Investigation. In the event that proposed trails pass through recorded archaeological resources, an archaeological testing program will be developed for these areas consistent with professional archeological standards and State and County requirements. The nature and extent of the testing program will be dependent on the level of site disturbance, and topological and environmental factors.</p>	County Parks staff and qualified archaeologist	Prior to construction	County Parks staff and/or qualified archaeologist	Review construction specifications and retain for administrative record	Once. If avoidance is not feasible, monitoring will be required during all earthmoving activities.	Initials: _____ Date: _____
<p><b>CR-5:</b> Due to the possibility that significant buried prehistoric cultural resources might be found during future construction and trail improvement activities, the following language will be incorporated into the Trails Master Plan and/or all future construction documents:</p> <p>"If prehistoric archaeological resources (including but not limited to dark soil containing shellfish or groundstone) are discovered during construction, work within the immediate vicinity of the find will be halted at a minimum of 200 feet from the find and the area will be staked off. County of Santa Clara, Parks and Recreation Department will then determine if it is feasible to relocate the trail to avoid and/or minimize impacts. If the trail cannot be rerouted and impacts cannot be</p>	County Parks staff and qualified historian and/or qualified archaeologist	Prior to construction	County Parks staff	Review construction specifications and retain for administrative record	Once	Initials: _____ Date: _____

CALERO COUNTY PARK  
 TRAILS MASTER PLAN INITIAL STUDY  
 MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measures	Party Responsible for Implementation	Implementation Trigger/Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency	Verified Implementation
<p>avoided, then work will cease in the area until the archaeological evaluation has been completed. The County of Santa Clara Parks and Recreation Department will retain a qualified professional historian and/or archaeologist that meets the Secretary of the Interior's Standards and Guidelines for Professional Qualifications in archaeology to evaluate and determine the significance of the find. If the find is determined to be significant, appropriate mitigation measures will be formulated and implemented."</p>						
<p><b>CR-6:</b> In the event of an accidental discovery or recognition of any human remains, the following language will be incorporated into the Trails Master Plan and/or all future construction documents in accordance with CEQA Guidelines section 15064.5(e):</p> <p>"If human remains are found during construction there will be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the coroner of Santa Clara County is contacted to determine that no investigation of the cause of death is required and procedures outlined in the County Ordinance Relating to Indian Burial Grounds (County of Santa Clara, 1987) and State Public Resources Code can be implemented. If the coroner determines the remains to be Native American the coroner will contact the Native American Heritage Commission within 24 hours.</p> <p>The Native American Heritage Commission will identify the person or persons it believes to be the most likely descendent from the deceased Native American. The most likely descendent may then make recommendations to County of Santa Clara or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and associated grave goods as provided in Public Resources Code Section 5097.98. The County of Santa Clara or its authorized representative will re-bury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further disturbance if:</p>	<p>County Parks staff and qualified archaeologist</p>	<p>During construction</p>	<p>County Parks staff</p>	<p>Review construction specifications and retain for administrative record</p>	<p>Once</p>	<p>Initials: _____          Date: _____</p>

CALERO COUNTY PARK  
TRAILS MASTER PLAN INITIAL STUDY  
MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MONITORING AND REPORTING PROGRAM (CONTINUED)

Mitigation Measures	Party Responsible for Implementation	Implementation Trigger/Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency	Verified Implementation
a) the Native American Heritage Commission is unable to identify a likely descendent or the likely descendent failed to make a recommendation within 24 hours after being notified by the commission; b) the descendent identified fails to make a recommendation; or c) the County or it's authorized representative rejects the recommendation of the descendent, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.”						
<b>LAND USE AND PLANNING</b>						
Conflict with Applicable Plans or Policies Adopted by Agencies with Jurisdiction over the Project	<i>See Mitigation Measure BIO-4</i>					
<b>RECREATION</b>						
New or Expanded Recreational Facilities that Have an Adverse Physical Effect on the Environment	<i>See All Mitigation Measures</i>					
<b>TRANSPORTATION/TRAFFIC</b>						
<b>T-1:</b> The tree located about 400 feet south the Ranger Station entrance on the east edge of McKean Road of the entrance shall be trimmed to increase and sight distance to a minimum distance of 430 feet. The trimming shall be regularly maintained to ensure sight distance is preserved.	County Parks staff	Upon project approval	County Parks staff	Trim tree to increase sight distance to a minimum of 430 feet.	Periodically as needed to preserve sight distance	Initials: _____ Date: _____
<b>T-2:</b> The following improvements will be incorporated into the Trails Master Plan and implemented prior to opening the Rancho San Vicente Staging Area: a. A Rectangular Rapid Flashing Beacon (RRFB) or other pedestrian crossing provisions to be developed in coordination with County of Santa Clara Roads and Airports Department prior to final design and implementation shall be installed on McKean Road at the Fortini Road intersection to alert drivers of crossing pedestrians. b. A high-visibility crosswalk adjacent to the RRFB or other pedestrian crossing provisions to be developed	County Parks staff	Prior to opening the Rancho San Vicente Staging Area	County Parks staff	Complete improvements and retain for administrative record	Once	Initials: _____ Date: _____

CALERO COUNTY PARK  
 TRAILS MASTER PLAN INITIAL STUDY  
 MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measures	Party Responsible for Implementation	Implementation Trigger/Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency	Verified Implementation
<p>in coordination with County of Santa Clara Roads and Airports Department prior to final design and implementation shall be installed to direct pedestrians to the proper crossing location on McKean Road.</p> <p>c. Pedestrian and equestrian warning signs (W11-2 and W11-7) shall be placed approximately 20 feet in advance of the high-visibility crosswalk on McKean Road. Actual configuration to be further coordinated with County of Santa Clara Roads and Airports Department prior to implementation.</p> <p>d. The Rancho San Vicente driveway entrance shall include one inbound and one outbound lane.</p> <p>e. Remove a vehicle parking space at the trail entrance to provide adequate space to enter and exit the trail.</p> <p>f. An eastbound right-turn deceleration lane and a westbound left-turn pocket shall be added on McKean Road. The deceleration lane and turn-pocket shall extend approximately 200 feet from the intersection. Actual configuration to be further coordinated with County of Santa Clara Roads and Airports Department prior to final design and implementation. The Rancho San Vicente entrance sign shall be installed perpendicular to McKean Road to maximize its visibility.</p>						
<p><b>T-3:</b> The following improvements will be incorporated into the Trails Master Plan and implemented prior to completing improvements at the Almaden Road Staging Area:</p> <p>a. Pedestrian and equestrian warning signs (W11-2 and W11-7) shall be installed on Almaden Road to alert drivers for pedestrians and equestrians in the roadway. Actual configuration to be further coordinated with County of Santa Clara Roads and Airports Department prior to implementation.</p> <p>b. The Almaden Road staging driveway entrance shall include one inbound and one outbound lane.</p> <p>c. The Almaden Road staging area entrance sign shall be installed perpendicular to Almaden Road to maximize its visibility.</p>	County Parks staff	Prior to completing improvements at Almaden Road Staging Area	County Parks staff	Complete improvements and retain for administrative record	Once	Initials: _____ Date: _____

## **F. LIST OF COMMENTS RECEIVED**

List of Comments Received on the Calero County Park Trails Master Plan and associated Initial Study / Mitigated Negative Declaration

1. State of California, Governor's Office of Planning and Research  
Scott Morgan, Director, State Clearinghouse
2. Joyce McKee (verbal comment)
3. Barbara White
4. Santa Clara Valley Water District
5. Glenn A. Bothwell (received after 30-day public comment period)



## **G RESPONSES TO WRITTEN AND ORAL COMMENTS**

This chapter presents each written or oral comment received by both individuals and agencies on the Draft Initial Study/Mitigated Negative Declaration (IS/MND) for the Calero County Park Trails Master Plan (“Trails Master Plan”) by the County of Santa Clara, Parks and Recreation Department (“County Parks Department”) during the 30-day public review period of the IS/MND between July 10, 2013 and August 9, 2013. Each comment letter is followed by the corresponding responses. The numbering of the responses to comment corresponds to the comment number in the margins of the comment letters.

### **COMMENT LETTER 1 STATE CLEARINGHOUSE**

**Response 1-1:** This is an acknowledgment from the State Clearinghouse that the project has complied with their requirements for draft environmental documents pursuant to the California Environmental Quality Act (CEQA) and that no State agencies submitted comments through the Clearinghouse. This letter does not require a response.



EDMUND G. BROWN JR.  
GOVERNOR

STATE OF CALIFORNIA

Letter #1

GOVERNOR'S OFFICE of PLANNING AND RESEARCH  
STATE CLEARINGHOUSE AND PLANNING UNIT



KEN ALEX  
DIRECTOR

August 9, 2013

AUG 12 2013

Elish Ryan  
Santa Clara County, Dept. of Parks and Rec.  
Sec. 298, Garden Hill Dr.  
Los Gatos, CA 95032

Subject: Calero County Park Trails Master Plan  
SCH#: 2013072023

Dear Elish Ryan:

1-1.

The State Clearinghouse submitted the above named Mitigated Negative Declaration to selected state agencies for review. The review period closed on August 8, 2013, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Scott Morgan  
Director, State Clearinghouse

**Document Details Report**  
**State Clearinghouse Data Base**

**SCH#** 2013072023  
**Project Title** Calero County Park Trails Master Plan  
**Lead Agency** Santa Clara County

**Type** MND Mitigated Negative Declaration

**Description** The proposed Draft Calero County Park Trails Master Plan (Trails Master Plan) provides a framework for expansion of the existing park trail system into a multi-use trail network over 10-year time period, while supporting protection and enhancement of the sensitive cultural and environmental resources within the park. The Trails Master Plan nearly doubles the mileage of the existing trail system. Equestrians and hikers currently use approximately 20 miles of trails. At final build-out, the expanded trail system will be approximately 36 miles and will offer many trails for walkers with dogs on-leash and mountain bikers while still retaining historic, limited trial use for equestrians and hikers on some trails. In addition, the Trails Master Plan will provide regional trail connections as identified in the Santa Clara County Countywide Trail Master Plan (1995).

**Lead Agency Contact**

**Name** Elish Ryan  
**Agency** Santa Clara County, Dept. of Parks and Rec.  
**Phone** 408 355 2236 **Fax**  
**email**  
**Address** Sec. 298, Garden Hill Dr.  
**City** Los Gatos **State** CA **Zip** 95032

**Project Location**

**County** Santa Clara  
**City** San Jose  
**Region**  
**Lat / Long** 37° 11' 13.15" N / 121° 46' 30.59" W  
**Cross Streets** Entrance at 23205 McKean Road, approximately 3 miles SW of U.S. Hwy 101

**Parcel No.**  

Township	Range	Section	Base
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**Proximity to:**

**Highways** Hwy 101  
**Airports**  
**Railways**  
**Waterways** Calero Reservoir  
**Schools**  
**Land Use** Regional Park; County: A; A H: A HS-sr, Regional Park, Existing; City: R-1-1, Open Hillside

**Project Issues** Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Drainage/Absorption; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Noise; Public Services; Recreation/Parks; Septic System; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Landuse

**Reviewing Agencies** Resources Agency; Department of Fish and Wildlife, Region 3; Cal Fire; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; California Highway Patrol; Caltrans, District 4; Air Resources Board, Transportation Projects; Regional Water Quality Control Board, Region 2; Native American Heritage Commission; State Lands Commission

**Date Received** 07/10/2013 **Start of Review** 07/10/2013 **End of Review** 08/08/2013



# SANTA CLARA COUNTY PARKS

Letter #2



298 Garden Hill Dr., Los Gatos, Ca 95032 (408) 355-2200 Main • (408) 355-2290 Fax [www.ParkHere.org](http://www.ParkHere.org)

July 29, 2013

Polaris Kinison Brown  
EMC Planning Group  
301 Lighthouse Way  
Monterey, CA 93940

**SUBJECT:** Verbal Response to Calero County Park Trails Master Plan Initial Study/Mitigated Negative Declaration

Dear Polaris,

On July 29, 2013, I received a call from Joyce McKee, who resides at 21201 Bertram Road, San Jose, CA 95120. As a resident within the vicinity of the Calero County Park Trails Master Plan project, she had received the Notice of Intent to Adopt an Initial Study/Mitigated Negative Declaration for the project.

2-1.

Ms. McKee stated that she was opposed to the walk-in entrance proposed in the project to be located on Bertram Road. It is her stated opinion that this entrance will be a nuisance and a safety hazard, encouraging people to park illegally on Bertram Road. She stated that this is already a persistent problem on that street and that she has contacted the Sheriff's Department. She has also been in contact with County Roads and Airports requesting that traffic control measures be put in place to reduce the parking problem. She has also observed people illegally entering the park at this location at night and loitering behind her house. A park entrance on Bertram Road,

2-2.

even if just for local residents to access by foot, horse, or bicycle will be a problem as many people in the neighborhood will want to drive to this location. She was happy to learn that other locations to access the park would be available and encouraged us to change to Trails Master Plan to eliminate the Bertram Road option based upon its impact to local residents.

Ms. McKee was asked to submit written comments per the instructions on the Notice of Intent. But since that conversation, we have not received any written comments, so this letter serves as documentation of their verbal response to the Draft Initial Study/Mitigated Negative Declaration.

Sincerely,

Elish Ryan  
Planner III

Cc: Julie Mark, Deputy Director of Administration  
Jane Mark, Senior Planner

**Board of Supervisors:** Mike Wasserman, Dave Cortese, Ken Yeager, S. Joseph Simitian, Cindy Chavez

**County Executive:** Jeffrey V. Smith

**Comment Letter 2. Joyce McKee (Verbal comment documented in July 29, 2013 memo)**

**Response 2-1:** Comment noted. Trail access at the Bertram Road entrance location has been discussed and identified as part of the proposed trails master plan for neighborhood walk-in access based on public input and interest. Concern about trail entrance location and limited public parking is noted and will be considered in the future development of the project designs.

**Response 2-2:** Comment noted. Trail access at this location will be subject to the County of Santa Clara's Ordinance Code Section B14-14.1 which requires posted hours of access. Effective May 1, 2007, the hours of access for trail use are sunrise to sunset. Trail hours are to be treated independently of the regular park hours of access from 8 AM to sunset, which will not change. After hours activities will be addressed by County Park Rangers on-call and with support from deputies from the Sheriff's Office. The County Parks Department will enforce park use in accordance with Ordinance Code Section B14-14.1, where Park Rangers will patrol the County's park system year round for parking and traffic enforcement.

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From: Barbara White  
Sent: Tuesday, July 30, 2013 11:47 AM  
To: Ryan, Elish  
Cc: Supervisor Yeager; Wasserman, Mike; Cortese, Dave; Supervisor Simitian  
Subject: Negative Declaration Calero Park

Dear Elish,

3-1. I have reviewed the Negative Declaration for the Calero Parks Master Plan, and I have a couple of comments regarding issues that I don't believe have been properly mitigated. My concerns are about the addition of mountain bikes to trails that, in the past, have been restricted to hikers and equestrians. As a frequent horseback rider in Calero Park, I know that many of the trails proposed for multi-use would not be safe because of the instinctive behavior of equines and the somewhat scofflaw attitude of many bikers. These are two separate matters, obviously, but the point is that many of the trails proposed for multi-use at Calero are dangerous for such use at this time. The Chisnantuk Peak trail, because of its blind corners, steep areas, narrow width and drop-offs is a perfect example. I note that changes are proposed for some sections of this trail, but I can't imagine any changes that would be so great as to ensure safety.

3-2. I am concerned about the Operations and Maintenance section on page 30. It states that the decision to implement staff increases will be dependent on many things, including **budgetary constraints**. Such budgetary constraints, and resulting lack of enforcement of trail rules in recent years, have resulted in mountain bikers riding with impunity in parks everywhere. Apparently, they know they won't be caught and they feel entitled to ride wherever they want, as it is, because these are public lands. How will bikers breaking the speed limit or going into the equestrian area be prevented when there is no enforcement? I think the enforcement should be visible and active before new users are allowed into the park, rather than stating it will be dependent on a range of factors. This seems to ignore the need for safety in an effort to appease a loud, new user group. Sort of putting the cart before the horse. Wouldn't it be more prudent to realign the trails, have adequate enforcement, and then, thereafter, introduce new users into the mix?

3-3. Page 127 of the document discusses recreation and asks the question, <sup>3</sup>Would the project affect existing or future recreational opportunities?<sup>2</sup> The impact checked on the chart is, <sup>3</sup>Less than significant impact.<sup>2</sup> I strongly disagree with that. The project is going to have a very large impact on existing equestrian opportunities. The trail experience for equestrians on blind single track trails, knowing that a mountain bike could appear at any time, will be very negative. I know equestrians who do not ride in Canada del Oro because bikes are allowed in there. I know equestrians, including myself, who no longer go to Almaden Quicksilver because of the bikes. The Calero experience could become one of fear, diminishing the quality of the trail experience and potentially causing equestrians to go elsewhere.

3-4. At the June 5th meeting, one of the men in the audience, who claimed to be both a mountain biker

and equestrian, said the problems could be resolved if only the equestrians would spend 15 minutes a day training their horses. He should know what he said is false, and it should have been challenged on the spot. Yes, horses can be trained to not be fearful of bikes in just a few training sessions. What cannot be trained out of them (or me, for that matter) is an instinctive flight response to a silent, moving object coming around a blind corner at speed. Wide roads with a good line of sight are appropriate for multi-use. Narrow, twisty trails are a recipe for disaster. As I have mentioned to you before, my horses are trained, yet I have been in two collisions on multi-use trails with bikers who lost control of their bikes and skidded into my horses. This is not fun for anyone. If mountain bikes and other mechanized forms of transportation are to be allowed into parks, please let them have their own trails. I, for one, would rather have half the trails for horseback riding and know they are safe and enforced, than share trails (or ride trails where legal use is not enforced) and have to worry about either collisions with mountain bikes or a frightened horse going over into the abyss from a single-track, cliff side trail.

3-5. Please remember that hikers and horses are not evolving. Mountain bikes are. They are changing into bikes that can go anywhere, at increasing speed. Many of the bike riders are not out there to commune with nature. In truth, many of them are looking for thrills, faster times, and bragging rights. I wonder what the Parks<sup>1</sup> definition of <sup>3</sup>mountain bike<sup>2</sup> is. Does this mean trail roller blades or mountain skateboards or any wheeled contraption of the future is allowed? How about a bicycle with a silent motor to get up the hills?

I urge you to proceed cautiously, in the name of safety. All outdoor activities come with risk; every park user knows that. However, to knowingly add an incompatible user group on hazardous trails, with no assurance of enforcement, to an existing user group doesn't make sense to me. I don't believe a Negative Declaration is appropriate with such unresolved issues. Thank you very much for the opportunity to comment.

Sincerely,  
Barbara White

**Comment Letter 3. Barbara White (July 30, 2013 e-mail correspondence)**

**Response 3-1:** The Calero County Park Trails Master Plan (“Trails Master Plan”) will retain approximately 7.5 miles of trails as limited use for equestrian and hiking only. In addition, the Trails Master Plan proposes expanding multi-use trails which will include hiking, hiking with dogs on-leash, equestrian and off-road mountain bicycling uses to approximately 26.6 miles of trails, as part of the policy implementation which is consistent with Board-approved policies and priorities identified in the Santa Clara County General Plan (1995-2010), *Santa Clara County Countywide Trails Master Plan Update (“Countywide Trails Master Plan,” November 1995)* and the *Strategic Plan for the Santa Clara County Parks and Recreation System (August 2003)*.

Expanded multi-use trails will be designed and constructed to meet the County’s approved Countywide Trails Master Plan trail design guidelines that are based on on-going trail management experience, trail user feedback and recreation industry Best Management Practices. Trail design for multi-use trails shall follow design guidelines in Figure G-3, which recommends a range of 6’-0” to 12’0” depending on the terrain, and single-trail trails shall follow design guidelines in Figure G-4, which recommends 4’-0” to 6’-0” as optimum trail widths.

The County Parks Department has considered the potential for differing types and levels of impacts between different users on the trails and on the environment through extensive trail assessment and field work, as well as environmental site analyses which identified suitable terrain for each of the multiple user groups, including hikers, hikers with dogs on-leash, equestrians and mountain bicyclists. The Calero County Park Trails Master Plan considers these differences in trail users and proposes alternate trail route options that would avoid significant impacts to both the environment and the trail users. In addition, the County Parks Department’s trail design guidelines, the BMPs in the Trails Master Plan and the IS/MND, lessons learned from building multi-use trails in other County Parks (i.e. Coyote Lake-Harvey Bear Ranch County Park) and other provisions will be used in developing the specific trail alignments in order to avoid site-specific impacts both at time of construction and as public use is implemented.

**Response 3-2:** The Chisnantuck Peak trail is proposed to be upgraded to a multi-use trail which will also provide regional trail connectivity through Calero County Park. Trail improvements will be refined based on the topography and alignment adjustment in the field. The purpose of the Trails Master Plan was to provide an initial assessment of preferred trail alignment based on existing landscape resource conditions. Recommendations for trail alignments are conceptual and will require further field study and construction modifications before constructing suitable new trails to accommodate the multiple users in the park. The trail design criteria are based on successful experiences in other County parks and continued assessment of trail conditions for safety. The County Parks Department applies Best Management Practices incorporating dips, grade reversals, gentle rises at trails junctions, and sinuous routes with varied trail slopes and lines of sight to moderate speed on the trails, as part of the trail design and construction to ensure safe trail uses and varied recreational trail experiences in the trail system.

**Response 3-3:** The County Parks Department would implement the Countywide Trails Master Plan policies M-1.0 through M-6.0, which provide for trail use management, trail monitoring and maintenance.

County Park Rangers will be monitoring trail use as part of their regular patrol functions. As part of their patrol and enforcement duties, County Park Rangers are trained and certified to enforce speed regulations. If trail use safety is compromised based on trail use experiences and management, the



County Parks Department can recommend trail restrictions and/or closure until appropriate design modifications or enforcement strategies are implemented. With project improvements phased over time and as trail alignments are opened to the public, staffing needs for Calero County Park will gradually increase and shared staff arrangement would need to be re-evaluated.

In addition to County Park Rangers, volunteer patrols (i.e. Trail Watch volunteers) aid in the patrol presence of the park.

**Response 3-4:** The Trails Master Plan recognizes the need to implement improvements to new trail uses prior to public use, where *“Improvements to existing trails requiring upgrades before they can be designated as multi-use trails are expected to be part of this strategy”* (Draft Trails Master Plan - page 71). The County Parks Department anticipates the Trails Master Plan will be implemented in phases incrementally over a 10 year period.

**Response 3-5:** See Response 3-1 above. Personal trail use experience varies among cyclists and equestrian users on multi-use trails. To accommodate multi-use and enhance for safety, trails are being redesigned to slow cyclist speeds and improve sight lines. Existing trails in the County Park system have been redesigned as needed in response to trail management experiences, best practices, new trail design guidelines/standards, public comments and trail user experiences.

**Response 3-6:** County Ordinance Code Section B14-33.1 restricts vehicles or motorized uses on trails, with the exception of authorized maintenance and emergency service vehicles and wheelchairs to accommodate access that complies with the 2010 American Disability Act (ADA) federal guidelines. However, with the need to comply with 2010 ADA federal guidelines, access may be allowed by Other Power-driven Mobility Devices (OPDMD) with some site based restrictions and limitations (ADA Power Driven Mobility Devices / Procedure 311 – dated March 2013). Future consideration of electric bicycle use on trails would require an assessment of the appropriate site conditions, terrain, and compatibility with the environment, current trail uses and other considerations before these uses are allowed on trails.

File: 20418  
Calero Dam/Reservoir

August 7, 2013

Ms. Elish Ryan  
Santa Clara County Parks and Recreation Department  
298 Garden Hill Drive  
Los Gatos, CA 95032

Subject: Calero County Park Draft Trails Master Plan and Draft Initial Study/Mitigated  
Negative Declaration

Dear Ms. Ryan:

The Santa Clara Valley Water District (District) has reviewed the Calero County Park Draft Trails Master Plan dated May 2013 and the Draft Initial Study (IS)/Mitigated Negative Declaration (MND) dated July 8, 2013 and received by the District on July 11, 2013.

As noted in the above referenced documents, the District owns the land for Calero Reservoir which is leased to the County for recreational uses and inclusion in the Calero County Park via the Reservoir Master Lease. The project also includes two proposed crossings of the District's Almaden-Calero Canal and associated property which is not included in the Master Reservoir Lease. Any work on the District's easements or fee title property will require the issuance of a District permit as per the District's Water Resources Protection Ordinance. Additionally the proposed crossings of the Almaden-Calero Canal will require amendment of the lease to include this land which requires action by the District Board of Director's prior to issuance of any permits. The District is to be considered a responsible agency under CEQA since the project will require discretionary District permits and Board action for amendments to the lease.

4-1.

Based on our review of the proposed project as shown on the above referenced documents we have the following comments:

1. The District's Almaden Valley Pipeline, a 72-inch diameter high pressure raw water transmission pipeline, is located within a District easement along the southerly side of McKean Road. The access road to the proposed San Vicente staging area will cross this easement and pipeline and will require a District permit. The District can provide plans for the pipeline and the easement deed upon request.
2. Plans for the individual projects need to clearly show District lands, easements and facilities.

- 4-1. 3. Plans for all the improvements located within District fee title property and easement will need to be submitted for permit review and issuance, including staging areas, new restroom facilities, utilities, stormwater detention facilities, fencing and signage at the canal crossings, planting, *etc.*
- 4. Planting for the project needs to be in conformance with the Guidelines and Standards for Land Use Near Stream and the District's Water Resources Protection Manual. The Master Plan and MND/IS do not discuss conformance with these documents.
- 4-2. 5. Page 69 of the Biological Resources section of the IS notes there is no impact to watercourses *etc.*; however, bridges are proposed over various creeks and even if done with clear spans there can be impacts though they may not be significant. Additionally, the Master Plan notes that Trail #13 will require several bridges or culverts which is not consistent with the IS analysis as culverts would clearly impact the creek.

The District looks forward to continuing to work with County Parks staff as this project continues to progress. Please provide a copy of the final Master Plan and other project documents/plans when available for District review. Reference District File Number 20418 on further correspondence regarding this project. If you have any questions or need further information, you can reach me at (408) 630-2322.

Sincerely,



Colleen Haggerty, P.E.  
Associate Civil Engineer  
Community Projects Review Unit

cc: S. Tippets, C. Haggerty, File

20418\_56009ch08-07

#### **Comment Letter 4. Santa Clara Valley Water District (August 7, 2013 letter)**

**Response 4-1:** Comment noted. The County acknowledges the Santa Clara Valley Water District (SCVWD)'s policies and ordinances that may require District land lease amendments and permits for proposed improvements on SCVWD lands. This includes proposed plantings which would need to meet with SCVWD Guidelines and Standards for Land Use Near Streams and the District's Water Resources Protection Manual.

**Response 4-2:** The Initial Study checklist for Section D. Biological Resources, item #14 has been revised accordingly to "less than significant impact" instead of "no impact" to address the proposed bridge and culverts in the Trails Master Plan. See Section H. Summary of Edits to the Initial Study and Trails Master Plan.

In regards to the proposed bridges and culverts for trail crossings, the County Parks Department would implement policies, trail Maintenance guidelines for bridge design, design guidelines and BMPs to avoid and minimize potential impacts to the creek and would ensure that no impacts to riparian habitat would occur with maintenance activities within or adjacent to water courses. These include:

Countywide Trails Master Plan Design Guidelines:

***D-1.3.3.2** Trail crossings of freshwater stream zones and drainages shall be designed to minimize disturbance, through the use of bridges and culverts, whichever is least environmentally damaging*

***D-1.3.1.4** Biological resource assessments shall be conducted as specific trail routes are implemented. These assessments will include mitigation recommendations as appropriate. These guidelines do not substitute or replace any existing codes, rules, or regulations of land managing and permitting agencies that may govern trail development, but in addition to them. Necessary permits from these agencies will be obtained when trail alignments result in impacts to their jurisdictional areas.*

Santa Clara Valley Habitat Plan Conditions:

**Condition 3.** Maintain Hydrologic Conditions and Protect Water Quality

**Condition 4.** Avoidance and Minimization for In-Stream Projects

**Condition 5.** Avoidance and Minimization Measures for In-Stream Operations and Maintenance

Included in the above Habitat Plan conditions are aquatic avoidance and minimization measures (Table 6-2 of the Santa Clara Valley Habitat Plan) that address stream crossings, trail crossings of freshwater stream zones and drainages, appropriate design, placement and sizing of culverts, which the County Parks Department would implement as part of the project's compliance with the Habitat Plan.

Santa Clara County Parks  
**Attention:** Jane Marks, Sr. Planner  
298 Garden Hill Drive  
Los Gatos, CA 95032

**RE: Calero County Parks Trail Expansion**

Dear Jane,

I am the nearest neighbor to the Casa Loma Trailhead entrance to the park. My house looks upon the meadow that the negative declaration sites as the future expansion area for picnic tables and a parking lot. I am opposed to turning this environmentally sensitive area into another parking lot.

I have some concerns regarding the trail expansion project and its Negative declaration.

5-1.

1. I believe the meadow on Casa Loma Road would need its own EIR as it is home to many species that may be endangered or at least of concern. The reports commitment to biological monitoring during planning and construction is far less than what would be required if this was a private project. The county needs to be held to the same standards as private developers.

2. Santa Clara County Parks needs to include fuel reduction planning in their expansion plan and set aside money to fund this maintenance. I am concerned that by opening up this remote area to more people the risk of fire is significantly increased.

County Parks currently does very little to maintain its property along Casa Loma Rd.

5-2.

Many trees and or large limbs from trees in the meadow have fallen and nothing has been done to clear the dead wood or trim the remaining tree to preserve their health. These trees need an arborist to save them. The EIR talks about replacing trees of a certain size that may need to be cut for trail expansion yet it does nothing to preserve what it has. This land is in the City limits and the City of San Jose has strict rules about weed abatement and yet Parks does nothing to reduce the risk of fire through cutting, disking or grazing.

Open space, next door, spends a lot of resources reducing their fuel for fires. We recently had a fire 200 yards from the trailhead and if it hadn't been for the grazing that had been done that fire would have been much more difficult to control and certainly could have reached my property line.

5-3.

3. At the community meetings I expressed my concern that the Casa Loma staging area should not be opened for bikes until the other trailheads are opened for bikes. Opening Casa Loma before the others

**5-3.** would put unacceptable pressure on this relatively small lot and narrow road. This new pressure from cyclists needs to be spread throughout the park and not focused on 1 spot. I don't see anything in the plan that says this will happen. Please consider it.

**5-4.** 4. Casa Loma Road is maintained by the City of San Jose in the area where it runs along the Park property. There is a problem with that. The City of San Jose does very little to maintain this section of Casa Loma Rd. Trees have overgrown from both sides which narrows the road and causes cars to travel along the center which creates quite a problem when two cars are traveling in opposite directions. The original road is composed of multiple layers of oil and screenings. (No section of asphalt). Since the opening of the existing staging area several years ago the city has done almost nothing to maintain this road. Increasing traffic will only make it worse. County Parks needs to take responsibility for the maintenance or at least get a commitment from the City that they will do it. Our road is a series of potholes and patches. It can't take more pressure without maintenance.

**5-5.** 5. The report identifies two historical structures within the park yet makes no commitment to preserving them. Before we spend money building new structures and trails we need to know that the historical structures we have will be preserved. The barn on Casa Loma Road is in desperate need of repair. If work is not done to reinforce the structure and patch the roof it will certainly fall down within the next decade if not the next few years.

Sincerely,

Glenn A. Bothwell  
333 Casa Loma Road  
Morgan Hill, CA



**Comment Letter 5. Glenn A. Bothwell –(August 9, 2013 letter)**

**Response 5-1:** As part of fulfilling the requirements of the California Environmental Quality Act (CEQA), the County Parks Department conducted a program-level biotic resource study as well as Biotic Resources Evaluation for the Initial Study/Mitigated Negative Declaration for the Calero County Park Trails Master Plan. In addition, the County Parks Department would need to comply with the biological monitoring requirements of the Santa Clara Valley Habitat Plan (VHP) conditions for covered activities, along with numerous detailed Best Management Practices that the County Parks Department implements for trails and support facilities improvements. Prior to construction, the County Parks Department will complete a site-specific biological survey for resources for preservation and protection, if known species occurrences are known to occur in the area.

In a follow-up discussion with the commenter on August 16, 2013, the commenter clarified that this comment was intended to address the need for additional environmental review and documentation for any new proposed staging areas along Casa Loma Road, in the event that the County Parks Department would need to consider a new parking area in the meadows along Casa Loma Road. Commenter explained his concern if the shared parking arrangement on the existing Open Space Authority's Canada del Open Space Preserve staging area would not be able to accommodate the additional visitor uses with the introduction of mountain bicycle uses to Calero County Park. To comply with CEQA, the County Parks Department would conduct the appropriate environmental review and assessment for any proposed expansion of parking uses along Casa Loma Road.

**Response 5-2:** Comment noted.. The County Parks Department implements the County of Santa Clara Ordinance Codes for Fire Prevention (Sections B14-21.1 through 21.5) and has procedures in place to prevent wildfires as defined in a Memorandum of Understanding with CalFire for Fire Prevention and Operational Procedure (revised August 2012). County Ordinances include a Board-adopted "No Smoking Ordinance ([Ordinance No. NS-625.5: Smoking Pollution Control Ordinance](#))" which include all County park areas, and procedures are in place to prevent fires through preventative measures and procedures when performing work in remote/backcountry areas (i.e., during fire season, work that has a risk of starting a fire is ceased when the relative humidity is less than 30% or on a designated Red Flag Day). In addition, the Department implements Guideline D-5.5 for Wildland Fire Suppression from the Countywide Trails Master Plan, which states:

**D-5.5 Wildland Fire Suppression:** Regional Staging Areas should be designed to optimize fire suppression capability in the area and to reduce the potential for wildland fire ignitions.

The County Parks Department and CalFire maintain a fuel break along Bald Peaks Trail in Calero County Park and participates in inter-jurisdictional emergency services planning. This designated fire break is part of the SCVWD Watershed Protection PL566 Project that includes Casa Loma Road to the Santa Cruz Mountains. Additionally, the County Parks Department is working on infrastructure improvements to return a managed cattle grazing program to the Canada del Oro portion of Calero County Park. The Department has been working on proposed improvement, repair and replacement of boundary fencing to contain cattle at Calero County Park, and is researching water needs and availability to sustain cattle grazing on parkland. Due to budget constraints, the grazing program is taking longer than anticipated, but the Department is working toward this as budget and staffing allows.

The County Parks Department implements trail maintenance standards for pruning and vegetation management along trails. In backcountry and remote/natural areas, downed materials and vegetation provide habitat value to wildlife. Those values are weighed with forest health and safety when determining if downed materials can remain in the landscape. When those materials are adjacent or within fire code regulations for defensible space and clearance, the Department does remove that vegetation to meet those standards and regulations.

**Response 5-3:** Comment noted. The Open Space Authority's staging area at Canada del Oro Open Space Preserve along Casa Loma Road currently allows mountain bicycle access and uses. With the Authority's permission to allow shared parking for the trail users accessing Calero County Park, the additional mountain bicyclists would not result in any additional impacts to the existing staging area which already accommodates this use.

**Response 5-4:** Comment noted. The County of Santa Clara, Roads and Airport Department owns a portion of Casa Loma Road, specifically, a 0.80 mile segment starting from the midline of McKean Road, where the County's maintenance of the road is identified in the chip seal program in 2019. For maintenance of the County's portion of the road, the area is subject to the County's Integrated Pest Management (IPM) Ordinance Code Section B28 which requires the use of non-pesticide management and other sustainable practices. For the portion of Casa Loma road that is owned by the City of San Jose, the County Parks Department would not be taking responsibility for maintaining City of San Jose's portion of the roadway.

**Response 5-5:** Comment noted. The County will be considering the Casa Loma Barn as part of future recommendations in a separate planning process for the "Unused Structures Inventory/ Assessment." For the Bailey-Fellows House and surrounding ranch complex near the Park Ranger office, the facility is owned by the Santa Clara Valley Water District, where there are no immediate plans for future use or management.



## **H. Summary of Edits to the Initial Study and Trails Master Plan**

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Where the responses indicate additions or deletions to the text of the Initial study/Mitigated Negative Declaration, additions are indicated in underline and deletions are indicated in ~~strikethrough~~.

### **IS/MND Proposed Mitigated Negative Declaration Inside Title Page**

PREPARED BY  
EMC Planning Group Inc.  
301 Lighthouse Avenue, Suite C  
Monterey, CA 93940  
Tel 831.649.1799  
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wissler@emcplanning.com  
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July 8, ~~2012~~ 2013

### **IS/MND Initial Study Inside Title Page**

PREPARED BY  
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July 8, ~~2012~~ 2013

IS/MND Page 57

**3. Conflict with an Existing Williamson Act Contract or the County’s Williamson Act Ordinance.**

There is one parcel in Calero County Park (742-12-007) that is currently under the Williamson Act. Notification of non-renewal has been filed and the contract terminates in January 2017. The parcel is located south of Casa Loma Road in the south easterly quadrant of the park. No proposed trails or improvements to existing trails will occur on this parcel. The parcel is outside of the project area of any trail improvements proposed in the Trails Master Plan; therefore, there are no lands in the proposed Calero County Park Trails Master Plan that are protected by the Williamson Act. **No Impact.**

IS/MND Page 67

AQ-3. *The following measures shall be incorporated into the Trails Master Plan and/or all future construction documents, applicable to areas identified as containing serpentine rock, if soil disturbance is anticipated during construction of the trail or abandonment of old trails:*

IS/MND Page 69-70 Biological Resources Checklist

<b>D. BIOLOGICAL RESOURCES</b>						
WOULD THE PROJECT:	IMPACT					SOURCE
	NO	YES				
	No Impact	Less Than Significant Impact	Less Than Significant With Mitigation Incorporated	Potentially Significant Impact	Cumulative	
7 1. 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 Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,43,44,45,46,47
8 2. 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 Wildlife or US Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,43,44,45

<del>9</del> <u>3</u>	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.) or tributary to an already impaired water body, as defined by section 303(d) of the Clean Water Act through direct removal, filling, hydrological interruption, or other means?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,43,44
<del>40</del> <u>4</u>	Have a substantial adverse effect on oak woodland habitat as defined by Oak Woodlands Conservation Law (conversion/loss of oak woodlands) – Public Resource Code 21083.4?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,43,44
<del>44</del> <u>5</u>	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,43,44
<del>42</del> <u>6</u>	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,13,43,44
<del>43</del> <u>7</u>	Impact a local natural community, such as a fresh water marsh, oak forest or salt water tide land?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,43,44
<del>44</del> <u>8</u>	Impact a watercourse, aquatic, wetland, or riparian area or habitat?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,43,44
<del>45</del> <u>9</u>	Adversely impact unique or heritage trees or a large number of trees over 12" in diameter?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,43,44,48
<del>46</del> <u>10</u>	Conflict with any local policies or ordinances protecting biological resources:						
i)	Tree Preservation Ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,6,43,44,48
ii)	Wetland Habitat?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,6,43,44
iii)	Riparian Habitat?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,6,43,44

**IS/MND Page 69 Biological Resources Checklist**

<del>9</del> <u>3</u>	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.) or tributary to an already impaired water body, as defined by section 303(d) of the Clean Water Act through direct removal, filling, hydrological interruption, or other means?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,43,44
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**IS/MND Page 69 Biological Resources Checklist**

44 8. Impact a watercourse, aquatic, wetland, or riparian area or habitat?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,43,44
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**IS/MND Page 74-75**

**3. Wetlands/Waterways**

Wetlands/waterways and associated riparian habitats are considered special-status by several regulatory agencies including the U.S. Army Corps of Engineers (USACE), CDFW, Regional Water Quality Control Board (RWQCB), and USFWS. There are wetlands and natural drainages on the project site; however, ~~project improvements in these areas will be limited to span bridge stream crossings installed above high water mark, and therefore, the proposed project is not to impact any potentially jurisdictional wetland features or Waters of the U.S. or State.~~ in regards to the proposed bridges and culverts for trail crossings, the County Parks Department would implement policies, trail maintenance guidelines for bridge design, design guidelines and BMPs to avoid and minimize potential impacts to the creek and would ensure that no impacts to riparian habitat would occur with maintenance activities within or adjacent to water courses. These include the following:

**Countywide Trails Master Plan Design Guidelines**

D-1.3.3.2 Trail crossings of freshwater stream zones and drainages shall be designed to minimize disturbance, through the use of bridges and culverts, whichever is least environmentally damaging

D- 1.3.1.4 Biological resource assessments shall be conducted as specific trail routes are implemented. These assessments will include mitigation recommendations as appropriate. These guidelines do not substitute or replace any existing codes, rules, or regulations of land managing and permitting agencies that may govern trail development, but in addition to them. Necessary permits from these agencies will be obtained when trail alignments result in impacts to their jurisdictional areas.

**Santa Clara Valley Habitat Plan Conditions**

Condition 3. Maintain Hydrologic Conditions and Protect Water Quality

Condition 4. Avoidance and Minimization for In-Stream Projects

Condition 5. Avoidance and Minimization Measures for In-Stream Operations and Maintenance

Included in the above Habitat Plan conditions are aquatic avoidance and minimization measures (Table 6-2 of the Santa Clara Valley Habitat Plan) that address stream crossings,

trail crossings of freshwater stream zones and drainages, appropriate design, placement and sizing of culverts, which the County Parks Department would implement as part of the project's compliance with the Habitat Plan.

Because the proposed project would implement policies, trail maintenance guidelines for bridge design, design guidelines and BMPs to avoid and minimize potential impacts to the creek and would ensure that no impacts to riparian habitat would occur with maintenance activities within or adjacent to will install span bridges above ordinary high water mark levels at the new stream crossings and avoid seasonal wetlands, there will be no impact to jurisdictional wetland features or waters of the U.S. or State, the impact is considered to be less than significant and no mitigation is required.

## **IS/MND Page 85**

### **8. Wetlands/Waterways**

As stated above in response number 3, the project will not impact any watercourse or aquatic, wetland, or riparian area or habitat. Because the proposed project will install span bridges above ordinary high water mark levels at the new stream crossings and avoid seasonal wetlands, there will be no impact to wetlands or waterways, and therefore no mitigation is required. because the proposed project would implement policies, trail maintenance guidelines for bridge design, design guidelines and BMPs to avoid and minimize potential impacts to the creek and would ensure that no impacts to riparian habitat would occur with maintenance activities within or adjacent to jurisdictional wetland features or waters of the U.S. or State, the impact is considered to be less than significant and no mitigation is required.

## **IS/MND Page 90-91**

*CR-6. In the event of an accidental discovery or recognition of any human remains, the following language will be incorporated into the Trails Master Plan and/or all future construction documents in accordance with CEQA Guidelines section 15064.5(e):*

*"If human remains are found during construction there will be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the coroner of Santa Clara County is contacted to determine that no investigation of the cause of death is required and procedures outlined in the County Ordinance Relating to Indian Burial Grounds (County of Santa Clara, 1987) and State Public Resources Code can be implemented. If the coroner determines the remains to be Native American the coroner will contact the Native American Heritage Commission within 24 hours.*

*The Native American Heritage Commission will identify the person or persons it believes to be the most likely descendent from the deceased Native American. The*

*most likely descendent may then make recommendations to County of Santa Clara or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and associated grave goods as provided in Public Resources Code Section 5097.98. The County of Santa Clara or its authorized representative will rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further disturbance if: a) the Native American Heritage Commission is unable to identify a likely descendent or the likely descendent failed to make a recommendation within 24 hours after being notified by the commission; b) the descendent identified fails to make a recommendation; or c) the County or its authorized representative rejects the recommendation of the descendent, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.”*

### **IS/MND Page 134**

- T-2. The following improvements will be incorporated into the Trails Master Plan and implemented prior to opening the Rancho San Vicente Staging Area:*
- a. A Rectangular Rapid Flashing Beacon (RRFB) or other pedestrian crossing provisions to be developed in coordination with County of Santa Clara Roads and Airports Department prior to final design and implementation shall be installed on McKean Road at the Fortini Road intersection to alert drivers of crossing pedestrians.*
  
  - b. A high-visibility crosswalk adjacent to the RRFB or other pedestrian crossing provisions to be developed in coordination with County of Santa Clara Roads and Airports Department prior to final design and implementation shall be installed to direct pedestrians to the proper crossing location on McKean Road.*

### **TRAILS MASTER PLAN Pages 11 and 12**

The Calero Trails Master Plan included three phases - the Program Development Phase, the Alternatives Phase, and the Master Plan Phase. Each phase included a number of steps.

#### ***Program Development Phase***

- Review of existing policies, plans and practices
- Establishment of project goals
- Mapping of existing conditions
- Site visits and field investigations
- Establishment of project issues and design program elements

- Community input through on-line questionnaires (November 2010 and January 2011)
- Publication of the Calero Trails Master Plan Program Development Report (March 2011)
- Input from the community and Parks and Recreation Commissioners (April 6, 2011)

### ***Alternatives Phase***

- Community input at two open houses (Community Mtgs. #1 and #2 May 21, 2011 and May 25, 2011)
- Focused field investigations
- Development of three trails plan alternatives
- Individualized interviews with partner agencies and interested groups on alternatives
- Evaluation of three alternatives and identification of a recommended Draft Preferred Alternative Plan
- Additional Input from partner agencies through a Technical Advisory Committee
- Input on Three Alternatives from the public at Community Meeting #3 (September 15, 2011)
- Refinement of the Draft Preferred Alternative Plan based on additional public input
- Input from the community at the Parks and Recreation Commission (November 2, 2011)
- Input from the community at the Parks and Recreation Commission (March 7, 2012)
- Continued refinement incorporating the following program elements:
  1. Trail Use / Peace of Mind - accommodate request for separate trails for bicyclists and equestrians
  2. Coordination with OSA - improve access, explore shared use of Catamount Trail, restrict dog on-leash on trails with connections to OSA property
  3. Trail width - incorporate standards for trail width into the Trails Master Plan
  4. “Solutions that Work” / Trail Design and Policies - comprehensive trail design guidelines
- Publication of Calero Trails Master Plan Alternatives Report (April 2012)

### ***Master Plan Phase***

- Detailed site investigation and analysis for feasibility of proposed trail routes
- Refinement of Preferred Alternative Map based on input from Parks and Recreation Commission (PRC), PRC Subcommittee, partner agencies, regulatory agencies, focus groups and public meeting
- Development of Staging Area Concept Plans
- Development of Regional Connectivity Plan
- Development of Phasing Plan
- Development of User Interface Program
- Development of Trail Features and Amenities
- Development of Operations / Maintenance Program
- Financial Implications
- Development of Education / Training / Enforcement approaches
- Plan Flexibility
- Determination of compliance with conservation strategies described in Valley Habitat Plan
- Public Release of Refined Preferred Alternative (April 25, 2012)
- Community Meeting #4 for Refined Preferred Alternative, Draft Phasing Plan, Regional Connections, and Focused Study Areas (May 22, 2013)
- Draft Trails Master Plan Report to Parks and Recreation Commission (June 5, 2013)
- Development of Trails Master Plan Initial Study/Mitigated Negative Declaration to identify and mitigate potential impacts to the environment per California Environmental Quality Act (CEQA) review guidelines
- 30 Day Public Review period for Initial Study/Mitigated Negative Declaration (July 10-August 9, 2013)

### **TRAILS MASTER PLAN Page 40**

Currently all Calero County Park trails are open to equestrians and hikers only, with one trail also open to horses with carts. Dogs are not permitted on trails, nor are bicycles. In keeping with County policies and the Trails Master Plan goals, which aim to increase multiple-use trails to diversify recreational opportunities, the Trails Master Plan adds new user groups to Calero County Park trails. Upon implementation of the Master Plan, dogs on-leash will be permitted on all park trails except on connector trails to Open Space Authority lands, along the southern edge of the park. Bicycles will be permitted on all trails except in the central core of the park where trails will remain open to equestrians and hikers with the addition of dogs on-leash.

### **TRAILS MASTER PLAN Page 87**

#### ***Whole Access Loop***

~~Due to Topographic conditions, it is not possible to design all trails within Calero Park to be whole access trails compliant with current ADA guidelines. However, where appropriate, trails will be designed for a broad range of user abilities. On the County Parks' side of Casa Loma Road, along the "Meadow", an accessible unpaved trail will be provided and options to connect to the OSA ADA trail will be expanded.~~

#### ***Whole Access Opportunities***



The Master Plan has identified a half-mile level unpaved trail loop along Baldy Ryan Canyon Creek. This trail loop is located at the south end of the park and utilizes a section of Serpentine Loop Trail that follows the bank of the creek. The trail loop will be made accessible from Casa Loma Road and the OSA Casa Loma Road Staging Area by improving the gated entrance to be ADA accessible. Located along the shady banks of this perennial stream, the trail will provide an opportunity for those with limited mobility to experience a quiet backcountry trail and observe streamside flora and fauna at close range from the pedestrian bridge that crosses the stream. Conditions on the trail are also capable of supporting an approved motorized mobility device during most of the year. As the trail is connected to a larger trail at both the north and east end of the loop, there are opportunities to further explore as abilities allow. This trail will also complement the paved fully whole access trail that is located on the OSA property adjacent to the Casa Loma Road Staging Area. Options to connect directly to the OSA ADA trail will also be explored.

In addition, County Parks trails design policies strive to build most new trails no steeper than 10% (1 foot rise in 10 foot linear distance) and identify trail grades to be ideal if they are between 1% to 7% (Trails Maintenance Manual, 2005). Where trail designs cannot achieve these grades, sections of lesser grades are interspersed with steeper grades to provide overall undulations that reduce long stretches of steep uphill/downhill (Trails Maintenance Manual, 2005). Thus, where appropriate, trails will be designed for a broad range of user abilities. When the Santa Clara Valley Water District determines their strategy for preservation of the Bailey Fellows House, other opportunities for fully compliant ADA accessible trails may become available close the Ranger Office. All proposed staging area improvements will meet current ADA accessibility requirements.

In the future, detailed trail information, including information on trail profiles, elevation change, slope, and special conditions will be available for park trails and accessible through the County Parks' website, smart phone apps, and other materials in order to assist users in determining which trails are appropriate for their level of mobility.



*Pedestrian Bridge over Baldy Ryan Canyon Creek*

## Calero Trails Master Plan - Staging Areas Programming

Site Improvements Desired	Staging Area/Park Entrance					
	Ranger Station	Rancho San Vicente	Casa Loma Road	Almaden Road	Bertram Road	Boat Launch
New Park Entrance Road		✓				
Park Entrance Feature / Standardized Park Sign	✓	✓	✓	✓		✓
Access Control Points	✓	✓	✓	✓	✓	✓
Perimeter Fencing – to manage use and ensure site safety	✓	✓	✓	✓	✓	
Future Possible Kiosk location	✓	✓				
'Early Bird' Parking –outside of gate for use before park opens		✓				
Equestrian Trailer Parking Capacity (28'x55')	18 spaces	25 spaces		Open lot		
Passenger Vehicle Parking Capacity	75 spaces	75 spaces	5 spaces	Open lot		
Restrooms - prefab stalls – vault or septic system <del>or sanitary sewer hookup</del>	✓	✓				
Casual Picnic Area – picnic tables and shade structures, possible drinking fountain, recycling	✓	✓	✓	✓		✓
Information Board –Park Map, regulations, directions, trail etiquette, information, etc.	✓	✓	✓	✓	✓	✓
Interpretation Station–interpretation of park features, cattle grazing, habitats, etc.	✓	✓	✓	✓	✓	✓
Access to park trails and regional trail connections	✓	✓	✓	✓	✓	✓
ADA compliance considerations– all staging area facilities / amenities to be accessible	✓	✓	✓	✓	✓	✓
Trail gates, stiles, etc. to promote trail etiquette and access control	✓	✓	✓	✓	✓	✓
Separate Service Road – park staff, grazing operations, SCVWD, and tower, access, etc...		✓				
Horse Warm-Up/Turn-Out Corral	✓	✓				
Animal Drinking Water source	✓	✓		✓		
Hitching Posts and Mounting Blocks	✓	✓	✓	✓		
Plantings – California native plantings along trail, staging areas and in user zones	✓	✓	✓	✓		
Site Utilities – Potable water, <del>sanitary sewer</del> , electrical (to be determined)	✓	✓				
Overflow Parking – for staging large events	✓	✓				
Trail/Vehicle Bridge Connection				✓		

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# **APPENDIX A**

AIR QUALITY TECHNICAL MEMO

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*Planning for Success.*

AIR QUALITY REPORT

# CALERO COUNTY PARK DRAFT TRAILS MASTER PLAN

San Jose, Santa Clara County, California

PREPARED FOR  
Bellinger Foster Steinmetz

June 10, 2013

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# CALERO COUNTY PARK DRAFT TRAILS MASTER PLAN

Air Quality Report

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June 10, 2013

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## **Attachments**

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## SUMMARY

An assessment of the potential air quality impacts of implementing the proposed Draft Calero County Park Trails Master Plan has been conducted. The methodology employed included evaluation of the proposed project significance screening criteria provided by the Bay Area Air Quality Management District in its *California Environmental Quality Act Air Quality Guidelines* published in 2010 and updated in 2011.

The proposed project is consistent with the Clean Air Plan because, as mitigated, it does not result in any project level air quality violations, and does not conflict with the Clean Air Plan's control measures.

The proposed project's operational ozone, PM<sub>10</sub> and PM<sub>2.5</sub> emissions would not exceed the Air District's thresholds for significance. However, the proposed project's construction impacts could potentially exceed Air District thresholds for significance and potentially have a short-term significant adverse air quality effect on the environment in the immediate vicinity. A mitigation measure to require additional basic construction mitigation measures would reduce potential air quality effects to a less than significant level.

The proposed project is not located close enough to sensitive receptor to expose those sensitive receptors to significant pollution concentrations. However, the project site contains serpentine rock formations that could contain asbestos materials. Disturbance of the serpentine rock or soils weathered from the rock could result in exposure to asbestos fibers. A mitigation measure is presented to reduce this potential impact to a less than significant level.

The proposed project would not emit substantial odors.

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## INTRODUCTION AND PROJECT DESCRIPTION

The proposed Draft Calero County Park Trails Master Plan (Trails Master Plan) provides a framework for expansion of the existing park trail system into a multi-use trail network over 10-year time period, while supporting protection and enhancement of the sensitive cultural and environmental resources within the park. The proposed Trails Master Plan will:

- Allow 966 acres of newly acquired areas in the park to be opened for recreational trail use;
- Expand the existing trail system by approximately 14,7 miles to 35.9 miles at build-out;
- Designate 26.6 miles of trails as multi-use, to be shared by hikers, bicyclists and equestrians;
- Retain 7.5 miles of trails as limited use for equestrian and hiking only;
- Designate 1.8 miles of trails as hiking only;
- Remove 4.9 miles of existing service road and trails and restore to native landscape;
- Remove dogs on-leash restriction on most trails in the park;
- Upgrade existing in-stream creek channel crossings with bridges spanning the creek/drainage ways or other crossing techniques to minimize in-channel hiking, bicycle, and equestrian water quality disturbance;
- Expand existing trail head staging facilities at Calero Park Ranger Station;
- Create new trail head staging facility off McKean Road;
- Create new trail head staging facility off Almaden Road;

## 1.0 INTRODUCTION AND PROJECT DESCRIPTION

- Install new fences, gates, signage, picnic and rest facilities and pet waste stations; and
- Install surface drainage facilities at new and existing trail head facilities that will maintain or improve storm water quality.

This Air Quality Analysis Report has been prepared to support the County's California Environmental Quality Act (CEQA) analysis process. The following six sections are included:

### Summary

- 1.0 Introduction and Project Description
- 2.0 Air Quality Setting
- 3.0 Air Quality Regulation
- 4.0 Project Air Quality Emissions Profile
- 5.0 References

## 2.0

# AIR QUALITY SETTING

## 2.1 AIR BASIN CHARACTERISTICS AND CLIMATE

The project site is located within the San Francisco Bay Area Air Basin (Air Basin). Temperatures at Mineta San Jose International Airport average 59 degrees Fahrenheit annually, ranging from the low-40s on winter mornings to near 80 degrees Fahrenheit on summer afternoons. The climate is dominated by the strength and location of a semi-permanent, subtropical high-pressure cell. During the summer, the Pacific high pressure cell is centered over the northeastern Pacific Ocean resulting in stable meteorological conditions and a steady northwesterly wind flow. Upwelling of cold ocean water from below to the surface because of the northwesterly flow produces a band of cold water off the California coast. The cool and moisture-laden air approaching the coast from the Pacific Ocean is further cooled by the presence of the cold water band resulting in condensation and the presence of fog and stratus clouds along the Northern California coast. In the winter, the Pacific high-pressure cell weakens and shifts southward resulting in wind flow offshore, the absence of upwelling, and the occurrence of storms. Weak inversions coupled with moderate winds result in a low air pollution potential.

Winds in the valley are greatly influenced by the terrain and temperature gradients. The prevailing winds flow roughly parallel to the valley's northwest-southeast axis. A north-northwesterly sea breeze flows through the valley during the afternoon and early evening, and a light south-southeasterly flow occurs during the late evening and early morning. In the summer, the southern end of the valley sometimes becomes a "convergence zone," when air flowing from the Monterey Bay gets channeled northward into the southern end of the valley and meets with the prevailing north-northwesterly winds. Wind speeds are greatest in the spring and summer and weakest in the fall and winter. Nighttime and early morning hours frequently have calm winds in all seasons, while summer afternoons and evenings are quite breezy. Strong winds are rare, associated mostly with winter storms (Bay Area Air Quality Management District 2010).



## 2.2 AIR POLLUTANTS AND EFFECTS ON HUMAN HEALTH

The health effects of various air pollutants are discussed below. [Table 1, Common Air Pollutants](#), presents the sources and effects of common criteria air pollutants.

### ***Ozone and Related Compounds***

Ozone is produced by chemical reactions, which are triggered by sunlight, involving NO<sub>x</sub> and VOC. NO<sub>x</sub> are created during combustion of fuels, while reactive organic gases are emitted during combustion and evaporation of organic solvents. Since ozone is not directly emitted to the atmosphere, but is formed through photochemical reactions, it is considered a secondary pollutant. Ozone is a seasonal problem within the Air Basin, occurring roughly from April through October.

Ozone is a strong irritant that attacks the respiratory system, leading to the damage of lung tissue. Asthma, bronchitis, and other respiratory ailments, as well as cardiovascular diseases, are aggravated by exposure to ozone. A healthy person exposed to high concentrations may become nauseated or dizzy, may develop a headache or cough, or may experience a burning sensation in the chest. Research has shown that exposure to ozone damages the alveoli (the individual air sacs in the lung where the exchange of oxygen and carbon dioxide between the air and blood takes place). Research has shown that ozone also damages vegetation (Bay Area Air Quality Management District 2010, Chapter 2).

### ***Nitrogen Dioxide***

NO<sub>2</sub> is a reddish-brown gas that can irritate the lungs and can cause breathing difficulties at high concentrations. Like O<sub>3</sub>, NO<sub>2</sub> is not directly emitted, but is formed through a reaction between nitric oxide (NO) and atmospheric oxygen. NO<sub>2</sub> is a major contributor to O<sub>3</sub> formation. NO<sub>2</sub> also contributes to the formation of PM<sub>10</sub> (see discussion of PM<sub>10</sub> below). NO<sub>2</sub> concentrations in the air basin have been well below ambient air quality standards; therefore, NO<sub>2</sub> concentrations from land use projects are not a concern (Bay Area Air Quality Management District 2010, Chapter 2).

### ***Suspended Particulate Matter***

PM<sub>10</sub> is comprised of small, suspended particulate matter, 10 microns or less in diameter. The major components of PM<sub>10</sub> are dust particles, nitrates, and sulfates. PM<sub>2.5</sub> is comprised of particles 2.5 microns or less in diameter. PM<sub>10</sub> is directly emitted to the atmosphere as a

**Table 1 Common Air Pollutants**

<b>Pollutant</b>	<b>Properties</b>	<b>Major Sources</b>	<b>Related Health &amp; Environmental Effects</b>
Ozone (O <sub>3</sub> )	Created by the chemical reaction between oxides of nitrogen and volatile organic compounds in the presence of heat and sunlight. Ground level ozone is the principal component of smog.	<ul style="list-style-type: none"> <li>▪ Motor vehicle exhaust;</li> <li>▪ Industrial emissions;</li> <li>▪ Gasoline vapors;</li> <li>▪ Chemical solvents.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Reduced lung capacity; Irritation of lung airways and inflammation;</li> <li>▪ Aggravated asthma;</li> <li>▪ Elevated susceptibility to respiratory illnesses (i.e. bronchitis).</li> </ul>
Suspended Particulate Matter (PM <sub>10</sub> )	Describes particles in the air, including dust, soot, smoke, and liquid droplets. Others are so small that they can only be detected with an electron microscope.	<ul style="list-style-type: none"> <li>▪ Motor vehicles;</li> <li>▪ Factories;</li> <li>▪ Construction sites;</li> <li>▪ Tilled farm fields;</li> <li>▪ Unpaved roads;</li> <li>▪ Wood burning.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Aggravated asthma;</li> <li>▪ Increases in respiratory symptoms;</li> <li>▪ Decreased lung function;</li> <li>▪ Premature death;</li> <li>▪ Reduced visibility.</li> </ul>
Carbon Monoxide (CO)	Colorless, odorless gas that is formed when carbon in fuel is not burned completely.	<ul style="list-style-type: none"> <li>▪ Fuel combustion;</li> <li>▪ Industrial processes;</li> <li>▪ Highly congested traffic.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Chest pain for those with heart disease;</li> <li>▪ Vision problems;</li> <li>▪ Reduced mental alertness;</li> <li>▪ Death (at high levels)</li> </ul>
Nitrogen Oxides (NO <sub>x</sub> )	Generic form for a group of highly organic gases, all of which contain nitrogen and oxygen in varying amounts. Many of the nitrogen oxides are odorless and colorless.	<ul style="list-style-type: none"> <li>▪ Motor vehicles;</li> <li>▪ Electric utilities;</li> <li>▪ Industrial, commercial, and residential sources that burn fuel.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Toxic to plants;</li> <li>▪ Reduced visibility;</li> <li>▪ Respiratory irritant.</li> </ul>
Sulfur Dioxides (SO <sub>x</sub> )	Sulfur oxide gases are formed when fuel containing sulfur such as coal and oil is burned and when gasoline is extracted from oil, or metals are extracted from ore.	<ul style="list-style-type: none"> <li>▪ Electric utilities (especially coal-burning);</li> <li>▪ Industrial facilities that derive their products from raw materials to produce process heat.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Respiratory illness, particularly in children and the elderly;</li> <li>▪ Aggravates existing heart and lung diseases.</li> </ul>
Volatile Organic Compounds (VOC)	Precursor of ground-level ozone.	<ul style="list-style-type: none"> <li>▪ Petroleum transfer and storage,</li> <li>▪ Mobile sources;</li> <li>▪ Organic solvents.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Potential carcinogen (e.g. benzene);</li> <li>▪ Toxic to plants and animals.</li> </ul>

*Source:* Bay Area Air Quality Management District 2010 Table 1.1

byproduct of fuel combustion, wind erosion of soil and unpaved roads, and from construction or agricultural operations. Small particles are also created in the atmosphere through chemical reactions. Approximately 64 percent of fugitive dust is PM<sub>10</sub>. Minimal grading typically generates about 10 pounds per day per acre on average while excavation and earthmoving activities typically generate about 38 pounds per day per acre.

Although particles greater than 10 microns in diameter can cause irritation in the nose, throat, and bronchial tubes, natural mechanisms remove much of these particles. Particles less than 10 microns in diameter are able to pass through the body's natural defenses and the mucous membranes of the upper respiratory tract and enter into the lungs. The particles can damage the alveoli. The particles may also carry carcinogens and other toxic compounds, which can adhere to the particle surfaces and enter the lungs.

PM<sub>10</sub> is the pollutant of greatest concern with respect to construction activities. PM<sub>10</sub> emissions can result from a variety of construction activities, including excavation, grading, demolition, vehicle travel on paved and unpaved surfaces, and vehicle and equipment exhaust. Construction-related emissions can cause substantial increases in localized concentrations of PM<sub>10</sub>. Particulate emissions from construction activities can lead to adverse health effects as well as nuisance concerns such as reduced visibility and soiling of exposed surfaces (Bay Area Air Quality Management District 2010, Chapter 2).

## ***Carbon Monoxide***

CO is a component of motor vehicle exhaust, which contributes about 56 percent of all CO emissions nationwide. Other non-road engines and vehicles (such as construction equipment and boats) contribute about 22 percent of all CO emissions nationwide. Higher levels of CO generally occur in areas with heavy traffic congestion. In cities, 85 to 95 percent of all CO emissions may come from motor vehicle exhaust. CO can cause harmful health effects by reducing oxygen delivery to the body's organs (like the heart and brain) and tissues. CO contributes to the formation of ground-level ozone.

Emissions thresholds established for carbon monoxide apply to direct or stationary sources. Emissions of CO emitted from traffic generated by the project are first evaluated by assessing the impacts of general development plan-generated traffic on existing and future traffic conditions. Congested intersections with high volumes of traffic could cause CO “hot spots,” where localized high concentrations of CO occur (Bay Area Air Quality Management District 2012c).

## ***Sulfur Oxides***

SO<sub>x</sub> gases are formed when fuel containing sulfur, such as coal and oil, is burned, when gasoline is extracted from oil, or metals are extracted from ore. SO<sub>2</sub> dissolves in water vapor to form acid, and interacts with other gases and particles in the air to form sulfates and other products that can be harmful to people and their environment.

## ***Lead***

Lead was formerly a major air pollutant of concern. Levels of lead in the air decreased 94 percent between 1980 and 1999, following the removal of lead from gasoline. Today, the highest levels of lead in air are usually found near lead smelters and a few other industrial and utility plants. Lead can also be found in paint in older buildings, and can be a localized air hazard during building renovation or demolition (Bay Area Air Quality Management District 2012c).

## ***Toxic Air Contaminants***

Toxic air contaminants (TACs) are pollutants that may be expected to result in an increase in mortality or serious illness or may pose a present or potential health hazard. Health effects include cancer, birth defects, neurological damage, damage to the body's natural defense system, and diseases that lead to death. TACs can be classified as either carcinogens or non-carcinogens (Bay Area Air Quality Management District 2010, Chapter 2).

## ***Diesel Emissions***

Diesel exhaust is the predominant TAC in urban air and is estimated to represent about two-thirds of the cancer risk from TACs. Diesel engines emit a complex mix of pollutants including NO<sub>x</sub>, particulate matter, and TACs. The most visible constituents of diesel exhaust are very small carbon particles or "soot," known as diesel particulate matter. Diesel exhaust also contains over 40 cancer-causing substances, most of which are readily adsorbed on the soot particles. Among the TACs contained in diesel exhaust are dioxin, lead, polycyclic organic matter, and acrolein.

Short-term exposure to diesel particulate matter is associated with variable irritation and inflammatory symptoms. Diesel engine emissions are responsible for a majority of California's estimated cancer risk attributable to air pollution, with an average statewide potential cancer risk of 540 excess cases per million people. Diesel particulate matter is also a significant fraction of California's particulate pollution. Diesel particulate matter is estimated to contribute to

approximately 3,500 premature respiratory and cardiovascular deaths and thousands of hospital admissions annually in California. Diesel exhaust contains several chemicals detrimental to visibility and vegetation (California Office of Environmental Health Hazard Assessment 2001a, b).

Diesel exhaust is especially common during the grading stage of construction (when most of the heavy equipment is used), and adjacent to heavily trafficked roadways where diesel trucks are common. The federal Environmental Protection Agency (EPA) regulates diesel engine design and fuel composition at the federal level, and has implemented a series of measures since 1994 to reduce NO<sub>x</sub> and particulate emissions from off-road diesel equipment. EPA Tier 2 diesel engine standards were implemented from 2001 and 2006, Tier 3 standards from 2006-2008, and Tier 4 standards are being phased in through 2014 (U.S. Environmental Protection Agency 2004). Ultralow sulfur off-road diesel fuel, 15 parts per million (ppm) is now the standard in California, replacing the current 500 ppm fuel (Clean Diesel Fuel Alliance 2013). The Tier 4 engines and ultralow sulfur fuels will reduce emissions by up to 65 percent compared to older engines and fuel (U.S. Environmental Protection Agency 2004). California's Regulation for In-use Off-road Diesel Vehicles establishes a state program to reduce NO<sub>x</sub> and particulate emissions from older construction equipment. Several provisions of the regulation are currently suspended (pertaining to fleet composition and vehicle retrofits), and some provisions are in force (idling restrictions and reporting). As the regulation is fully implemented, it will reduce construction equipment emissions over time (California Air Resources Board 2010, 2011, Bay Area Air Quality Management District 2010, Chapter 2).

## **Asbestos**

Asbestos handling and disposal is regulated by federal and state law. Asbestos is found in several kinds of building materials. Asbestos is generally not harmful when asbestos-containing materials are left undisturbed, but when disturbed microscopic fibers can be dislodged and remain in the air for long periods. If asbestos fibers are inhaled they can become lodged in body tissues and pose a serious health threat, especially lung disease.

Asbestos is also found naturally-occurring in certain rock formations in the California Coast Ranges and elsewhere. Asbestos is the generic term for the naturally-occurring fibrous (asbestiform) varieties of six silicate minerals. These minerals are: chrysotile, tremolite (when fibrous), actinolite (when fibrous), crocidolite (fibrous riebeckite), anthophyllite (when fibrous), and amosite (fibrous cummingtonite-grunerite). Chrysotile is the most common asbestos mineral in California and belongs to the serpentine mineral group. Serpentine rock outcroppings at the project site are identified in the Draft Trails Master Plan and could contain asbestos (California Department of Conservation Division of Geology 2000).

## 2.3 SENSITIVE RECEPTORS

Although air pollution can affect all segments of the population, certain groups are more susceptible to its adverse effects than others. Children, the elderly, and the chronically or acutely ill are the most sensitive population groups. These sensitive receptors are commonly associated with specific land uses such as residential areas, schools, parks, retirement homes, and hospitals.

Existing sensitive receptors near the project site are residences along McKean Road, Casa Loma Road, Almaden Road, and Bertram Road. The Almaden Road trailhead location is the only one that is near enough to residences to have potential air quality effects on residents.

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## 3.0

# REGULATION AND POLICY

### 3.1 STATE AND FEDERAL CLEAN AIR ACTS

Air quality is regulated on the state and federal level. The Clean Air Act, adopted in 1970 and amended in 1990, set federal standards for air quality. The California Clean Air Act was adopted by the state legislature in 1988. The California Air Resources Board (CARB) is responsible for coordinating both the state and federal air pollution control programs in California. CARB is composed of regional districts that are charged with developing attainment plans for their regions. The Air District is the regional agency with responsibility for monitoring air quality in the nine Bay Area counties.

Historically, air quality laws and regulations have divided air pollutants into two broad categories of airborne pollutants: “criteria pollutants” and “toxic air contaminants.”

#### ***Bay Area Air Quality Management District***

The Air District is the agency with primary responsibility for assuring that federal and state ambient air quality standards are attained and maintained in the air basin. The air basin encompasses all of seven counties: Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa, and portions of two others: southwestern Solano and southern Sonoma.

Air pollutants of concern in the air basin are ozone, particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>), and TACs (Bay Area Air Quality Management District 2010).

#### ***State and Federal Criteria Air Pollutant Quality Standards***

In general, criteria pollutants are pervasive constituents, such as those emitted in vast quantities by the combustion of fossil fuels. Both the State of California and the federal government have



developed ambient air quality standards for the criteria pollutants, which include O<sub>3</sub>, CO, NO<sub>2</sub>, SO<sub>2</sub>, and PM<sub>10</sub>. [Table 2, Federal and State Ambient Air Quality Standards](#), lists state and federal ambient air quality standards for criteria air pollutants. The state standards are more stringent than the federal standards, and are relevant for the proposed project. The Clean Air Act established two types of national air standards. Primary standards establish limits to protect public health, including the health of "sensitive" populations such as asthmatics, children, and the elderly. Secondary standards establish limits to protect public welfare, including protection against decreased visibility, damage to animals, crops, vegetation, and buildings.

### ***Air Basin Attainment Status***

CARB is required to designate areas of the state as attainment, non-attainment, or unclassified with regard to its compliance with state standards for criteria air pollutants. An "attainment" designation for an area signifies that pollutant concentrations do not violate the standard for that pollutant in that area. A "non-attainment" designation indicates that a pollutant concentration violated the standard at least once, excluding an "unclassified" designation signifies that available data does not support either an attainment or non-attainment status. A "non-attainment transitional" status infers that the air basin has had fewer than three exceedences at any one monitoring station. The California Clean Air Act divides districts into moderate, serious, and severe air pollution non-attainment categories, with increasingly stringent control requirements mandated for each category.

Ambient air quality in the project area is monitored at by the Air District at eight locations in Santa Clara County. The ozone and particulate matter standards have been exceeded and therefore the Air Basin does not meet the state ambient air quality standards for these pollutants. The ozone attainment status is currently "non-attainment" and the PM<sub>10</sub> / PM<sub>2.5</sub> attainment status is currently "non-attainment." On October 29, 2012, EPA proposed that the Bay Area be re-classified as in attainment for the 24-hour PM<sub>2.5</sub> national standard. Other criteria pollutants are not considered to have a non-attainment status (Bay Area Air Quality Management District 2010, 2012a). [Table 3, San Francisco Bay Area Air Basin Attainment Status Designations](#), identifies the current status within the air basin for each criteria pollutant.

### ***Air Quality Plans***

The federal Clean Air Act requires areas with unhealthful levels of ozone, inhalable particulate matter, carbon monoxide, nitrogen dioxide, and sulfur dioxide to develop plans, known as State Implementation Plans. State Implementation Plans are comprehensive plans that describe how an area will attain national ambient air quality standards. State Implementation Plans are a

**Table 2 Federal and State Ambient Air Quality Standards <sup>a</sup>**

Pollutant	Averaging Time	California Standards <sup>1</sup>		Federal Standards <sup>2</sup>			
		Concentration <sup>3</sup>		Primary <sup>3,4</sup>		Secondary <sup>3,5</sup>	
		ppm	µg/m <sup>3</sup>	ppm	µg/m <sup>3</sup>	ppm	µg/m <sup>3</sup>
Ozone	1 Hour	0.09	180	-	-	-	-
	8 Hour	0.07	137	0.075	147	0.075	147
PM <sub>10</sub>	24 Hour	-	50	-	150	-	150
	Annual	-	20	-	-	-	-
PM <sub>2.5</sub>	24 Hour	-	-	-	35	-	35
	Annual	-	12	-	15	-	15
Carbon Monoxide (CO)	1 Hour	20	23,000	35	40,000	-	-
	8 Hour	9	10,000	9	10,000	-	-
Nitrogen Dioxide (NO <sub>2</sub> )	1 Hour	0.18	339	0.100 <sup>6</sup>	188	-	-
	Annual Mean	0.03	57	0.053	100	0.053	100
Sulfur Dioxide (SO <sub>2</sub> )	1 Hour	0.25	655	0.075	196	-	-
	3 Hour	-	-	-	-	0.5	1,300
	24 Hour	0.04	105	-	-	-	-
Lead <sup>7</sup>	30 Day Average	-	1.5	-	-	-	-
	Calendar Quarter	-	-	-	1.5	-	1.5
	Rolling 3 Month	-	-	-	0.15	-	0.15
Visibility Reducing Particles	8 Hour	Extinction coefficient 0.23 per km -- visibility of ten miles or more due to particles with relative humidity less than 70%. Beta attenuation and transmittance through filter tape.		No Federal Standards			
Sulfates	24 Hour	-	25				
Hydrogen Sulfide	1 Hour	0.03	42				
Vinyl Chloride <sup>7</sup>	24 Hour	0.01	26				

*Source:* California Air Resources Board, 2012

*Notes:*

- California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, suspended particulate matter—PM<sub>10</sub>, PM<sub>2.5</sub>, and visibility reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

### 3.0 REGULATION AND POLICY

2. National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest eight hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM<sub>10</sub>, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m<sup>3</sup> is equal to or less than one. For PM<sub>2.5</sub>, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact U.S. EPA for further clarification and current federal policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
5. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
6. To attain this standard, the 3-year average of the 98th percentile of the daily maximum 1-hour average at each monitor within an area must not exceed 0.100 ppm.
7. The CARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

**Table 3 San Francisco Bay Area Air Basin Attainment Status Designations**

Pollutant	State	Federal
Ozone (O <sub>3</sub> )	Non-attainment	Non-attainment
Inhalable Particulates (PM <sub>10</sub> )	Nonattainment	Unclassified
Fine Particulates (PM <sub>2.5</sub> )	Non-attainment	Non-attainment <sup>1</sup>
Carbon Monoxide (CO)	Attainment	Attainment
Nitrogen Dioxide (NO <sub>2</sub> )	Attainment	Unclassified/Attainment
Sulfur Dioxide (SO <sub>2</sub> )	Attainment	Attainment

*Source:* Bay Area Air Quality Management District, 2012a

*Note:* On October 29, 2012, EPA proposed that the Bay Area be re-classified as in attainment for the PM<sub>2.5</sub> national standard.

compilation of new and previously submitted plans, programs (such as monitoring, modeling, permitting, etc.), district rules, state regulations, and federal controls. California grants air districts explicit statutory authority to adopt indirect source regulations and transportation control measures, including measures to encourage the use of ridesharing, flexible work hours, or other measures that reduce the number or length of vehicle trips. Local air districts and other agencies, such as the Bureau of Automotive Repair and the Department of Pesticide Regulation, prepare State Implementation Plan elements and submit them to CARB for review and approval. CARB forwards State Implementation Plan revisions to the EPA for approval and

publication in the Federal Register. The 1990 amendments to the federal Clean Air Act set deadlines for attainment based on the severity of an area's air pollution problem (California Air Resources Board 2013).

The Air District is delegated with the responsibility at the local level to implement both federal and state mandates for improving air quality in the Air Basin through an air quality plan. When thresholds are exceeded at regional monitoring stations on consecutive accounts, an attainment plan must be prepared that outlines how an air quality district will achieve compliance. Generally, these plans must provide for district-wide emission reductions of five percent per year averaged over consecutive three-year periods. The Air District periodically prepares and updates plans in order to attain State and national air quality standards, comply with quality planning requirements, and achieve the goal of clean and healthful air. These plans also report on progress in improving air quality and provide a road map to guide the Air District's future activities.

The Air District has adopted several plans in an attempt to achieve state and federal air quality standards. Because the San Francisco Bay Air Basin has been designated as a non-attainment area for the national ozone standard since 1998, the Air District has prepared ozone attainment plans in 1999, 2001, and 2005. The 2010 CAP updates the Air District's most recent state ozone plan, the 2005 Ozone Strategy, which laid out a comprehensive plan to reduce emissions. The 2010 Clean Air Plan was developed as a multi-pollutant plan; this plan provides an integrated control strategy to reduce ozone, particulate matter, TACs, and greenhouse gases. The Clean Air Plan includes a variety of control measures, most of which relate to industrial uses, and some of which relate to residential uses. None of the control measures in the 2010 Clean Air Plan are applicable to a park or open space project (Bay Area Air Quality Management District 2010, Chapter 4 and Volume II). The Air District prepared a PM<sub>2.5</sub> inventory and published *Understanding Particulate Matter: Protecting Public Health in the San Francisco Bay Area* in 2012, for inclusion in the State Implementation Plan (Bay Area Air Quality Management District 2012a).

## **3.2 SANTA CLARA COUNTY GENERAL PLAN**

Most Santa Clara County General Plan air quality policies are directed at developed land uses such as residential and commercial. The following air quality policies from the Santa Clara County General Plan could be relevant to the proposed project.

C-HS 12 Measures to reduce particulate matter pollution originating from quarrying, road and building construction, industrial processes, unpaved parking lots, and other sources should be encouraged.

C-HS 13 Emissions from small scale sources such as gasoline-powered lawn equipment, consumer products, barbeque grills, and other sources should be reduced through public education, product replacement, and regulation where appropriate.

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## PROJECT AIR QUALITY EMISSIONS PROFILE

### 4.1 METHODOLOGY AND THRESHOLDS

This section includes analysis of the criteria air pollutant emissions of the proposed project as a basis to qualitatively evaluate its potential impacts. The analysis is qualitative because of the unique character the project air quality emissions profile. Therefore, the analysis focuses on whether the proposed project meets the BAAQMD's screening criteria for projects having a less than significant impact. This section was prepared in accordance with the Air District's *California Environmental Quality Act Guidelines* and thresholds, as available. The thresholds in the 1999, 2011, and 2012 versions of the Air District's guidelines and screening thresholds were consulted, to determine if quantitative modeling was required. As described on page 3-1 of the 2011 Air District Guidelines, if a proposed project size is below that listed in Table 3-1 for the corresponding use, the proposed project's operational impacts for criteria pollutants would not be potentially significant relative to the related thresholds of significance contained in the 2011 Air District Guidelines, and detailed air quality assessment would not be needed.

Because of the unique nature of the proposed project, there is no project type listed in Table 3-1 against which the proposed project can be directly compared. The Air District was consulted to discuss an alternative screening approach. The proposed approach is to identify the average daily trip (ADT) volume for the proposed project and compare it to the ADT volume for several diverse representative project types listed in Table 3-1. If the proposed project ADT volume falls below that for the selected project types, a conclusion can be drawn that the proposed project air quality impacts would be less than significant. Air District staff concurred with this analysis approach (Telephone conversation with Dave Vintz, Bay Area Air Quality Management District, May 9, 2013). Note that because of a lawsuit regarding the absence of CEQA review, the thresholds in the 2010 air quality guidelines were removed and the air quality guidelines re-published in 2012 without the thresholds. The merits of the thresholds were not challenged, and are backed by the Air District's scientific analysis. Further, many of the 2011 thresholds are similar to the 1999 air emissions thresholds.

To follow the methodology, an estimate of existing baseline ADT volumes for the existing park use is needed as is a projection of total ADT volumes that would be generated under post-park expansion conditions. The difference between these trip numbers represents the ADT volume value that will be compared to representative projects contained in the Air District's Table 3-1, Operational-Related Criteria Air Pollutant and Precursor Screening Level Sizes.

The proposed project will generate air emissions from two primary sources – operations and construction. As a first step in assessing potential operational phase air quality impacts, Table 3-1, Operational-Related Criteria Air Pollutant and Precursor Screening Level Sizes, contained in the 2011 guidelines on page 3-2 was reviewed. The table is included as [Attachment A](#) to this technical memo. The table includes project screening size information for criteria air pollutants and construction emissions for over 60 project types.

The analysis methodology is conservative. Nearly all of the project types listed in Table 3-1 would generate additional criteria air pollutants from sources that would be largely absent from the proposed project. Unlike most land development project types, during its operational phase, the proposed project will not be a source of significant indirect criteria air emissions from energy consumption or on-site combustion. Use of ADT volumes as a comparison metric does not reflect the less intensive non-mobile source air emissions profile of the proposed project relative to nearly all projects listed in Table 3-1.

## 4.2 CEQA STANDARDS OF SIGNIFICANCE

The County utilizes the environmental checklist contained in CEQA Guidelines appendix G as a basis for standards of significance. The following standards are considered in this report:

- A project is considered to have a significant effect on the environment if it would conflict with or obstruct implementation of the applicable air quality plan.
- A project is considered to have a significant effect on the environment if it would cause a violation of any air quality standard or contribute substantially to an existing or projected air quality violation.
- A project is considered to have a significant effect on the environment if it would result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).

- A project is considered to have a significant effect on the environment if it would expose sensitive receptors to substantial pollutant concentrations.
- A project is considered to have a significant effect on the environment if it would create objectionable odors affecting a substantial number of people.

The proposed project is discussed in the context of each of these standards of significance in the following section.

## 4.3 ENVIRONMENTAL ANALYSIS

### ***Conflict with or obstruct implementation of the applicable air quality plan***

#### **Less than Significant Impact with Mitigation**

The applicable air quality plan is the Bay Area 2010 Clean Air Plan. The Clean Air Plan addresses ozone, particulate matter, and TACs. The Air District's *California Environmental Quality Act Guidelines* Section 9.1 provides guidance on determining if a project is consistent with the Clean Air Plan. For consistency a project should meet three criteria:

1. **Support the primary goals of the Clean Air Plan.** The primary goals of the Clean Air Plan are to attain air quality standards; to reduce population exposure and protect public health in the Bay Area; and to reduce greenhouse gas emissions and protect the climate. This is considered to have been accomplished if there are no project-level significant impacts, or if significant impacts are mitigated to a less than significant level. Since the proposed project's operational criteria air pollutant and greenhouse gas emissions meet Air District standards, and the proposed project's construction criteria air pollutant emissions are mitigated to meet Air District standards, the proposed project is considered to meet the primary goals of the Clean Air Plan.
2. **Include applicable Clean Air Plan control measures.** There are 55 control measures in the Clean Air Plan, many of which are applicable only for industrial or regional implementation, and do not apply to other types of projects. The Air District's CEQA Guidelines do not state the extent to which a project must be consistent with potentially applicable control measures. None of the control measures are applicable to a park or open space project.



3. **Not disrupt or hinder implementation of any Clean Air Plan control measures.** Since none of the control measures are applicable to a park or open space project, the proposed project would not interfere with their implementation.

The proposed project meets the three criteria and would be consistent with the Clean Air Plan.

Consistency of the proposed project with applicable Santa Clara County General Plan polices was also considered. Two air quality policies are potentially applicable. Policy C-HS 12 is applicable because the proposed project would include unpaved parking lots, which can be a source of dust, and can also result in tracking of dirt or mud onto paved roadways, where passing traffic can cause it to become airborne. The Trails Master Plan does not include any guidance on parking lot design, and dust from unpaved lots could violate the intent of Policy C-HS-12. The following mitigation measure is recommended to ensure consistency with County air quality policy.

### **Mitigation Measure**

The Master Plan shall be revised to include best management practices for dust control on unpaved parking lots.

Policy C-HS 13 is applicable only in that some park users could potentially bring barbeque grills to picnic areas. Policy C-HS 13 calls for public education, product replacement, and regulation where appropriate to reduce emissions from barbeque grills and similar small outdoor appliances or tools. Use of barbeques within the park would not constitute an inconsistency with the Santa Clara County General Plan on the part of the proposed project.

***Cause a violation of any air quality standard or contribute substantially to an existing or projected air quality violation***

### **Less than Significant Impact with Mitigation**

The state CEQA Guidelines state that, where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make determinations regarding violations of air quality standards. The Air District's current air quality CEQA guidelines do not provide thresholds. Thresholds were included in the 1999 and 2011 versions of the Air District's air quality guidelines, however, the 1999 thresholds were superseded by the 2011 thresholds, and the 2011 thresholds were subsequently removed from the air quality guidelines due to a court decision. The removal of the thresholds, and accompanying screening tables, was based on the Air District's lack of CEQA review for the adoption of the thresholds; the Court did not take issue with the merits of the thresholds themselves, and

therefore, the County is relying in part on those thresholds. Table 6 in the 1999 air quality guidelines and Table 3-1 in the 2011 air quality guidelines both present minimum sizes for typical project types, below which, that type of project is considered to have a less than significant effect from criteria air pollutants. Based on Institute of Transportation Engineers daily trip generation rates (noted in the 1999 air quality guidelines), a typical air quality screening level is a project generating fewer than 3,000 to 4,000 daily trips.

**Existing Operational ADT/Air Emissions Baseline.** Under existing conditions, the primary source of air emissions associated with the park is mobile source vehicle trips taken by visitors to the park. A traffic impact analysis memo entitled *Focused Transportation Analysis for Calero County Park Trails Master Plan* (Fehr and Peers June 2013) (traffic memo) was prepared for the proposed project to evaluate traffic and circulation impacts. The traffic memo included an analysis of peak vehicle trip generation to the park and found that the worst-case, maximum trip generation occurs during peak weekends in the spring. Trip volumes were based on an assumption that 75 percent of the existing 28 spaces at the Ranger Station turn over three times per day while the remaining 25 percent turn over two times per day. The rates were based on the average length of stay at the park for hikers (approximately three hours) and for equestrian trail users (approximately five hours). Table 4, Trip Generation, in the traffic memo summarizes existing and future daily trip generation. Under existing conditions, maximum use of the 28 existing parking spaces at the Ranger Station generates about 154 vehicle trips per day. Criteria air emissions are generated by each of these vehicle trips. No existing trips are listed for other trailheads.

Other existing park activities are sources of negligible volumes of air emissions. These include electricity use at the Ranger Station/Visitor Center, disposal and treatment of wastewater from several existing portable restrooms, operation of park facility maintenance vehicles and equipment, and water pumping to fill a storage tank used for park-specific water supply and fire flow. Fuel-powered water activities (boating and jet skiing) on the reservoir within the park also generate emissions. However, improvements proposed as part of the park master plan are not expected to result in an increase in boating activity.

**Project Operational ADT/Air Emissions.** Under post-project conditions, vehicle trips will continue to be the dominant source of air emissions generated by the use and operation of Calero County Park. The capacity of the park to accommodate visitors arriving by vehicle will increase significantly. A net of up to 185 new parking spaces will be provided at the existing and new staging areas (65 new spaces at Ranger Station, 115 new spaces at Rancho San Vicente, and five new spaces at Almaden Road).

Table 4 in the traffic memo includes a summary of the worst-case, maximum total daily volume of new daily traffic trips that would be generated with the addition of 185 new parking spaces.

The 65 new spaces at Ranger Station would enable up to 358 new ADT (512 ADT new – 154 ADT existing), the 115 new spaces at Rancho San Vicente would enable up to 633 new ADT, and the five new spaces at Almaden Road would enable up to 28 new ADT for a maximum total of 1,019 ADT. It must be re-emphasized that this is the worst-case condition that is assumed to occur during a limited number of weekends during a limited portion of the year.

Based on further discussion with Calero Park staff, use of the park declines during other seasons of the year. For example, peak maximum season is mid-March through May (2.5 months). Visitor numbers decline to approximately 80 percent of maximum from June through mid-October (4.5 months), and to 20 percent of maximum from mid-October through the remainder of the off season (5.0 months). The weighted average of seasonal use is about 60 percent of the maximum peak season (Email Communication with Alexandra Sweet, Fehr & Peers, June 5, 2013). Therefore, it is assumed that over the course of an entire year, average ADT is 60 percent of the peak season ADT. At this average rate of use, vehicle trips would average about 611 ADT.

Non-mobile sources of air emissions will also increase, but continue to represent a very minor percentage of the total air emissions volume. These sources would mirror those noted under existing conditions (e.g. electricity demand at the Ranger Station, energy to dispose and treat wastewater, and energy to pump water). No new sources of non-mobile air emissions are expected under post-project conditions.

As described above, the proposed project would generate a maximum of approximately 1,019 new ADT per day under the most heavy park use scenario and is assumed to average 611 ADT over the course of an entire year. As a means to compare project ADT to the ADT of representative projects listed in Table 3-1 of the Air District guidelines, [Table 4, Average Daily Trip Screening Comparison](#), shows representative project types from Table 3-1, along with trip generation rates and estimates of ADTs for each based on the project size included in Table 3-1 of the Air District guidelines. Trip generation rates and ADT are based on a spreadsheet using *Institute of Transportation Engineers ITE Trip Generation Rates – 8<sup>th</sup> Edition*, accessed at: <http://www.mikeontraffic.com/2009/08/trip-generation-8th-edition-spreadsheet.html>.

The ADT for the proposed project is shown as the last entry in the table. The average ADT for the proposed project over an entire year is well within the range of ADT for the representative project types illustrated. Further, as described previously, the volume of air emissions generated by the project from other sources (e.g. electricity consumption) would be significantly lower than most of the representative projects listed in the table. Based on this information, it can be qualitatively concluded that, like many other project types included in Table 3-1, the proposed project would not generate annual operational air emissions that would have a significant impact on the environment.

**Table 4 Average Daily Trip Screening Comparison**

Representative Screening Project Type	Project Size/Intensity <sup>1</sup>	Trip Generation Rate <sup>2</sup>	Average Daily Trips <sup>2</sup>
Single-Family Residential	325 units	9.57 trips/unit	3,110
Condo/Townhouse	451 units	5.81 trips/unit	2,620
Hardware/Paint Store	83,000 sq. ft.	51.29 trips/1,000 sq. ft.	4,257
General Office Building	346,000 sq. ft.	11.01 trips/1,000 sq. ft.	3,809
Supermarket	42,000 sq. ft.	102.24 trips/1,000 sq. ft.	4,294
City Park	2,613 acres	1.59 trips/acre	4,155
Library	78,000 sq. ft.	56.24 trips/1,000 sq. ft.	4,387
Quality Restaurant	47,000 sq. ft.	89.95 trips/1,000 sq. ft.	4,228
Industrial Park	553,000 sq. ft.	6.96 trips/1,000 sq. ft.	3,849
Proposed Project (County Park)	185 new parking spaces	2.5-3.0 trips/parking space x 185 new spaces x 2 trips (in and out) <sup>3</sup> – worst case	1,019 - max <sup>4</sup> 611 – avg <sup>5</sup>

**Source:** Bay Area Air Quality Management District 2011; Institute of Transportation Engineers 2009.

**Note:** <sup>1</sup> Project size/intensity for is the screening threshold from the “Operational Criteria Screening Size” column in Table 3-1, Criteria Air Pollutants and Precursors and GHG Screening Level Sizes, contained in the Air District’s *California Environmental Quality Act Air Quality Guidelines, 2011*.

<sup>2</sup> Trip generation rates and daily trip generation based on Institute of Traffic Engineers’ *ITE Trip Generation Rates – 8<sup>th</sup> Edition*, with spreadsheet calculator found at: <http://www.mikeontraffic.com/2009/08/trip-generation-8th-edition-spreadsheet.html>.

<sup>3</sup> A multiplier is used to convert horse trailer parking space size to average vehicle parking space size.

<sup>4/5</sup> The maximum 1,019 ADT is for worst-case conditions on a peak spring weekend when all available spaces are full for the entire day. It is conservatively assumed that the average ADT over the full year is 60 percent of the maximum spring weekend day demand, or approximately 611 ADT.

**Project Construction Emissions.** The proposed project would include several construction aspects: expansion of the parking lot at the Ranger Station; construction of new parking lots at Rancho San Vicente and Almaden Road; and construction of 14.7 miles of new trails.

In accordance with the Air District’s 2011 air quality guidelines (pages 3-5, 8-3), a project is considered to have a less than significant impact from construction activities if the following three criteria are met.

1. The project is below the applicable screening level size shown in Table 3-1.
2. All basic construction mitigation measures <sup>1</sup> would be included in the project design and implemented during construction. The following are the Air District’s basic construction mitigation measures:

#### 4.0 PROJECT AIR QUALITY EMISSIONS PROFILE

- a. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
  - b. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
  - c. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
  - d. All vehicle speeds on unpaved roads shall be limited to 15 mph.
  - e. 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.
  - f. Idling times shall be minimized 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.
  - g. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.
  - h. Post a publicly visible sign with the telephone number and person to contact at the lead agency 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.
3. Construction-related activities would not include any of the following, therefore, these criteria are not relevant and the proposed project would be considered to be in conformance:
- a. Demolition activities inconsistent with District Regulation 11, Rule 2: Asbestos Demolition, Renovation and Manufacturing;
  - b. Simultaneous occurrence of more than two construction phases (e.g., paving and building construction would occur simultaneously);
  - c. Simultaneous construction of more than one land use type (e.g., project would develop residential and commercial uses on the same site) (not applicable to high density infill development);
  - d. Extensive site preparation (i.e., greater than default assumptions used by the Urban Land Use Emissions Model [URBEMIS] for grading, cut/fill, or earth movement); or

- e. Extensive material transport (e.g., greater than 10,000 cubic yards of soil import/export) requiring a considerable amount of haul truck activity.

**Screening Table Comparison.** Construction emissions come from equipment exhaust and dust that is raised during grading. Similar to the approach for operational air emissions, project construction was compared to sample project types in Table 3-1 in the 2011 air quality guidelines. However, because operational trip volume is not a reasonable proxy for construction effects, the approximate equivalent area of land disturbance was estimated for each of the sample project types and for the proposed project. The proposed project disturbance area was estimated for the parking lots by using a standard square footage per parking space, accounting for actual parking space and for drive aisles (American Society of Planning Officials, Planning Advisory Service). The trails' disturbance area was estimated at eight feet in width based on a range of four to 12 feet, with most trails at four feet wide. This is a conservative estimate that allows for disturbance beyond the final trail surface, and does not account for the fact that many of the trails will be built within existing road grades.

Table 5, **Project Construction Screening Comparison**, presents the proposed project's disturbance area in relation to the estimated disturbance area of the thresholds.

As indicated in the table above, the proposed project's total disturbance area is above the threshold equivalent calculated for two land uses, and at or below the threshold equivalent calculated for other seven sample land uses. Table 3-1 is designed for project development that typically occurs within a reasonably short timeframe, typically one year or less. The proposed project's ground disturbance would take place incrementally over a period of ten years. Spread over the ten-year implementation period, the disturbance area would be well below the thresholds. Additionally, most of the new trails to be constructed would be developed following existing road alignments, and the level of ground disturbance, and resulting dust emissions, would be low compared to the grading that would take place for an urban development project. Therefore, the proposed project is considered to fall below the thresholds presented in Table 3 of the Air District's 2011 air quality guidelines.

**Basic Air Quality Measures.** The Draft Trails Master Plan includes one air quality best management practice (page 64):

The following best management practice would be implemented at all construction sites to minimize emissions during construction:

1. Sweep daily if visible soil material is carried out onto adjacent public streets, paved park access roads, parking areas, and staging areas at construction sites.

**Table 5 Project Construction Screening Comparison**

Representative Screening Project Type	Project Size/Intensity <sup>1</sup>	Approximate Disturbance Rate <sup>2</sup>	Disturbance Area
Single-Family Residential	114 units	One acre /four units	29 acres
Condo/Townhouse	78 units	One acre /eight units	10 acres
Hardware/Paint Store	277,000 sq. ft.	One acre /20,000 sq. ft.	14 acres
General Office Building	277,000 sq. ft.	One acre /20,000 sq. ft.	14 acres
Supermarket	277,000 sq. ft.	One acre /20,000 sq. ft.	14 acres
City Park	67 acres	One acre/ half acre	34 acres
Library	277,000 sq. ft.	One acre /20,000 sq. ft.	14 acres
Quality Restaurant	277,000 sq. ft.	One acre /20,000 sq. ft.	14 acres
Industrial Park	11 acres	One acre /acre	11 acres
Proposed Project (County Park)	185 new parking spaces and 14.7 miles of trails	185 new spaces plus additional size for 43 trailer spaces <sup>3</sup> . Trails average disturbance width 8 feet x 77,600 lineal feet = 621,000 sq. ft. = 14.25 acres <sup>4</sup>	±2.5 acres  ±14.25 acres (average less than 1.5 acres per year)

**Source:** Bay Area Air Quality Management District 2011; Institute of Traffic Engineers 2009.

**Note:** <sup>1</sup> Project size/intensity for is the screening threshold from the “Construction Criteria Screening Size” column in Table 3-1, Criteria Air Pollutants and Precursors and GHG Screening Level Sizes, contained in the Air District’s *California Environmental Quality Act Air Quality Guidelines, 2011*.

<sup>2</sup> Disturbance area based on typical floor area ratios.

<sup>3</sup> Square feet per standard parking space 300 square feet, inclusive of drive aisles x 185 new spaces: 300 x 185 = 55,500 square feet; trailer parking spaces add 1,200 square feet x 43 spaces. 1,200 x 43 = 51,600 square feet.

<sup>4</sup> Trail widths vary from four to 12 feet, but most are 4 to 6 feet. Most trails will be developed on existing road alignments.

In addition, the Draft Trails Master Plan (pages 67-68) includes the following hydrologic best management practice and the following storm water pollution prevention plan best management practice, each of which would benefit air quality:

The following design guidelines would be followed for trails in areas of steep slopes or in areas adjacent to a creek or riparian area:

1. In order to reduce erosion and maintenance problems during construction, disturbance to the soil surface should be kept to a minimum.

To minimize the mobilization of sediment to creeks and other water bodies, the following erosion and sediment-control measures would be included in a Stormwater Pollution Prevention Plan (SWPPP) prepared for the project after final design. These measures are based on standard County measures and standard dust-reduction measures.

1. Enclose and cover exposed stockpiles of dirt or other loose, granular construction materials that could contribute sediment to waterways.

The best management practices presented in the Draft Trails Master Plan do not adequately reflect the requirements of the Air District's basic construction mitigation measures. The air quality best management practice utilizes dry sweeping, which is specifically prohibited by the Air District. The following mitigation measure is recommended to ensure compliance with the Air District's air quality guidelines.

### **Mitigation Measure**

The following Air District basic construction mitigation measures shall be incorporated into the Trails Master Plan and/or all future construction documents:

- a. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. Material stockpiles may be covered in accordance with Trails Master Plan Stormwater Pollution Prevention Plan best management practices No. 1.
- b. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- c. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- d. All vehicle speeds on unpaved roads shall be limited to 15 mph.
- e. 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.
- f. Idling times shall be minimized 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.

- g. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.
- h. Post a publicly visible sign with the telephone number and person to contact at the lead agency 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.

The proposed project, with mitigation to add several of the Air District's basic construction mitigation measures, would meet the screening criteria for projects that have a less than significant construction phase air quality impact.

***Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment***

**Less than Significant Impact with Mitigation**

The Air District is in non-attainment for ozone, PM<sub>10</sub> and PM<sub>2.5</sub>. Although the EPA is reviewing the Air District's non-attainment status for PM<sub>2.5</sub>, even if the Air District were to be re-classified to attainment, the Air District would likely still be in non-attainment of the stricter State standard.

The proposed project's operational ozone, PM<sub>10</sub> and PM<sub>2.5</sub> emissions would not exceed the Air District's thresholds for significance. Refer to the discussion above regarding air quality standards violations. The proposed project's construction impacts could potentially exceed Air District thresholds for significance. However, the mitigation measure presented above to require additional basic construction mitigation measures would reduce potential air quality effects to a less than significant level.

## ***Expose sensitive receptors to substantial pollutant concentrations***

### **Less than Significant Impact with Mitigation**

Substantial pollution concentrations are typically in reference to concentrated acute emissions, such as particulate matter, or TACs such as carbon monoxide. The proposed project would not result in substantial particulate matter emissions outside of a brief construction period. There are no sensitive receptors close enough to the project sites to be affected by dust generated during construction. Carbon monoxide is generated in substantial quantities only when large numbers of vehicles are idling for a long period of time, and are significant only if there are sensitive receptors proximate to the idling vehicles. The proposed project would not result in large numbers of idling vehicles, and there are no sensitive receptors close enough to the project sites to be affected in any case.

The project site includes serpentine rock, which could have an asbestos component. Disturbance of this type of rock, or soils weathered from this type of rock, could result in the release of asbestos fibers, as is acknowledged in the Draft Trails Master Plan (page 28-29). Several trail alignments are shown crossing areas of serpentine soils (page 31). The following mitigation measure is recommended:

### **Mitigation Measure**

The following measures shall be incorporated into the Trails Master Plan and/or all future construction documents, applicable to areas identified as containing serpentine rock, if soil disturbance is anticipated during construction of the trail or abandonment of old trails:

- a. Upon determination of a precise trail alignment, soil sampling shall be conducted in not less than one location for each one-half mile of alignment within the area identified as containing serpentine rock, and in any case, no less than one sample for any trail segment within the area identified as containing serpentine rock. California Air Resources Board Test Method 435 should be used unless otherwise directed by the Air District.
- b. Soil samples shall be analyzed by an approved laboratory for asbestos materials content, and characterized as to concentration and resultant potential for adverse health effects to workers or trail users.
- c. If asbestos levels are high enough to warrant precautions, County Parks shall develop a mitigation plan in accordance with the *Asbestos Airborne Toxic Control Measure for*

*Construction, Grading, Quarrying, and Surface Mining Operations* (California Air Resources Board 2009).

***Create objectionable odors affecting a substantial number of people***

**Less than Significant Impact**

The proposed project would not be a significant source of odors. The proposed project could include minor features that would result in very localized odors, such as portable toilets, but would not emit odors that were detectible at off-site sensitive receptors.

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# ATTACHMENT A

TABLE 3-1, OPERATIONAL-RELATED CRITERIA AIR  
POLLUTANT AND PRECURSOR SCREENING LEVEL SIZES

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<b>Land Use Type</b>	<b>Operational Criteria Pollutant Screening Size</b>	<b>Operational GHG Screening Size</b>	<b>Construction-Related Screening Size</b>
Single-family	325 du (NOX)	56 du	114 du (ROG)
Apartment, low-rise	451 du (ROG)	78 du	240 du (ROG)
Apartment, mid-rise	494 du (ROG)	87 du	240 du (ROG)
Apartment, high-rise	510 du (ROG)	91 du	249 du (ROG)
Condo/townhouse, general	451 du (ROG)	78 du	240 du (ROG)
Condo/townhouse, high-rise	511 du (ROG)	92 du	252 du (ROG)
Mobile home park	450 du (ROG)	82 du	114 du (ROG)
Retirement community	487 du (ROG)	94 du	114 du (ROG)
Congregate care facility	657 du (ROG)	143 du	240 du (ROG)
Day-care center	53 ksf (NOX)	11 ksf	277 ksf (ROG)
Elementary school	271 ksf (NOX)	44 ksf	277 ksf (ROG)
Elementary school	2747 students (ROG)	-	3904 students (ROG)
Junior high school	285 ksf (NOX)	-	277 ksf (ROG)
Junior high school	2460 students (NOX)	46 ksf	3261 students (ROG)
High school	311 ksf (NOX)	49 ksf	277 ksf (ROG)
High school	2390 students (NOX)	-	3012 students (ROG)
Junior college (2 years)	152 ksf (NOX)	28 ksf	277 ksf (ROG)
Junior college (2 years)	2865 students (ROG)	-	3012 students (ROG)
University/college (4 years)	1760 students (NOX)	320 students	3012 students (ROG)
Library	78 ksf (NOX)	15 ksf	277 ksf (ROG)
Place of worship	439 ksf (NOX)	61 ksf	277 ksf (ROG)
City park	2613 acres (ROG)	600 acres	67 acres (PM10)
Racquet club	291 ksf (NOX)	46 ksf	277 ksf (ROG)
Racquetball/health	128 ksf (NOX)	24 ksf	277 ksf (ROG)
Quality restaurant	47 ksf (NOX)	9 ksf	277 ksf (ROG)
High turnover restaurant	33 ksf (NOX)	7 ksf	277 ksf (ROG)
Fast food rest. w/ drive thru	6 ksf (NOX)	1 ksf	277 ksf (ROG)
Fast food rest. w/o drive thru	8 ksf (NOX)	1 ksf	277 ksf (ROG)
Hotel	489 rooms (NOX)	83 rooms	554 rooms (ROG)
Motel	688 rooms (NOX)	106 rooms	554 rooms (ROG)
Free-standing discount store	76 ksf (NOX)	15 ksf	277 ksf (ROG)
Free-standing discount superstore	87 ksf (NOX)	17 ksf	277 ksf (ROG)
Discount club	102 ksf (NOX)	20 ksf	277 ksf (ROG)
Regional shopping center	99 ksf (NOX)	19 ksf	277 ksf (ROG)
Electronic Superstore	95 ksf (NOX)	18 ksf	277 ksf (ROG)
Home improvement superstore	142 ksf (NOX)	26 ksf	277 ksf (ROG)
Strip mall	99 ksf (NOX)	19 ksf	277 ksf (ROG)
Hardware/paint store	83 ksf (NOX)	16 ksf	277 ksf (ROG)
Supermarket	42 ksf (NOX)	8 ksf	277 ksf (ROG)
Convenience market (24 hour)	5 ksf (NOX)	1 ksf	277 ksf (ROG)
Convenience market with gas pumps	4 ksf (NOX)	1 ksf	277 ksf (ROG)
Bank (with drive-through)	17 ksf (NOX)	3 ksf	277 ksf (ROG)





**Table 3-1  
Operational-Related Criteria Air Pollutant and Precursor Screening Level Sizes**

Land Use Type	Operational Criteria Pollutant Screening Size	Operational GHG Screening Size	Construction-Related Screening Size
General office building	346 ksf (NOX)	53 ksf	277 ksf (ROG)
Office park	323 ksf (NOX)	50 ksf	277 ksf (ROG)
Government office building	61 ksf (NOX)	12 ksf	277 ksf (ROG)
Government (civic center)	149 ksf (NOX)	27 ksf	277 ksf (ROG)
Pharmacy/drugstore w/ drive through	49 ksf (NOX)	10 ksf	277 ksf (ROG)
Pharmacy/drugstore w/o drive through	48 ksf (NOX)	10 ksf	277 ksf (ROG)
Medical office building	117 ksf (NOX)	22 ksf	277 ksf (ROG)
Hospital	226 ksf (NOX)	39 ksf	277 ksf (ROG)
Hospital	334 beds (NOX)	84 ksf	337 beds (ROG)
Warehouse	864 ksf (NOX)	64 ksf	259 ksf (NOX)
General light industry	541 ksf (NOX)	121 ksf	259 ksf (NOX)
General light industry	72 acres (NOX)	-	11 acres (NOX)
General light industry	1249 employees (NOX)	-	540 employees (NOX)
General heavy industry	1899 ksf (ROG)	-	259 ksf (NOX)
General heavy industry	281 acres (ROG)	-	11 acres (NOX)
Industrial park	553 ksf (NOX)	65 ksf	259 ksf (NOX)
Industrial park	61 acres (NOX)	-	11 acres (NOX)
Industrial park	1154 employees (NOX)	-	577 employees (NOX)
Manufacturing	992 ksf (NOX)	89 ksf	259 ksf (NOX)

Notes: du = dwelling units; ksf = thousand square feet; NO<sub>x</sub> = oxides of nitrogen; ROG = reactive organic gases. Screening levels include indirect and area source emissions. Emissions from engines (e.g., back-up generators) and industrial sources subject to Air District Rules and Regulations embedded in the land uses are not included in the screening estimates and must be added to the above land uses. Refer to Appendix D for support documentation. Source: Modeled by EDAW 2009.

### 3.2. COMMUNITY RISK AND HAZARD IMPACTS

Please refer to Chapter 5 for discussion of screening criteria for local community risk and hazard impacts.

### 3.3. CARBON MONOXIDE IMPACTS

This preliminary screening methodology provides the Lead Agency with a conservative indication of whether the implementation of the proposed project would result in CO emissions that exceed the *Thresholds of Significance* shown in Table 2-3.

The proposed project would result in a less-than-significant impact to localized CO concentrations if the following screening criteria is met:

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# **APPENDIX B**

## **BIOLOGICAL RESOURCES EVALUATION REPORT**

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*Planning for Success.*

BIOLOGICAL RESOURCES EVALUATION REPORT

# CALERO COUNTY PARK TRAILS MASTER PLAN

San Jose, Santa Clara County, California

PREPARED FOR

Bellinger Foster Steinmetz

July 3, 2013

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# CALERO COUNTY PARK TRAILS MASTER PLAN

Biological Resources Evaluation Report

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July 3, 2013

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# 1.0 INTRODUCTION

This section describes the proposed Calero County Park Trails Master Plan, including project implementation details, and the general project location.

## 1.1 PROJECT SUMMARY

The primary purpose of this report is to evaluate the proposed Calero County Park Trails Master Plan's potential to impact special-status biological resources. The proposed Trails Master Plan provides a framework for expansion of the existing park trail system into a multi-use trail network over a 10-year time period, while supporting protection and enhancement of the sensitive cultural and environmental resources within the park. The proposed Trails Master Plan will:

- Allow 966 acres of newly acquired areas in the park to be opened for recreational trail use;
- Expand the existing trail system by approximately 14.7 miles to 35.9 miles at build-out;
- Designate 26.6 miles of trails as multi-use, to be shared by hikers, bicyclists and equestrians;
- Retain 7.5 miles of trails as limited use for equestrian and hiking only;
- Designate 1.8 miles of trails as hiking only;
- Remove 4.9 miles of existing service road and trails and restore to native landscape;
- Remove dogs-on-leash restriction on most trails in the park
- Upgrade existing in-stream creek channel crossings with bridges spanning the creek/drainage or other crossing techniques to minimize in-channel hiking, bicycle, and equestrian water quality disturbance;

## 1.0 INTRODUCTION

- Expand existing trailhead staging facilities at Calero Park Ranger Station;
- Create new trailhead staging facility off McKean Road;
- Create new trailhead staging facility off Almaden Road;
- Install new fences, gates, signage, picnic, and rest facilities and pet waste stations; and
- Install surface drainage facilities at new and existing trailhead facilities that will maintain or improve storm water quality.

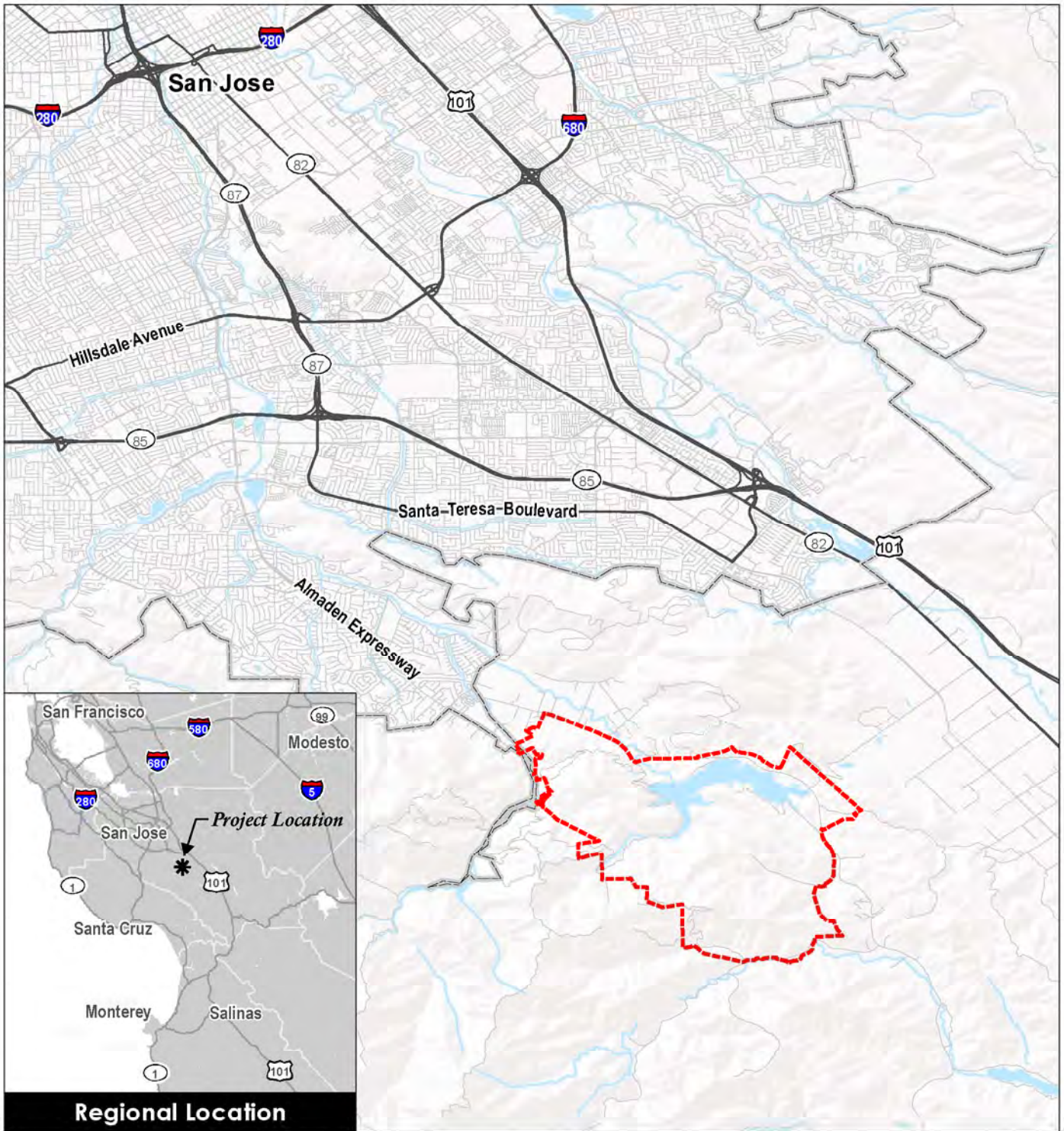
As outlined above, the draft Trails Master Plan nearly doubles the mileage of the existing trail system. Equestrians and hikers currently use approximately 20 miles of trails. At final build-out the expanded Calero County Park's trail system will have grown to approximately 36 miles and will offer many trails for walkers with dogs-on-leash and mountain bikers while still retaining historic, limited trail use for equestrians and hikers on some trails. In addition, the Trails Master Plan will provide regional trail connections as identified in the *Santa Clara County Countywide Trails Master Plan Update (1995)*.

A complete version of the Calero County Park Trails Master Plan is available to view and download at the Santa Clara County Parks Department website: [www.parkhere.org](http://www.parkhere.org).

Figure 1, [Location Map](#), shows the location and general vicinity of the project site, and Figure 2, [Aerial Photograph](#), illustrates the project site's existing conditions. Figure 3, [Trails, Streams, and Land Cover](#), shows not only biological resources on the project site, but also the locations of various proposed elements of the Trails Master Plan.

## 1.2 LOCATION AND SETTING

Calero County Park is situated approximately 10 miles south of the City of San Jose within the Santa Clara Valley in the eastern foothills of the Santa Cruz Mountains. Surrounding land uses include mainly open space, along with agriculture and residential development. The park is influenced by a Mediterranean climate of Santa Clara County with most precipitation occurring in the winter and early spring months. Average precipitation is 24.5 inches with a range from 20-28 inches (County of Santa Clara, Parks and Recreation Department 2005). Precipitation typically falls during the winter months (generally November through April), with virtually no precipitation from spring through autumn. The average annual rainfall is subject to seasonal variation and periodic droughts, and the valley has fairly mild air temperatures that rarely drop far below freezing (ICF International 2012).



**Legend**

- Project Boundary
- Urban Area



Source: Santa Clara County 2012, ESRI 2009

Figure 1  
Location Map



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**Legend**  
  Project Boundary    — Water Course



Source: Santa Clara County 2012, Google Earth 2011, ESRI 2009

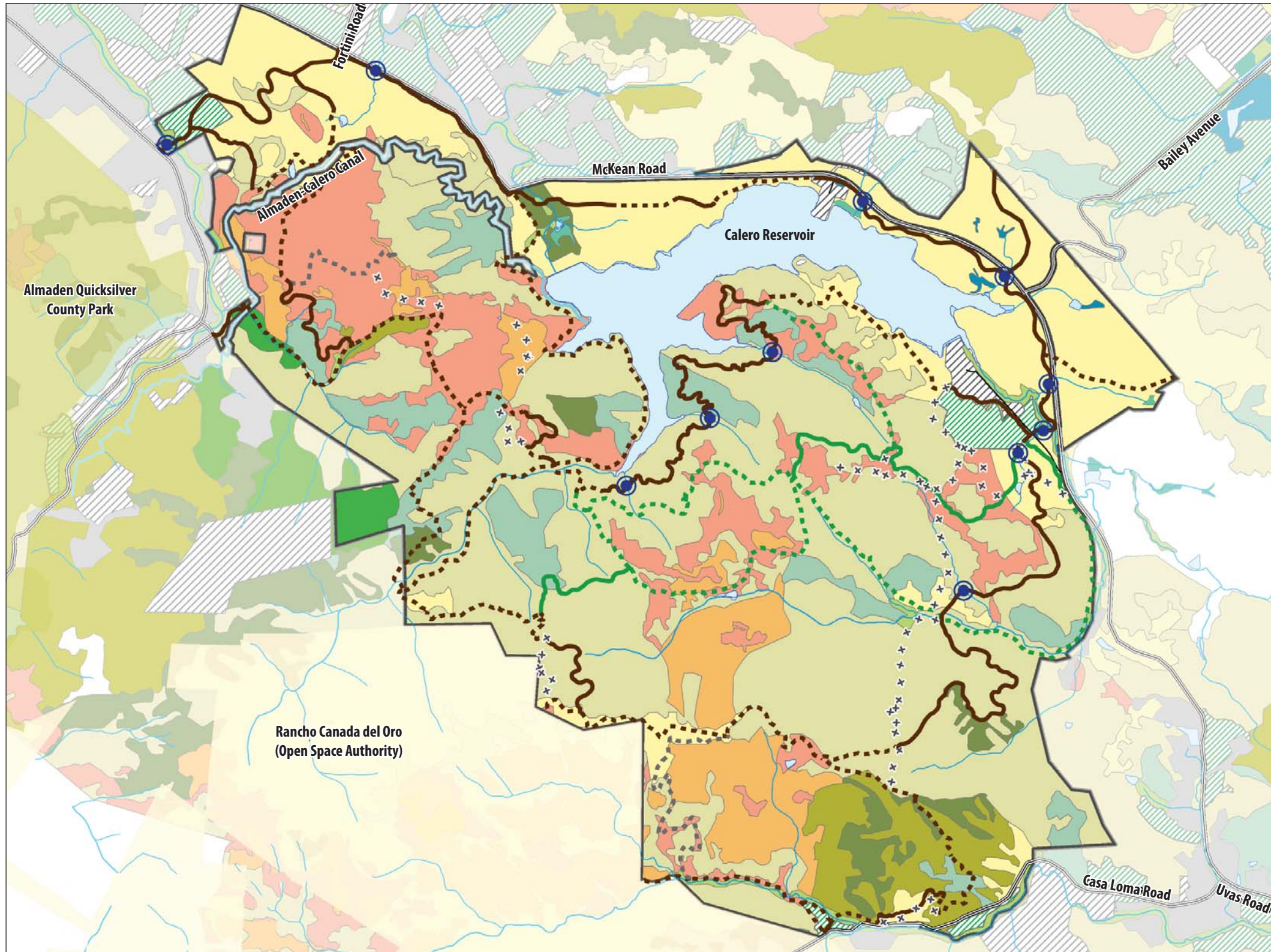


Figure 2  
**Aerial Photograph**



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Source: Calero County Park Trails Master Plan, Bellinger Foster Steinmetz 2013



Figure 3  
Trails, Streams, and Land Cover



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Most of the park is composed of annual grassland and oak woodland plant communities. Calero Reservoir, an approximately 347-acre lake, is located in the northern section of the park. Slopes rise gently from almost zero percent around the reservoir edge, to 20 to 40 percent in the southern half of the park. Some of the riparian canyons have very steep slopes greater than 50 percent (County of Santa Clara, Parks and Recreation Department 2005). The park is situated on the Santa Teresa Hills U.S. Geological Survey (USGS) quadrangle map. Elevations across the site range from approximately 390 to 1,530 feet.

There are numerous intermittent creeks; many are tributaries to Calero Creek. Those below the Almaden-Calero Canal that do not drain to Calero Creek flow to Los Alamitos Creek. Drainages south of Bald Peaks Trail are tributaries of Llagas Creek. There are eight human-made ponds present in the park and many springs (County of Santa Clara, Parks and Recreation Department 2005). Calero Reservoir, located within the project site, has a capacity of 9,934 acre-feet and is part of the Guadalupe River Watershed, whose headwaters originate on the west side of Santa Clara County in the Santa Cruz Mountains (ICF International 2012).

The park is positioned on the Franciscan volcanic and metavolcanic formation and has scattered serpentine outcrops throughout the park, and extensive serpentine rock outcrops that span several ridge tops in the southwestern portion of the park (County of Santa Clara, Parks and Recreation Department 2005). Soils within the park are predominately well drained, sandy loams to clay loams (Bellinger Foster Steinmetz 2013). However, the park also contains significant amounts of serpentine soils that are notable in the area (ICF International 2012):

Of particular importance from a conservation perspective are the study area's serpentine soils, which are derived from the serpentinite ultramafic rocks of the region. Serpentine soils are typically very shallow, nutrient-poor (i.e., low levels of nitrogen, potassium, phosphorous, and molybdenum essential for normal plant growth), high in magnesium, and may contain elevated levels of the heavy metals chromium and nickel that are toxic to many plant species. Water availability in serpentine soils may also be limited. As a result, serpentine soils support limited and highly specialized floras and vegetation associations that often include a high number of endemic (i.e., largely or entirely restricted to serpentine soils) and special-status species.

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## 2.0 REGULATORY SETTING

This section includes a summary of the applicable biological resource protection regulations.

### 2.1 FEDERAL REGULATIONS

#### ***Endangered Species Act***

The federal Endangered Species Act of 1973 protects species that the U.S. Fish and Wildlife Service (USFWS) has listed as Endangered or Threatened. Permits may be required from USFWS if activities associated with a proposed project would result in the “take” of a federally listed species or its habitat. Under the Act, the definition of “take” is to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” USFWS has also interpreted the definition of “harm” to include significant habitat modification that could result in take. “Take” of a listed species is prohibited unless (1) a Section 10(a) permit has been issued by the USFWS or (2) an Incidental Take Statement has been obtained through formal consultation between a federal agency and the USFWS pursuant to Section 7 of the Act.

#### ***Migratory Bird Treaty Act***

The federal Migratory Bird Treaty Act of 1989 prohibits killing, possessing, or trading in migratory birds, except in accordance with regulations prescribed by the Secretary of the Interior. The Migratory Bird Treaty Act encompasses whole birds, parts of birds, bird nests, and bird eggs.

## **Clean Water Act**

Section 404 of the federal Clean Water Act of 1972 regulates the discharge of dredge and fill material into “Waters of the U.S.” including wetlands. Natural drainage channels and wetlands are considered jurisdictional “Waters of the U.S.” The U.S. Army Corps of Engineers (USACE) is responsible for administering the 404 permit program and determines the extent of jurisdiction within drainage channels as defined by ordinary high water marks on channel banks.

Wetlands are habitats with soils that are intermittently or permanently saturated, or inundated. The resulting anaerobic conditions select for plant species known as hydrophytes that show a high degree of fidelity to such soils. Wetlands are identified by the presence of hydrophytic vegetation, hydric soils (soils intermittently or permanently saturated by water), and wetland hydrology according to methodologies outlined in the *1987 Corps of Engineers Wetlands Delineation Manual* and the *2006 Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region*.

Activities that involve the discharge of fill into jurisdictional waters are subject to the permit requirements of the USACE. Discharge permits are typically issued on the condition that the project proponent agrees to provide mitigation resulting in no net loss of wetland function or value. In addition to individual discharge permits, the USACE issues nationwide permits applicable to certain activities. Nationwide Permit 43 covers storm-water management facilities of up to one-half acre within non-tidal wetlands, with notification required over one-tenth acre, and a compensatory mitigation proposal required in all cases. Under the nationwide permits, discharge of fill must be minimized to the extent practicable. Under Section 401 of the Act, any activity requiring a USACE Section 404 permit must also obtain a state Water Quality Certification (or waiver thereof) to ensure that the proposed activity will meet state water quality standards.

## **2.2 STATE REGULATIONS**

### ***California Endangered Species Act***

Pursuant to the California Endangered Species Act and Section 2081 of the California Fish and Game Code, an incidental take permit from the California Department of Fish and Wildlife (CDFW) is required for projects that could result in the take of a state-listed Endangered, Threatened, or Rare species. “Take” is defined as “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” If a proposed project would result in the take of a state-listed species, then a CDFW Incidental Take Permit, including the preparation of a conservation plan would be required.

## ***Nesting Birds and Birds of Prey***

Sections 3505, 3503.5, and 3800 of the California Fish and Game Code prohibit the take, possession, or destruction of birds, including their nests or eggs. Birds of prey are specifically protected in California under provisions of the California Fish and Game Code, Section 3503.5. This section states that it is unlawful to take, possess, or destroy any birds of prey or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this Code. Disturbance that causes nest abandonment and/or loss of reproductive effort, such as construction during the breeding season, is considered take by the CDFW.

## ***Streambed Alterations***

The CDFW has jurisdiction over the bed and bank of natural drainages according to provisions of Sections 1601 through 1603 of the California Fish and Game Code. Diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake in California that supports wildlife resources and/or riparian vegetation are subject to CDFW regulations. Activities that would disturb these drainages are regulated by the CDFW; authorization is required in the form of a Streambed Alteration Agreement. Such an agreement typically stipulates certain measures that will protect the habitat values of the drainage in question.

## ***California Porter-Cologne Water Quality Control Act***

The applicable Regional Water Quality Control Board (RWQCB) is responsible for administering the state water quality certification program. The RWQCB is also responsible for enforcing National Pollutant Discharge Elimination System permits, including the General Construction Storm Water Permit. Under the California Porter-Cologne Water Quality Control Act, the applicable RWQCB headquarters office may necessitate Waste Discharge Requirements for the fill or alteration of “Waters of the State,” which according to California Water Code Section 13050 includes “any surface water or groundwater, including saline waters, within the boundaries of the state.” The RWQCB may, therefore, necessitate its own specific Waste Discharge Requirements even if the affected waters are not under USACE jurisdiction.

## ***California Environmental Quality Act (CEQA)***

CEQA Guidelines Appendix G contains standards of significance to indicate that a project may have a significant effect on biological resources if it would:

- 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 CDFW or USFWS;

## 2.0 REGULATORY SETTING

- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS;
- 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;
- 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;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and/or
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

## 2.3 REGIONAL/LOCAL REGULATIONS

### ***Santa Clara County General Plan***

The 1995-2010 Santa Clara County General Plan's Book A, Part 2, Parks and Recreation section focuses on meeting recreation demand while maintaining natural resources and beauty of the County (County of Santa Clara 1994). The Regional Parks and Public Open Space Lands subsection contains several strategies for park and open space resources:

- Strategy #1: Develop parks and public open space lands;
- Strategy #2: Improve accessibility;
- Strategy #3: Balance recreation and environmental objectives;
- Strategy #4: Facilitate interjurisdictional coordination; and
- Strategy #5: Encourage private sector involvement.

Each of these strategies includes multiple policies and implementation recommendations, which are compatible with the proposed project.

In addition, the general plan's Book A, Part 2, Resource Conservation section, Habitat and Biodiversity subsection contains these strategies:

- Strategy #1: Improve Current Knowledge and Awareness of Habitats;
- Strategy #2: Protect the Biological Integrity of Critical Habitat Areas;
- Strategy #3: Encourage Habitat Restoration; and
- Strategy #4: Evaluate the Effectiveness of Environmental Mitigations.

The proposed Calero County Park Trails Master Plan's extensive resource conservation design elements are also compatible with the policies and implementation recommendations for these strategies.

### ***Santa Clara County Tree Preservation Ordinance***

The Santa Clara County Tree Preservation Ordinance is contained in the municipal code Division C16: Tree Preservation and Removal (County of Santa Clara 2013). An administrative permit must be obtained from the County Planning Department prior to removal of protected trees, which are defined below as applicable to the project site. Tree removal permits typically require mitigation, usually through the planting of replacement trees in appropriate sites. More stringent mitigation measures are necessary for the removal of heritage trees, also defined below.

On any property owned or leased by the county, any tree which measures over thirty-seven and seven-tenths (37.7) inches in circumference (twelve (12) inches or more in diameter) measured four and one-half (4.5) feet above the ground, or which exceeds twenty (20) feet in height.

*Heritage tree* shall include any tree which, because of its history, girth, height, species, or other unique quality, has been recommended for inclusion on the heritage resource inventory by the historic heritage commission and found by the Board of Supervisors to have special significance to the community, and which has therefore been included in the heritage resource inventory adopted by resolution of the Board of Supervisors.

### ***Santa Clara Valley Habitat Plan***

The Santa Clara Valley Habitat Plan ("Valley Habitat Plan") was designed "to protect, enhance, and restore natural resources in specific areas of Santa Clara County, while improving and streamlining the environmental permitting process for impacts on threatened and endangered



species” (ICF International 2012). Local partners for the Valley Habitat Plan include the County of Santa Clara, City of San José, City of Morgan Hill, City of Gilroy, Santa Clara Valley Water District, and Santa Clara Valley Transportation Authority. This Valley Habitat Plan, which is a Habitat Conservation Plan/Natural Community Conservation Plan, was developed in collaboration with the USFWS and the CDFW. The Valley Habitat Plan’s study area encompasses 519,506 acres, or approximately 62 percent of Santa Clara County (ICF International 2012).

“Covered activities” in the Valley Habitat Plan include projects or ongoing activities that will receive incidental take authorization for potential impacts to covered species. The Valley Habitat Plan provides conservation measures to protect and maintain habitat areas to support 18 special-status “covered species”: nine wildlife species and nine plant species within the study area (ICF International 2012).

In addition, the Valley Habitat Plan sets forth a comprehensive, coordinated, and standardized mitigation and compensation program that would ensure that conservation actions, which include the creation, management, and monitoring of a new Reserve System in Santa Clara County, will be accomplished to streamline future mitigation requirements and achieve the biological goals and objectives of the Valley Habitat Plan.

The Valley Habitat Plan and its accompanying permits provide assurances that the USFWS and CDFW will not require any additional conservation or mitigation to address changed circumstances that are not identified in the Valley Habitat Plan, without the consent of the Permittee, as long as the Valley Habitat Plan is found to be properly implemented. Consistent with the provisions of these assurances, the understanding is that the Valley Habitat Plan provides adequate mitigation for the effects of the covered activities, and there is no need for additional mitigation requirements beyond the provisions of the Valley Habitat Plan and associated permits nor modifications to the conservation measures. It is expected that the conservation measures provided in the Valley Habitat Plan will be sufficient to meet all CEQA mitigation standards for impacts on the special-status species and natural communities that are covered in the Valley Habitat Plan.

# 3.0 METHODS

This section includes a summary of the methods and limitations of the biological surveys.

## 3.1 BACKGROUND RESEARCH

EMC Planning Group biologists reviewed site maps, aerial photographs, electronic database accounts, technical reports, and relevant scientific literature describing natural resources on the project site and on adjacent lands. A search of the CDFW *California Natural Diversity Database (CNDDDB)* and the California Native Plant Society (CNPS) *Inventory of Rare and Endangered Plants* for the San Jose West, San Jose East, Lick Observatory, Los Gatos, Santa Teresa Hills, Morgan Hill, Laurel, Loma Prieta, and Mount Madonna USGS quadrangles was conducted in order to generate lists of potentially occurring special-status species in the project vicinity (CDFW 2013 and CNPS 2013). Species listed by the USFWS that occur in Santa Clara County were also reviewed (USFWS 2013).

These lists are included as Appendices A, B, and C. Special-status species in this report are those listed as Endangered, Threatened, or Rare, or as candidates proposed for listing by the USFWS and/or CDFW; as Species of Special Concern or Fully Protected species by CDFW; or as Rare Plant Rank 1B or 2 by the CNPS.

## 3.2 FIELD SURVEYS

EMC Planning Group biologists Bill Goggin and Andrea Edwards conducted the biological field surveys on March 28, 2013 to document existing plant communities and wildlife habitats, and to evaluate the potential for special-status species occurrence at the project site.

### 3.0 METHODS

Biological resources were documented in field notes, including species observed, dominant plant communities, and significant wildlife habitat characteristics. Qualitative estimations of plant cover, structure, and spatial changes in species composition were used to determine plant communities and wildlife habitats, and habitat quality and disturbance level were described.

Additionally, observations of any potential wetlands and/or potential wildlife movement corridors were recorded. Representative site photographs were taken at several locations within the project site to document habitat conditions. *The Jepson Manual* (Jepson Flora Project 2013) was the principal taxonomic references used for botanical resources.

## EXISTING BIOLOGICAL CONDITIONS

This section documents the physical site characteristics and general biological resources observed at the site during the biological reconnaissance survey.

### 4.1 MAIN PLANT COMMUNITIES/ WILDLIFE HABITATS

The Calero County Park brochure and visitor guide includes this brief description of the park's natural biodiversity (County of Santa Clara, Parks and Recreation Department 2007):

The merging of California Oak woodland, grasslands and riparian (stream) corridors bring a wide variety of plants, trees, and wildlife to Calero Park. The reservoir is a winter home to migratory birds who use the coves and the shoreline as a temporary resting area. In addition, the reservoir has large naturalized populations of Bass, Sunfish and Crappie. Birds of prey such as Golden Eagles, Red-tailed Hawks, White-tailed Kite and Osprey may be seen within the park. Over 184 bird species have been identified within Calero Park so far.

The California Oak Woodland community is well represented at Calero Park. Valley, Live, Blue, Black and Leather Oaks are found throughout Calero Park and are intermixed with grasslands and serpentine rock outcroppings. Sensitive plant communities are associated with serpentine rock which is low in nutrients essential to plant growth. The plants adapted to these conditions are specialized. While serpentine accounts for only 1% of California's geologic base, it supports about 10% of the state's native flora.

The back country of Calero accommodates and supports a large wildlife population. Deer, Coyote, Bobcat, and Fox, are some of the park's resident wildlife. The state bird, the California Quail, and the state flower, the California Poppy, can be found throughout the park. From March through late May the park also contains a diverse and abundant wildflower display.

As stated earlier, the purpose of this report is to provide a broad-scale evaluation of the proposed Trails Master Plan's potential to impact special-status plant and animal resources, and as such, biological surveys were limited to a one-day overview site tour that was focused on evaluating the potential for special-status resources to occur in areas proposed for new trail/facility construction. The surveys were not intended to document all plant communities and/or wildlife habitats present or to provide an inventory of existing biological conditions throughout the entire park. Therefore, the park-wide plant community and habitat description overview contained below is partially based on the *Calero County Park Interim Natural Resources Management Plan* (County of Santa Clara, Parks and Recreation Department 2005), confirmed and supplemented with observations from the biological surveys.

The plant community types noted in the *Natural Resources Management Plan*, classified according to *A Manual of California Vegetation* (Sawyer and Keeler-Wolf 1995), include coast live oak, blue oak, mixed oak, interior live oak, valley oak, canyon live oak, California bay, California sycamore, California buckeye, scrub oak, black sage, coyote brush, chamise, serpentine chaparral, annual grassland, bullrush, creeping rye, purple needle grass, and foothill needle grass. The most prevalent plant communities at Calero County Park are annual grasslands and oak woodlands; these communities intermix throughout the park, and are described further below.

Despite past grazing activities in some areas, Calero County Park supports extremely high quality wildlife habitat functions and values. These conditions are due mostly to the undeveloped characteristics of the site and its varied habitat types, high diversity of plant species, presence of available food and water, and provision of suitable escape cover; these factors provide optimal habitat conditions for many native species. The descriptions below outline the wildlife habitats present within the most abundant plant communities at the project site.

### ***Annual Grasslands***

Annual grasslands are the dominant plant community at Calero County Park, and in general, are interspersed with various types of oak woodlands. This community is composed of mainly non-native annual grasses such as foxtail chess (*Bromus madritensis* ssp. *rubens*), soft chess (*Bromus hordeaceus*), ripgut grass (*Bromus diandrus*), slender wild oat (*Avena barbata*), wild oat (*Avena fatua*),

and Italian ryegrass (*Lolium multiflorum*). It also contains high numbers of wildflowers such as lupines (*Lupinus* spp.), California poppy (*Eschscholzia californica*), clarkias (*Clarkia* spp.), and common fiddleneck (*Amsinckia intermedia*), along with a diverse assemblage of less abundant plants. Non-native hoary cress (*Lepidium draba*) occurs in grazed grassland areas.

Overall, the grasslands are composed of many non-native and native species with composition varying among stands. They are characterized by a dense to sparse cover of non-native annual grasses along with native perennial bunchgrasses and numerous annual forbs (wildflowers), especially in years with plentiful rain. Grass species are generally less than one meter in height and vegetative cover may be continuous or open.

Grasslands on the site provide suitable foraging habitat and, in some cases, suitable nesting habitat for many species of perching birds. Passerines, such as horned lark (*Eremophila alpestris* ssp. *actia*) (observed), western meadowlark (*Sturnella neglecta*), American robin (*Turdus migratorius*), western bluebird (*Sialia mexicana*) (observed), California quail (*Callipepla californica*) (observed), (introduced) wild turkey (*Meleagris gallopavo*), western kingbird (*Tyrannus verticalis*), black phoebe (*Sayornis nigra*), and white-crowned sparrow (*Zonotrichia leucophrys*) may utilize less disturbed portions of the site's grasslands. Raptor species using or potentially using grasslands within the project site for foraging and/or nesting include red-tailed hawk (*Buteo jamaicensis*) (observed), great horned owl (*Bubo virginianus*), barn owl (*Tyto alba*), and short-eared owl (*Asio flammeus*).

The site's high-quality grasslands could be expected to provide habitat opportunities for a number of common mammal species, such as black-tailed deer (*Odocoileus hemionus*), black-tailed jackrabbit (*Lepus californicus*), California ground squirrel (*Spermophilus beecheyi*), western harvest mouse (*Reithrodontomys megalotis*), California vole (*Microtus californicus*), Botta's pocket gopher (*Thomomys bottae*), coyote (*Canis latrans*), raccoon (*Procyon lotor*), red fox (*Vulpes vulpes*), and Virginia opossum (*Didelphis marsupialis*). Commonly occurring reptiles and amphibians, such as southern alligator lizard (*Gerrhonotus multicarinatus*), western fence lizard (*Sceloporus occidentalis*), and Pacific slender salamander (*Batrachoseps attenuatus*), would also be expected to feed on invertebrates found within leaf litter and beneath fallen logs. Common reptile species such as gopher snake (*Pituophis melanoleucus*), western rattlesnake (*Crotalus oreganus*), California king snake (*Lampropeltis getula californiae*), and terrestrial garter snake (*Thamnophis elegans*) would also be expected to occur within grassland habitats on the site.

## **Oak Woodlands**

Oak woodlands are the other dominant plant community located at the park. These woodlands are primarily dominated by coast live oak (*Quercus agrifolia*). Oak-dominated woodlands within the park also include valley oak (*Quercus lobata*) and blue oak (*Quercus douglasii*). Other tree

species present within the oak woodlands include California bay (*Umbellularia californica*) and California buckeye (*Aesculus californica*). Common understory components are California coffee berry (*Frangula californica*), blue elderberry (*Sambucus nigra* ssp. *caerulea*), and toyon (*Heteromeles arbutifolia*). Western poison oak (*Toxicodendron diversilobum*) is found in abundance throughout the oak woodlands. Common shrub and herbaceous components include California sagebrush (*Artemisia californica*), mugwort (*Artemisia douglasiana*), and various annual and perennial grass species such as foothill needlegrass (*Stipa lepida*) and wild-ryes (*Elymus* spp.). An abundance of native common miner's-lettuce (*Claytonia perfoliata* ssp. *perfoliata*) and goose grass (*Galium aparine*) also occur in the oak woodland understory, along with a diverse assemblage of less abundant native and non-native plants. The oak woodlands have a closed to moderately closed canopy and a well-formed understory.

Oak woodlands in proximity to water sources provide high quality habitat for a variety of native wildlife. This community type is important to bird species such as various types of woodpeckers, song sparrow (*Melospiza melodia*), common yellowthroat (*Geothlypis trichas*), numerous species of wood warblers, California towhee (*Melospiza crissalis*), California thrasher (*Toxostoma redivivum*), and California quail. Raptors that utilize oak woodlands for nesting or foraging include American kestrel (*Falco sparverius*) (observed), Cooper's hawk (*Buteo cooperii*) (observed), sharp-shinned hawk (*Accipiter striatus*) (observed), western screech-owl (*Megascops kennicottii*), long-eared owl (*Asio otus*), red-tailed hawk, and red-shouldered hawk (*Buteo lineatus*). Mammals expected to utilize on-site oak woodland habitats include gray fox (*Urocyon cinereoargenteus*), coyote, black-tailed deer, bobcat (*Lynx rufus*), deer mouse (*Peromyscus maniculatus*), and western harvest mouse.

## 4.2 OTHER PLANT COMMUNITIES/ WILDLIFE HABITATS

The proposed Trails Master Plan states the following regarding the park's natural resources (Bellinger Foster Steinmetz 2013):

Due to a wide range of habitats, Calero County Park is one of Santa Clara County's most ecologically diverse parks, with a large number of distinct native plant communities. Most prevalent are non-native annual grasslands and Coast Live Oak Woodland. Other plant communities include Blue Oak Woodland, Valley Oak Woodland, Riparian Forest, Serpentine Grassland and Serpentine Chaparral, Sage-Chaparral Scrub and Seasonal Wetland, Pond, and Freshwater Marsh.

This land cover data was developed as part of the baseline biological information collected for the park in 1991, in conjunction with park master planning effort underway at that time. Additional information was gathered in 2005 after the acquisition of Rancho Cañada del Oro properties.

Using a slightly more refined naming system and more current data sampling, these land covers, their ecosystem functions, and common wildlife associations are also described in detail in the Santa Clara Valley Habitat Plan (Valley Habitat Plan). While the Valley Habitat Plan's vegetation plan mapping was conducted at a regional scale and not ground-truthed specifically for Calero County Park, the Valley Habitat Plan contains the most recent compilation of the Department's natural communities' vegetation data and mapping available for the Rancho San Vicente portion of the park. Thus, for planning purposes, the consolidated mapping available from the Valley Habitat Plan was used to depict unified land cover designations for the entire park in this Master Plan.

In particular, land covers associated with serpentine soils are considered sensitive and cover considerable areas of the park. As they contain rare and endangered species habitat, these serpentine areas and their habitats were carefully considered and avoided where feasible in planning new trail routes in Calero County Park.

The distribution of serpentine soils within Calero County Park was also carefully considered during planning to remove certain existing trail routes from sensitive habitat areas.

These mapped plant communities/wildlife habitats are classified as land cover types as shown on Figure 3, Trails, Streams, and Land Cover, and they are described in extensive detail in the Santa Clara Valley Habitat Plan, Section 3.3.5, Natural Communities and Land Cover Types (pages 3-32 to 3-102).



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## 5.0

# SPECIAL-STATUS BIOLOGICAL RESOURCES

This section documents the special-status biological resources observed on or having potential to occur at the project site.

## 5.1 OVERVIEW

The CNDDDB list of special-status plant and animal species known to occur in the project vicinity is presented in Appendix A. The USFWS compilation of federally listed species occurring in Santa Clara County is presented in Appendix B. The CNPS list of potentially occurring special-status plant species in the project vicinity is presented in Appendix C.

Together these lists were used to compile site-specific lists of potentially occurring special-status species known from the project vicinity. Recorded occurrences of special-status species known to occur on the project site or within about one mile of the site are depicted in [Figure 4, Special-Status Biological Resources](#). Representative photos of the project site including special-status plant observations are shown in [Figures 5 and 6, Site Photographs](#).

Excerpts below from Table 5-5 of the Santa Clara Valley Habitat Plan list existing resources for the Trails Master Plan project site, including both Calero County Park and Rancho San Vicente (ICF International 2012).

Calero County Park - Existing Biological Resources:

- Extensive stands of mixed oak woodland (1,562 acres) and over 620 acres of California annual grassland;
- 268 acres of serpentine grassland, much of which may be suitable for Bay checkerspot butterfly;

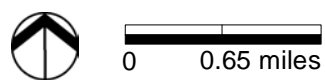
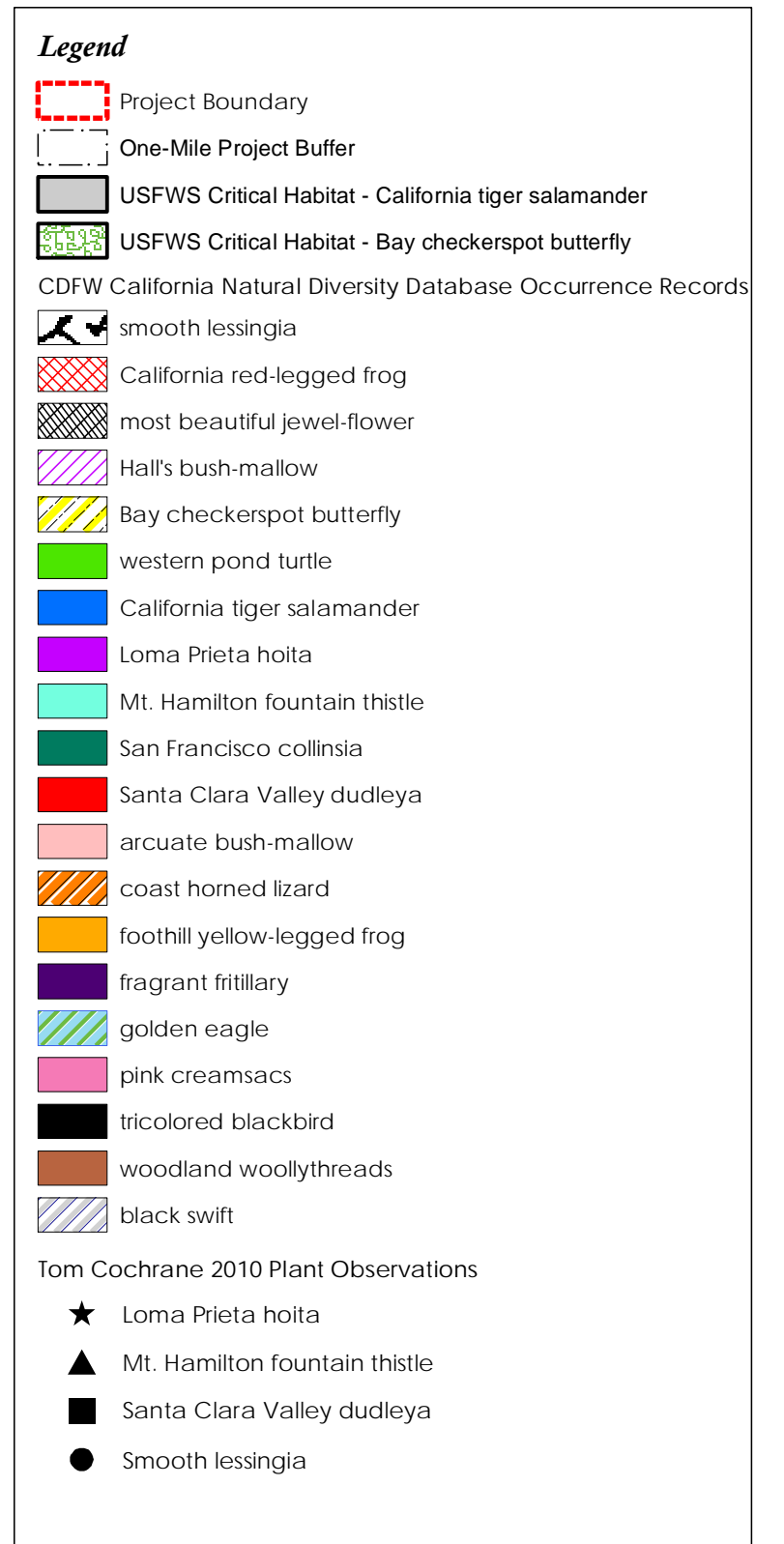
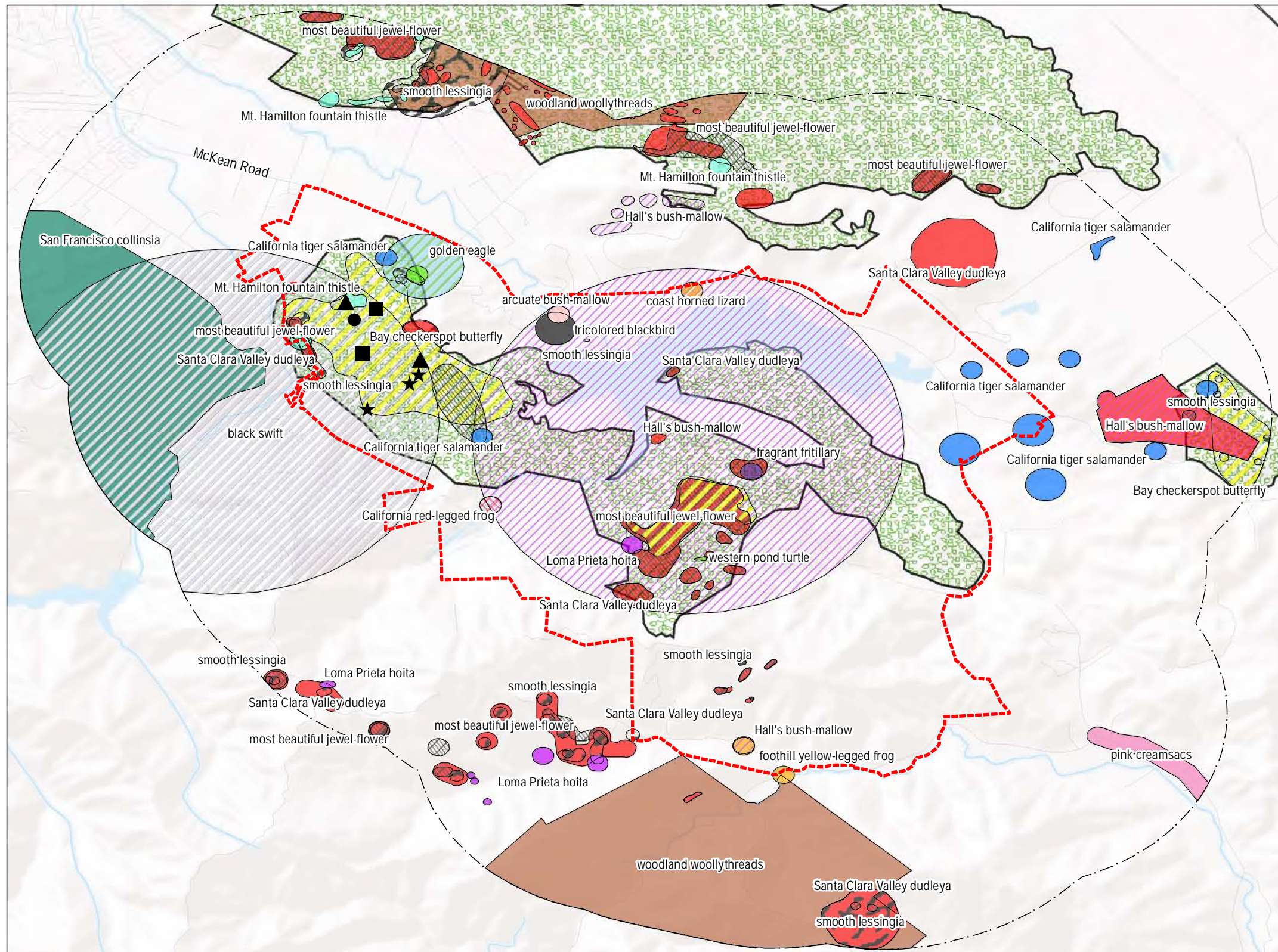
## 5.0 SPECIAL-STATUS BIOLOGICAL RESOURCES

- Provides important habitat connectivity within the Santa Cruz Mountains;
- California tiger salamander and Bay checkerspot butterfly critical habitat; and
- Populations of most beautiful jewelflower, Santa Clara Valley dudleya, Loma Prieta hoita, smooth lessingia and fragrant fritillary.

### Rancho San Vicente - Existing Biological Resources:

Extensive serpentine grassland, serpentine chaparral, blue oak woodland, valley oak woodland, and riparian woodland; supports known populations of at least four covered species: Santa Clara Valley dudleya, most beautiful jewelflower, smooth lessingia, and Mt. Hamilton thistle; supports habitat for at least five covered species: Bay checkerspot butterfly, California red-legged frog (upland), California tiger salamander (upland), and Western burrowing owl (foraging); completes landscape linkage between Almaden Quicksilver County Park and complex of open space surrounding Calero Lake (Linkage 9).





Source: California Department of Fish and Wildlife 2013, U.S. Fish and Wildlife Service 2012, Santa Clara County 2012, ESRI 2009



Figure 4  
**Special-Status Biological Resources**  
 Calero County Park Trails Master Plan: Biological Resources Evaluation

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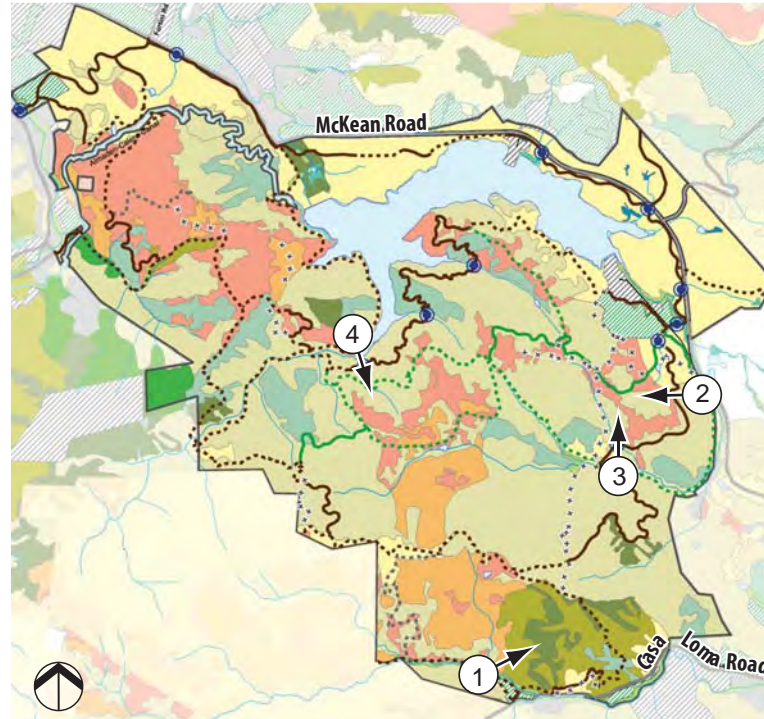




① Low impact span bridge across creek on existing multiuse trail



② Proposed trail alignment area within grassland and oak woodland patches



③ Proposed trail alignment area within grassland and oak woodland



④ Intermittent drainage downstream from potential new creek crossing

Source: Calero County Park Trails Master Plan, Bellinger Foster Steinmetz 2013



Figure 5  
**Site Photographs**  
 Calero County Park Trails Master Plan: Biological Resources Evaluation

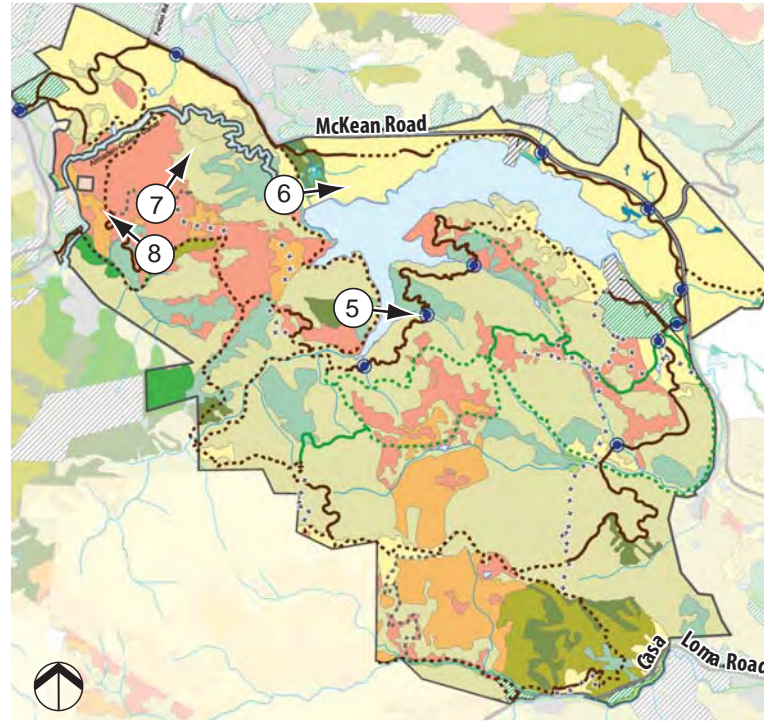
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⑤ View across reservoir toward canyon with potential new creek crossing



⑥ Pond and marsh with distant proposed trail alignment areas through grassland



⑦ View from existing pedestrian trail surrounded by serpentine grassland



⑧ Proposed trail alignment area within grassland and oak woodland patches

Source: Calero County Park Trails Master Plan, Bellinger Foster Steinmetz 2013



Figure 6  
Site Photographs  
Calero County Park Trails Master Plan: Biological Resources Evaluation



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## 5.2 SPECIAL-STATUS PLANTS

Special-status plant species known to occur in the general vicinity of the project site were evaluated for potential to occur on the project site. Information on special-status plants, including listing status, suitable habitat conditions, and potential to occur on the project site and be impacted by the Trails Master Plan, is presented in [Table 1, Special-Status Plants Potentially Occurring in the Project Vicinity](#).

As shown in Table 1, Santa Clara Valley Habitat Plan covered plant species with potential to be impacted by the proposed Trails Master Plan project include coyote ceanothus (*Ceanothus ferrisiae*); fragrant fritillary (*Fritillaria liliacea*); Loma Prieta hoita (*Hoita strobilina*); Metcalf Canyon jewel-flower (*Streptanthus albidus* ssp. *albidus*); most beautiful jewel-flower (*Streptanthus albidus* ssp. *peramoenus*); Mt. Hamilton fountain thistle (*Cirsium fontinale* var. *campylon*); Santa Clara Valley dudleya (*Dudleya abramsii* ssp. *setchellii*); smooth lessingia (*Lessingia micradenia* var. *glabrata*); and Tiburon paintbrush (*Castilleja affinis* ssp. *neglecta*). Appendix D of the Santa Clara Valley Habitat Plan provides detailed natural history accounts for each of these nine covered species.

In addition, the proposed project has potential to impact many plant species considered special-status by the CNPS (Rare Plant Rank 1B or 2). These species include arcuate bush-mallow (*Malacothamnus arcuatus*); bent-flowered fiddleneck (*Amsinckia lunaris*); big-scale balsamorhiza (*Balsamorhiza macrolepis*); bristly sedge (*Carex comosa*); chaparral harebell (*Campanula exigua*); chaparral ragwort (*Senecio aphanactis*); Congdon's tarplant (*Centromadia parryi* spp. *congdonii*); Hall's bush-mallow (*Malacothamnus hallii*); Indian Valley bush-mallow (*Malacothamnus aboriginum*); Mt. Diablo phacelia (*Phacelia phacelioides*); pink creamsacs (*Castilleja rubicundula* ssp. *rubicundula*); round-leaved filaree (*California macrophylla*); saline clover (*Trifolium hydrophilum*); San Francisco collinsia (*Collinsia multicolor*); Santa Cruz Mountains beardtongue (*Penstemon rattanii* var. *kleei*); Santa Cruz Mountains pussypaws (*Calyptridium parryi* var. *hesseae*); showy golden madia (*Madia radiata*); and woodland woollythreads (*Monolopia gracilens*).

Finally, there is a federally listed Endangered and CNPS Rare Plant Rank 1B species with potential to be impacted by the proposed project due to the presence of suitable habitat: Contra Costa goldfields (*Lasthenia conjugens*). This species is not covered by the Valley Habitat Plan. This annual herb occurs in wet areas in cismontane woodland, alkaline playas, valley and foothill grassland, and vernal pools. Although it is presumed extirpated in Santa Clara County, it still has low potential to occur in the park. It is known in the project vicinity from a historical 1958 occurrence in San Jose, west of Capitol Avenue (CDFW 2013).

**Table 1 Special-Status Plants Potentially Occurring in the Project Vicinity**

Species	Status (Federal/ State/Other)	Suitable Habitat Description	Potential to be Affected by the Trails Master Plan
Anderson's manzanita ( <i>Arctostaphylos andersonii</i> )	--/--/1B.2	Broadleaved upland forest, chaparral, and North Coast coniferous forest. Known only from the Santa Cruz Mountains. Prefers open sites in redwood forest; elevation 180-800m.	Unlikely. Due to geographic range of species, no suitable habitat present in the park.
Arcuate bush-mallow ( <i>Malacothamnus arcuatus</i> )	--/--/1B.2	Chaparral, in gravelly alluvium; elevation 80-355m.	Moderate. Suitable habitat present in the park. Recorded occurrence in the park.
Ben Lomond spineflower ( <i>Chorizanthe pungens</i> var. <i>hartwegiana</i> )	FE/--/1B.1	Lower montane coniferous forest; Ben Lomond sands, and Zayante coarse sands in maritime Ponderosa pine sand hills; elevation 120-470m.	Unlikely. Due to substrate restrictions of species, no suitable habitat present in the park.
Bent-flowered fiddleneck ( <i>Amsinckia lunaris</i> )	--/--/1B.2	Coastal bluff scrub, cismontane woodland, and valley and foothill grassland, on decomposed shale soils; elevation 3-500m.	Low. Marginally suitable habitat present in the park.
Big-scale balsamroot ( <i>Balsamorhiza macrolepis</i> )	--/--/1B.2	Valley and foothill grassland, cismontane woodland; sometimes on serpentine; elevation 35-1000m.	Moderate. Suitable habitat present in the park.
Bonny Doon manzanita ( <i>Arctostaphylos silvicola</i> )	--/--/1B.2	Chaparral, closed-cone coniferous forest, and lower montane coniferous forest. Known only from inland marine Zayante sands in Santa Cruz County; elevation 120-390m.	Unlikely. Due to geographic range and substrate restrictions of species, no suitable habitat present in the park.
Bristly sedge ( <i>Carex comosa</i> )	--/--/2.1	Coastal prairie, marshes and swamps (lake margins), and valley and foothill grassland; elevation 0-625m.	Low. Marginally suitable habitat present in the park.

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Species	Status (Federal/ State/Other)	Suitable Habitat Description	Potential to be Affected by the Trails Master Plan
Chaparral harebell <i>(Campanula exigua)</i>	--/--/1B.2	Chaparral (rocky, usually serpentine); elevation 275-1250m.	Moderate. Suitable habitat present in the park.
Chaparral ragwort <i>(Senecio aphanactis)</i>	--/--/2.2	Cismontane woodland and coastal scrub. Prefers drying alkaline flats; elevation 20-575m.	Low. Marginally suitable habitat present in the park.
Congdon's tarplant <i>(Centromadia parryi</i> spp. <i>congdonii)</i>	--/--/1B.1	Valley and foothill grassland (alkaline); elevation 1-230m.	Moderate. Suitable habitat present in the park.
Contra Costa goldfields <i>(Lasthenia conjugens)</i>	FE/--/1B.1	Wet areas in cismontane woodland, playas (alkaline), valley and foothill grassland, and vernal pools; elevation 0-470m.	Low. Suitable habitat present in the park, but species presumed extirpated from Santa Clara County.
Coyote ceanothus <i>(Ceanothus ferrisiae)</i>	FE/--/1B.1	Serpentine sites in chaparral, coastal scrub, and valley and foothill grassland; elevation 120-460m.	Moderate. Suitable habitat present in the park. Recorded about four miles from park in serpentine habitat. It is a covered species in the Santa Clara Valley Habitat Plan, with established protective conditions required for covered activities.
Deceiving sedge <i>(Carex saliniformis)</i>	--/--/1B.2	Wet areas in coastal prairie, coastal scrub, meadows and seeps, and coastal salt marshes and swamps; elevation 3-230m.	Unlikely. Due to extant geographic range of species, no suitable habitat present in the park.
Fragrant fritillary <i>(Fritillaria liliacea)</i>	--/--/1B.2	Coastal scrub, valley and foothill grassland, and coastal prairie. Often on serpentine, various soils reported though usually clay in grassland; elevation 3-410m.	Moderate. Suitable habitat present in the park. Recorded occurrence in the park. It is a covered species in the Santa Clara Valley Habitat Plan, with established protective conditions required for covered activities.
Hall's bush-mallow <i>(Malacothammus hallii)</i>	--/--/1B.2	Chaparral, some populations on serpentine; elevation 10-550m.	Moderate. Suitable habitat present in the park. Recorded occurrence in the park.

5.0 SPECIAL-STATUS BIOLOGICAL RESOURCES

Species	Status (Federal/ State/Other)	Suitable Habitat Description	Potential to be Affected by the Trails Master Plan
Indian Valley bush-mallow <i>(Malacothamnus aboriginum)</i>	--/--/1B.2	Chaparral and cismontane woodland; rocky, often burned areas; prefers granitic outcrops and sandy bare soil; elevation 150-1700m.	Low. Marginally suitable habitat present in the park.
Loma Prieta hoita <i>(Hoita strobilina)</i>	--/--/1B.1	Wet areas on serpentine substrate in chaparral, cismontane woodland, and riparian woodland; elevation 30-860m.	Moderate. Suitable habitat present in the park. Recorded occurrence in the park. It is a covered species in the Santa Clara Valley Habitat Plan, with established protective conditions required for covered activities.
Metcalf Canyon jewel-flower <i>(Streptanthus albidus ssp. albidus)</i>	FE/--/1B.1	Valley and foothill grassland. Endemic to Santa Clara County. Relatively open areas in dry grassy meadows on serpentine soils/serpentine balds; elevation 45-245m.	Moderate. Suitable habitat present in the park. It is a covered species in the Santa Clara Valley Habitat Plan, with established protective conditions required for covered activities.
Minute pocket moss <i>(Fissidens pauperculus)</i>	--/--/1B.2	North coast coniferous forest. Moss growing on damp soil along the coast; elevation 10-100m.	Unlikely. Due to habitat preference and geographic distribution, no suitable habitat present in the park.
Monterey spineflower <i>(Chorizanthe pungens var. pungens)</i>	FT/--/1B.2	Sandy openings in maritime chaparral, cismontane woodland, coastal dunes, coastal scrub, and valley and foothill grassland; elevation 3-450m.	Unlikely. Due to habitat preference and geographic distribution, no suitable habitat present in the park.
Most beautiful jewel-flower <i>(Streptanthus albidus ssp. peramoenus)</i>	--/--/1B.2	Chaparral, valley and foothill grassland, and cismontane woodland; serpentine outcrops, on ridges and slopes; elevation 120-730m.	Moderate. Suitable habitat present in the park. Recorded occurrence in the park. It is a covered species in the Santa Clara Valley Habitat Plan, with established protective conditions required for covered activities.
Mt. Diablo phacelia <i>(Phacelia phacelioides)</i>	--/--/1B.2	Rocky sites in chaparral and cismontane woodland; elevation 500-1370m.	Moderate. Suitable habitat present in the park.

Species	Status (Federal/ State/Other)	Suitable Habitat Description	Potential to be Affected by the Trails Master Plan
Mt. Hamilton coreopsis <i>(Leptosyne hamiltonii)</i>	--/--/1B.2	Rocky sites in cismontane woodland; prefers steep shale talus with open southwestern exposure; elevation 550-1300m.	Unlikely. Due to habitat preference and geographic distribution, no suitable habitat present in the park.
Mt. Hamilton fountain thistle <i>(Cirsium fontinale var. campylon)</i>	--/--/1B.2	Serpentine seeps in chaparral, cismontane woodland, and valley and foothill grassland; elevation 100-890m.	Moderate. Suitable habitat present in the park. Recorded occurrence in the park. It is a covered species in the Santa Clara Valley Habitat Plan, with established protective conditions required for covered activities.
Mt. Hamilton lomatium <i>(Lomatium observatorium)</i>	--/--/1B.2	Cismontane woodland; open to partially shaded openings in pine/oak woodland with sedimentary Franciscan rocks and volcanic substrate; elevation 1219-1330m.	Unlikely. Due to habitat preference and geographic distribution, no suitable habitat present in the park.
Pink creamsacs <i>(Castilleja rubicundula ssp. rubicundula)</i>	--/--/1B.2	Chaparral, meadows and seeps, and valley and foothill grassland. Openings in chaparral or grasslands on serpentine soils; elevation 20-900m.	Moderate. Suitable habitat present in the park.
Robust spineflower <i>(Chorizanthe robusta var. robusta)</i>	FE/--/1B.1	Sandy or gravelly openings in cismontane woodland, coastal dunes, and coastal scrub; prefers sandy terraces and bluffs or loose sand; elevation 3-300m.	Unlikely. Due to habitat preference and geographic distribution, no suitable habitat present in the park.
Rock sanicle <i>(Sanicula saxatilis)</i>	--/SR/1B.2	Rocky sites in broadleaved upland forest, chaparral, and valley and foothill grassland; prefers bedrock outcrops and talus slopes; elevation 620-1175m.	Unlikely. Due to habitat preference and known elevation range, no suitable habitat present in the park.
Round-leaved filaree <i>(California macrophylla)</i>	--/--/1B.1	Clay sites in cismontane woodland, valley and foothill grassland; elevation 15-1200m.	Low. Marginally suitable habitat present in the park.

5.0 SPECIAL-STATUS BIOLOGICAL RESOURCES

Species	Status (Federal/ State/Other)	Suitable Habitat Description	Potential to be Affected by the Trails Master Plan
Saline clover <i>(Trifolium hydrophilum)</i>	--/--/1B.2	Marshes and swamps, valley and foothill grassland, and vernal pools. Prefers wet, alkaline sites; elevation 0-300m.	Low. Marginally suitable habitat present in the park.
San Francisco collinsia <i>(Collinsia multicolor)</i>	--/--/1B.2	Sometimes serpentine sites in closed cone coniferous forest and coastal scrub; prefers decomposed shale (mudstone) mixed with humus; elevation 30-250m.	Moderate. Suitable habitat present in the park.
San Francisco popcornflower <i>(Plagiobothrys diffusus)</i>	--/SE/1B.1	Valley and foothill grassland, coastal prairie. Historically from grassy slopes with marine influence; elevation 60-485m.	Unlikely. Due to known geographic distribution, no suitable habitat present in the park.
Santa Clara Valley dudleya <i>(Dudleya abramsii ssp. setchellii)</i>	FE/--/1B.1	Valley and foothill grassland, cismontane woodland. Endemic to serpentine outcrops and on rocks within grassland or woodland of Santa Clara County; elevation 80-335m.	Moderate. Suitable habitat present in the park. Recorded occurrence in the park. It is a covered species in the Santa Clara Valley Habitat Plan, with established protective conditions required for covered activities.
Santa Cruz clover <i>(Trifolium buckwestiorum)</i>	--/--/1B.1	Broadleaved upland forest, cismontane woodland, and coastal prairie; prefers moist grassland and gravelly margins; elevation 105-610m.	Unlikely. Due to known geographic distribution, no suitable habitat present in the park.
Santa Cruz Mountains beardtongue <i>(Penstemon rattanii var. kleei)</i>	--/--/1B.2	Chaparral and lower montane coniferous forest; sandy shale slopes, transition zone between forest and chaparral; elevation 400-1100m.	Low. Marginally suitable habitat present in the park.
Santa Cruz Mountains pussypaws <i>(Calyptridium parryi var. hesseae)</i>	--/--/1B.1	Sandy or gravelly openings in chaparral and cismontane woodland; elevation 305-1530m.	Low. Marginally suitable habitat present in the park.

Species	Status (Federal/ State/Other)	Suitable Habitat Description	Potential to be Affected by the Trails Master Plan
Santa Cruz tarplant <i>(Holocarpha macradenia)</i>	FT/SE/1B.1	Coastal prairie, coastal scrub, valley and foothill grassland; often on clay or sandy soils; elevation 10-220m.	Unlikely. Due to known geographic distribution, no suitable habitat present in the park.
Santa Cruz wallflower <i>(Erysimum teretifolium)</i>	FE/SE/1B.1	Lower montane coniferous forest and chaparral. Pine Parkland Area, inland marine sands (Zayante coarse sand); elevation 120-610m.	Unlikely. Due to geographic range and substrate restrictions of species, no suitable habitat present in the park.
Scotts Valley polygonum <i>(Polygonum hickmanii)</i>	FE/SE/1B.1	Valley and foothill grassland. Purisima sandstone or mudstone with a thin soil layer, vernal moist due to runoff; elevation 210-250m.	Unlikely. Due to geographic range and substrate restrictions of species, no suitable habitat present in the park.
Scotts Valley spineflower <i>(Chorizanthe robusta var. hartwegii)</i>	FE/--/1B.1	Meadows, valley and foothill grassland. In grasslands with mudstone and sandstone outcrops; elevation 230-245m.	Unlikely. Due to geographic range and substrate restrictions of species, no suitable habitat present in the park.
Showy golden madia <i>(Madia radiata)</i>	--/--/1B.1	Valley and foothill grassland, cismontane woodland, and chenopod scrub. Mostly on adobe clay in grassland or among shrubs; elevation 25-1125m.	Low. Marginally suitable habitat present in the park.
Smooth lessingia <i>(Lessingia micradenia var. glabrata)</i>	--/--/1B.2	Chaparral; endemic to Santa Clara County. Serpentine, often on roadsides; elevation 120-485m.	Moderate. Suitable habitat present in the park. Recorded occurrence in the park. It is a covered species in the Santa Clara Valley Habitat Plan, with established protective conditions required for covered activities.
Tiburon paintbrush <i>(Castilleja affinis ssp. neglecta)</i>	FE/ST/1B.2	Valley and foothill grassland (serpentine); elevation 60-400m.	Moderate. Suitable habitat present in the park. It is a covered species in the Santa Clara Valley Habitat Plan, with established protective conditions required for covered activities.



5.0 SPECIAL-STATUS BIOLOGICAL RESOURCES

Species	Status (Federal/ State/Other)	Suitable Habitat Description	Potential to be Affected by the Trails Master Plan
White-rayed pentachaeta <i>(Pentachaeta bellidiflora)</i>	FE/SE/1B.1	Valley and foothill grassland; open dry, rocky slopes and grassy areas, often on soils derived from serpentine bedrock; elevation 35-620m.	Unlikely. Due to known geographic range of species, no suitable habitat present in the park.
Woodland woollythreads <i>(Monolopia gracilens)</i>	--/--/1B.2	Serpentine, open sites in broadleaved upland forest, chaparral, cismontane woodland, North Coast coniferous forest, valley and foothill grassland; elevation 100-1200m.	Moderate. Suitable habitat present in the park.

Sources: CDFW 2013, CNPS 2013

**Listing Status Codes:**

Federal (USFWS)

- FE - Listed as Endangered under the Federal Endangered Species Act.
- FT - Listed as Threatened under the Federal Endangered Species Act.

State (CDFW)

- SE - Listed as Endangered under the California Endangered Species Act.
- ST - Listed as Threatened under the California Endangered Species Act.
- SR - Listed as Rare under the California Endangered Species Act.

Other (CNPS)

- List 1B: Plants that are considered Rare, Threatened, or Endangered in California and elsewhere.
- List 2: Plants that are considered Rare, Threatened, or Endangered in California, but more common elsewhere.

The remaining special-status plant species that are known to occur in the general vicinity of the project site and therefore are presented in Table 1, but are not expected to be impacted by the proposed project due to lack of suitable habitat in Calero County Park, are not listed here or included in the impact and mitigation measure discussion. Refer to Section 6, Impacts and Mitigation Measures, for recommendations intended to address potential project impacts to special-status plant species.

### 5.3 SPECIAL-STATUS ANIMALS

Special-status animal species known to occur in the general vicinity of the project site were evaluated for potential to occur on the project site. Information on special-status animals, including listing status, suitable habitat conditions, and potential to occur on the project site and be impacted by the Trails Master Plan, is presented in [Table 2, Special-Status Animals Potentially Occurring in the Project Vicinity](#).

As shown in Table 2, Santa Clara Valley Habitat Plan covered animal species with potential to be impacted by the proposed Trails Master Plan project include Bay checkerspot butterfly (*Euphydryas editha bayensis*); burrowing owl (*Athene cunicularia*); California red-legged frog (*Rana draytonii*); California tiger salamander (*Ambystoma californiense*); foothill yellow-legged frog (*Rana boylei*); tricolored blackbird (*Agelaius tricolor*); and western pond turtle (*Emys marmorata*). Appendix D of the Santa Clara Valley Habitat Plan provides detailed natural history accounts for each of these seven covered species.

In addition, the proposed project also has low potential to impact six species that are not federally or state-listed, but considered Species of Special Concern or Fully Protected Species by the CDFW. These species include American badger (*Taxidea taxus*); black swift (*Cypseloides niger*); coast horned lizard (*Phrynosoma blainvillii*); golden eagle (*Aquila chrysaetos*); northern harrier (*Circus cyaneus*); and white-tailed kite (*Elanus leucurus*).

Finally, the federally Delisted and state-listed Endangered and Fully Protected bald eagle (*Haliaeetus leucocephalus*) was observed on the site during the survey and the project has a low potential to impact this species. Its diet consists mainly of fish, especially salmon, but also includes waterfowl, seagulls, small mammals, and carrion. Due to its preference for salmon, the species chooses aquatic ecosystems for nesting and over-wintering. In rare instances the species may also choose prairies, if adequate food is available. Bald eagles usually choose nest sites in large trees near a relatively undisturbed shoreline. The nesting site must be able to support a very large nest that is five feet wide and three feet deep, and is often used repeatedly. Bald eagle courtship begins in late winter or early spring and lasts about a month before egg-laying.

**Table 2 Special-Status Animals Potentially Occurring in the Project Vicinity**

Species	Status (Federal / State)	Suitable Habitat Description	Potential to be Affected by the Trails Master Plan
American badger <i>(Taxidea taxus)</i>	--/SSC	Most abundant in drier, open stages of most shrub, forest, and herbaceous habitats. Need sufficient food and open, uncultivated ground with friable soils to dig burrows. Prey on burrowing rodents.	Low. Highly suitable grassland habitat occurs in the park. This mostly nocturnal species would not be expected to be above ground during trail building/construction activities. New trails and facilities will be sited in the field prior to construction to avoid potential den sites/active burrow habitat.
American peregrine falcon <i>(Falco peregrinus anatum)</i>	FD/SD, SFP	Occurs near wetlands, lakes, rivers, or other waters on cliffs, banks, dunes, mounds, and human-made structures. Nest consists of a scrape on a depression or ledge in an open site.	Unlikely. Suitable cliff breeding habitat is not present in proposed impact areas. If nesting near trail building/construction activities, standard nesting bird mitigation measures would avoid impacts to this species during nesting season.
Bald eagle <i>(Haliaeetus leucocephalus)</i>	FD/SE, SFP	Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within one mile of water. Nests in large, old-growth, or dominant live tree with open branches, especially Ponderosa pine. Roosts commonly in winter.	Low. Observed on the site at the reservoir during survey. However, if active nesting is observed during pre-construction surveys during the breeding season, standard nesting bird mitigation measures would avoid impacts to this species.
Bay checkerspot butterfly <i>(Euphydryas editha bayensis)</i>	FT/--	Restricted to native grasslands on outcrops of serpentine soil in the vicinity of San Francisco Bay. <i>Plantago erecta</i> is the primary host plant; <i>Castilleja densiflora</i> and <i>C. exserta</i> are secondary host plants.	Moderate. Suitable habitat occurs in the park. Although new trails avoid serpentine areas as is practical, this species may be affected by proposed trails/facilities. Species is covered under the Santa Clara Valley Habitat Plan, with established protective conditions required for covered activities.

Species	Status (Federal / State)	Suitable Habitat Description	Potential to be Affected by the Trails Master Plan
Black swift <i>(Cypseloides niger)</i>	--/SSC	Breeds in small colonies on cliffs behind or adjacent to waterfalls in deep canyons and sea bluffs above surf; forages widely.	Low. Although the species may occur in the park, suitable cliff breeding habitat is not present in proposed new infrastructure areas. If nesting near trail building/construction activities, standard nesting bird mitigation measures would avoid impacts to this species during nesting season.
Burrowing owl <i>(Athene cunicularia)</i>	--/SSC	Open, dry, annual or perennial grasslands, desert, or scrubland, with available small mammal burrows.	Moderate. Suitable habitat occurs in the park. Recorded about two miles from park in serpentine habitat. This species may be affected. Species is covered under the Santa Clara Valley Habitat Plan, with established protective conditions required for covered activities.
California red-legged frog <i>(Rana draytonii)</i>	FT/SSC	Rivers, creeks, and stock ponds with pools and overhanging vegetation. Requires dense, shrubby or emergent riparian vegetation, and prefers wetlands comprised of numerous short riffles and pools greater than 2½ feet in depth, with slow moving, well oxygenated water. Species aestivates (remains dormant during summer) in small mammal (especially ground squirrel) burrows, cracks in the soil, and moist leaf litter.	Moderate. Suitable aquatic habitat is present at some proposed stream crossings and in temporary seasonal wetlands. The placement of new stream crossings would not directly remove aquatic habitat, but has potential to temporarily impact suitable upland (burrow) habitat. Species is covered under the Santa Clara Valley Habitat Plan, with established protective conditions required for covered activities.
California tiger salamander <i>(Ambystoma californiense)</i>	FT/ ST	Grasslands, open oak woodlands, and seasonal pools and stock ponds in central and coastal California from Santa Barbara to Sonoma Counties. Needs underground refuges, especially ground squirrel burrows. Requires vernal pools or other seasonal water sources that persist into late March for breeding.	Moderate. Suitable aquatic habitat is present at some proposed stream crossings and in temporary seasonal wetlands. The placement of new stream crossings would not directly remove aquatic habitat, but has potential to temporarily impact suitable upland (burrow) habitat. Species is covered under the Santa Clara Valley Habitat Plan, with established protective conditions required for covered activities.

5.0 SPECIAL-STATUS BIOLOGICAL RESOURCES

Species	Status (Federal / State)	Suitable Habitat Description	Potential to be Affected by the Trails Master Plan
Coast horned lizard <i>(Phrynosoma blainvillii)</i>	--/SSC	Frequents a wide variety of habitats; most common in lowlands along sandy washes with scattered low bushes. Requires open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects for feeding.	Low. Suitable habitat is present in the park. However, new trail building activities would avoid direct impacts to species due to trail crew watchfulness, and other new facilities would be located in generally unsuitable, disturbed areas and annual grassland habitat.
Coho salmon <i>(Oncorhynchus kisutch)</i>	FE/SE	Freshwater habitats; require beds of loose, silt-free, coarse gravel for spawning, covered cool water, and sufficient oxygen levels.	Unlikely. No suitable habitat present.
Foothill yellow-legged frog <i>(Rana boylei)</i>	--/SSC	Partly shaded, shallow streams and riffles with rocky substrate in a variety of habitats. Requires at least some cobble-sized substrate for egg-laying and 15 weeks of available water to attain metamorphosis.	Moderate. Suitable aquatic habitat is present at some proposed stream crossings. The placement of new stream crossings would not remove aquatic habitat. Species is covered under the Santa Clara Valley Habitat Plan, with established protective conditions required for covered activities.
Golden eagle <i>(Aquila chrysaetos)</i>	--/SFP	Rolling foothill mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range. Also uses large trees in open areas.	Low. Observed nesting at an electric utility tower on the site during survey. However, if active nesting is observed during pre-construction surveys during the breeding season, standard nesting bird mitigation measures would avoid impacts to this species.
Northern harrier <i>(Circus cyaneus)</i>	--/SSC	Found near coastal salt and freshwater marshes. Nests and forages in grasslands. Nests on ground in shrubby vegetation, usually at marsh edge; nest built of a large mound of sticks in wet areas.	Low. Observed adjacent to the site during survey. However, if active nesting is observed during pre-construction surveys during the breeding season, standard nesting bird mitigation measures would avoid impacts to this species.

Species	Status (Federal / State)	Suitable Habitat Description	Potential to be Affected by the Trails Master Plan
Ohlone tiger beetle <i>(Cicindela ohlone)</i>	FE/--	Remnant native grasslands with California oatgrass and purple needlegrass in Santa Cruz County. Substrate is poorly drained clay or sandy clay soil over bedrock of Santa Cruz mudstone.	Unlikely. No suitable habitat present.
Pallid bat <i>(Antrozous pallidus)</i>	--/SSC	Deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	Unlikely. Although the species may occur in the park, suitable habitat would not be removed by the project. Even if present, not expected to be impacted by trail building/construction activities.
Ring-tail <i>(Bassariscus astutus)</i>	--/SFP	Occurs in riparian habitats and brush stands of forest and shrub habitats. Nests in rock recesses, hollow trees, logs, snags, abandoned burrows, or woodrat nests. Prefers rocky areas or riparian habitats, close to a permanent water source.	Unlikely. Although suitable habitat is present in the park, species is not known to occur in the project vicinity. Widely distributed and therefore not tracked by the CNDDDB.
San Francisco dusky-footed woodrat <i>(Neotoma fuscipes annectens)</i>	--/SSC	Forest habitats of moderate canopy and moderate to dense understory. May prefer chaparral and redwood habitats. Constructs nests of shredded grass, leaves, and other material. May be limited by availability of nest-building materials.	Unlikely. Although the species may occur in the park, new trail building would not impact species due to trail crew watchfulness for nests, and other new facilities would be located in unsuitable, disturbed areas and non-native grassland habitat.

5.0 SPECIAL-STATUS BIOLOGICAL RESOURCES

Species	Status (Federal / State)	Suitable Habitat Description	Potential to be Affected by the Trails Master Plan
San Joaquin kit fox <i>(Vulpes macrotis mutica)</i>	FE/ST	Annual grasslands or grassy open stages with scattered shrubby vegetation. Needs loose-textured sandy soils for burrowing, and suitable prey base.	Unlikely. Suitable grassland habitat is present in the park. There is an occurrence record about five miles to the northeast of the park from the early 1970s, but the species has not been recorded in the project vicinity since. Current distribution records indicate that this sub-population may be extirpated. Even in the unlikely event species is present, the species is not expected to be impacted by trail building/construction activities. Species is covered under the Santa Clara Valley Habitat Plan, with established protective conditions required for covered activities.
Steelhead <i>(Oncorhynchus mykiss irideus)</i>	FT/SSC	Coastal stream with spawning gravel.	Unlikely. No suitable habitat present.
Tricolored blackbird <i>(Agelaius tricolor)</i>	--/SSC	Areas adjacent to open water and access to protected nesting substrate.	Low. Suitable habitat is present in the park. However, no suitable nesting habitat would be removed by the project. If nesting near trail building/construction activities, standard nesting bird mitigation measures would avoid impacts to this species during nesting season. Species is covered under the Santa Clara Valley Habitat Plan, with established protective conditions required for covered activities.
Western pond turtle <i>(Emys marmorata)</i>	--/SSC	Ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. Need basking sites and suitable upland habitat for egg-laying (sandy banks or grassy open fields).	Low. Suitable aquatic habitat that may be impacted by the project is present only at proposed trail stream crossings. Species is covered under the Santa Clara Valley Habitat Plan, with established protective conditions required for covered activities.

Species	Status (Federal / State)	Suitable Habitat Description	Potential to be Affected by the Trails Master Plan
White-tailed kite <i>(Elanus leucurus)</i>	--/SFP	Rolling foothills and valley margins with scattered oaks, and river bottomlands or marshes next to deciduous woodlands. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	Low. Observed on the site during survey. However, if active nesting is observed during pre-construction surveys during the breeding season, standard nesting bird mitigation measures would avoid impacts to this species.
Zayante band-winged grasshopper <i>(Trimerotropis infantilis)</i>	FE/--	Isolated sandstone deposits in the Santa Cruz Mountains, Zayante Hills ecosystem.	Unlikely. No suitable habitat present.

Source: CDFW 2013

**Listing Status Codes:**

Federal (USFWS)

- FE - Listed as Endangered under the Federal Endangered Species Act.
- FT - Listed as Threatened under the Federal Endangered Species Act.
- FD – Delisted under the Federal Endangered Species Act.

State (CDFW)

- SE - Listed as Endangered under the California Endangered Species Act.
- ST - Listed as Threatened under the California Endangered Species Act.
- SD – Delisted under the California Endangered Species Act.
- SSC - Species of Special Concern.
- SFP – Fully Protected species under the California Fish and Game Code.



Incubation lasts about a month and fledging takes place when the young are about three months old; parental care may last between another month and three months. Bald eagles have phased plumage, with adults not gaining the distinctive white head until after the fourth or fifth season. Most bald eagles migrate from their breeding area hundreds of miles to their wintering grounds, taking several months to make the journey, while some remain near their breeding grounds, depending upon prey availability. Potential threats to bald eagles include habitat destruction, shooting, and human disturbance at nest sites. An adult bald eagle was observed during the field survey and it is possible, but not currently known if bald eagles are breeding in the park. The project site contains suitable breeding habitat and foraging opportunities for this species.

The remaining special-status animal species that are known to occur in the general vicinity of the project site and therefore are presented in Table 2, but are not expected to be impacted by the proposed project due to lack of suitable habitat in Calero County Park, are not listed here or included in the impact and mitigation measure discussion. Refer to Section 6, Impacts and Mitigation Measures, for recommendations intended to address potential project impacts to special-status animal species.

### ***Nesting Migratory Birds and Raptors***

Vegetation on the project site provides suitable foraging and nesting opportunities for bird species protected under the Migratory Bird Treaty Act. Human disturbance, such as proximity to the nest, excessive noise around the nest, and loss of foraging grounds, may lead to nest failure. There is a moderate to high probability that nesting birds, including raptors, could occur in and/or adjacent to proposed impact areas during the breeding bird season (February 1 to August 31).

## **5.4 SPECIAL-STATUS NATURAL COMMUNITIES**

Special-status natural communities are those that are considered rare in the region, support special-status plant or animal species, or receive regulatory protection (i.e., wetlands under Section 404 of the Clean Water Act and/or Section 1600 of the California Fish and Game Code). In addition, the CDFW has designated a number of communities as rare; these communities are given the highest inventory priority. Special-status natural communities present on the site include oak woodlands, riparian/marsh/wetland areas, and serpentine grassland and chaparral plant communities.

## **5.5 JURISDICTIONAL WETLANDS AND WATERS**

Wetlands and riparian habitats are considered special-status by several regulatory agencies including the USACE, CDFW, RWQCB, and USFWS (the role these various federal and state agencies play in regulating wetlands is discussed in detail above in the Regulatory Setting section of this report). There are wetlands and natural drainages on the project site; however, project improvements in these areas will be limited to span bridge stream crossings installed above high water mark, and therefore, the proposed project is not to impact any potentially jurisdictional wetland features or Waters of the U.S. or State.

## **5.6 WILDLIFE MOVEMENT CORRIDORS**

Wildlife movement includes migration (i.e., usually movement one way per season), inter-population movement (i.e., long-term dispersal and genetic flow), and small travel pathways (i.e., daily movement within an animal's territory). While small travel pathways usually facilitate movement for daily home range activities such as foraging or escape from predators, they also provide connection between outlying populations and core populations, allowing an increase in gene flow between populations. These linkages among habitats can extend for miles and occur on a large scale throughout the greater region. Habitat linkages facilitate movement between populations located in discrete locales and populations located within larger habitat areas.

The access roads, trails, and natural drainages present at Calero County Park offer important regional wildlife movement opportunities throughout the project site. Project implementation is not expected to adversely impact wildlife movement through the park, and actually is expected to benefit wildlife movement by greatly expanding the existing trail system to better link the park to adjacent open space areas. The new trails will not be fenced and will not have night lighting.

## **5.7 PROTECTED TREES**

To the greatest extent practicable, new trails will be sited to avoid and retain protected trees. However, limited tree removal will be necessary to build the new trail along the south side of the reservoir in the vicinity of Cherry Cove. Any tree removals will be subject to the County's tree removal permitting process and will likely require mitigation. No heritage trees will be removed.

It should be noted that the Trails Master Plan includes Best Management Practices to discourage the spread of Sudden Oak Death Syndrome (SOD), which is not currently known to occur in the park (Bellinger Foster Steinmetz 2013).

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## 6.0

# IMPACTS AND MITIGATION MEASURES

The proposed Trails Master Plan will have some beneficial impacts on biological resources, as some existing trail segments will be closed and restored to native habitat. This section identifies the potential adverse impacts of the proposed project on biological resources, based on the creation of new trails (with several associated new span bridge stream crossings) and limited construction of other new facilities.

The impact areas for the proposed new trail corridors and other facilities are generally identified, but actual alignments will be determined by a qualified County trail-building crew in the field to avoid/minimize impacts to special-status biological resources. The CEQA standards of significance were used to determine potentially significant or significant impacts. Recommended mitigation measures were then identified to reduce any potentially significant impacts to biological resources due to the proposed project to a less than significant level.

## 6.1 SANTA CLARA VALLEY HABITAT PLAN COMPLIANCE

The proposed Trails Master Plan outlines the general project compliance approach with the Santa Clara Valley Habitat Plan (Bellinger Foster Steinmetz 2013):

Located within the permit area of the Santa Clara Valley Habitat Plan (Valley Habitat Plan) and identified as a “covered activity”, the Trails Master Plan project would be subject to the conditions of the approved Valley Habitat Plan and permits.

As a public agency Permittee, the County of Santa Clara (which includes Santa Clara County Parks, County Roads and Airport Department and other County departments) would be subject to a project compliance process for public projects covered under the Valley Habitat Plan. To fulfill the conditions of the Valley Habitat Plan, Santa Clara County Parks would submit a Habitat Plan application package for the implementation of the Trails Master Plan to the new Habitat Agency and pay appropriate Habitat Plan mitigation impact fees to the Habitat Agency. In lieu of paying mitigation impact fees, the County of Santa Clara would enroll portions of Calero County Park, including Rancho San Vicente lands, in a new reserve system for the Valley Habitat Plan, whereby enrolled parklands would need to comply with the Valley Habitat Plan's conservation strategies and permit conditions. New trails, staging areas and other recreational facilities will follow the Valley Habitat Plan's requirements and guidelines including, but not limited to, establishing trails on existing service/ranch roads to minimize the need for new ground-disturbing activities. Chapter 3 provides the Valley Habitat Plan requirements and guidelines for the development of new trails, staging areas and recreational facilities on future parklands that would be enrolled in the new reserve system.

Consistent with the Valley Habitat Plan conservation strategy, public access would be allowable on future reserve lands that are owned by Santa Clara County Parks, whereby a recreation plan will be developed to manage public access to reserves. The Final Calero County Park Trails Master Plan provides the basic planning framework for the future recreation plan for lands at Calero County Park enrolled in the reserve system. Recreation plans will be reviewed by the new Santa Clara Valley Habitat Agency for consistency with Condition 9 of the Valley Habitat Plan and integrated into the applicable reserve unit management plan, which will be reviewed and approved by the Permittees (i.e. County Parks) and the Wildlife Agencies.

The Calero County Park Trails Master Plan is a covered activity as described in Chapter 2 (pages 2-91 through 2-93), County Parks Projects, of the Santa Clara Valley Habitat Plan (ICF International 2012). This section covers “trail and fire road development, and installation of related infrastructure such as bridges, staging areas, restrooms, parking lots, and signage” and “development of regional recreation opportunities and supporting infrastructure including ... staging areas including restrooms, equestrian staging areas including water troughs, parking ... gateway sites (e.g., trailheads, park entrances, kiosks), paved and dirt roads...”, etc. The County

as a Valley Habitat Plan permittee will need to submit a Valley Habitat Plan Application Package prior to project implementation. The Trails Master Plan is described on page 2-29 of the Valley Habitat Plan (ICF International 2012):

Calero County Park is located in the eastern foothills of the Santa Cruz Mountains, south San José. The approximately 4,455-acre park offers picnicking, boating and fishing on Calero Reservoir and 18.6 miles of trails in the adjoining oak woodlands. The park contains a trails staging area at the Park office near McKean Road. Additional access is available from the Santa Clara County Open Space Authority (Open Space Authority) Rancho Canada del Oro staging area on Casa Loma Road. Certain uses, such as equestrian group camping, horse and cart activities and special events are by permit only.

County Parks is developing a Trails Master Plan for Calero County Park to incorporate the 966-acre Rancho San Vicente property acquired in November 2009 into the park (this parcel is also expected to be enrolled in the Habitat Plan Reserve System; see Chapter 5 for interim conservation actions). The Trails Master Plan will also consider expanding the types of trail uses allowed in the park in accordance with provisions of the Santa Clara County Parks and Recreation System: Strategic Plan which states that the purpose of a park-specific Trails Master Plan is “to identify opportunities to increase multiple-use trails and to ensure consistency with the Countywide Trails Master Plan and Strategic Plan”.

Portions of this park have been grazed in the past. A Grazing Management Plan was completed for the Canada del Oro property of Calero County Park in 2004. Infrastructure to support implementation of the Grazing Plan is under development. The Rancho San Vicente property of Calero is currently grazed under a managed grazing program through a grazing license with a private operator.

In support of the Valley Habitat Plan, the County park system will be enrolling portions of certain parks in the proposed Reserve System. Table 5-5 of the Valley Habitat Plan estimates that 1,690 of the 4,455 total acres of Calero County Park and up to all 966 acres of Rancho San Vicente are proposed for the Valley Habitat Plan Reserve System (ICF International 2012). However, the final number of acres to be enrolled will be based upon further refinement of areas appropriate for Reserve System designation.

The project design and analysis process included a detailed review of the conditions for covered activities under the Valley Habitat Plan (Chapter 6), ensuring that the Trails Master Plan project design practices and features would incorporate special-status resource impact avoidance and minimization measures directly into plans for new park infrastructure. This information is summarized below.

Most conditions on covered activities that are applicable to the proposed project would be met by standard Best Management Practices regularly followed by park management and maintenance staff. To protect natural resources within its parks, the County of Santa Clara, Parks and Recreation Department follows established Natural Resource Management Guidelines for different resource categories, such as wetlands, special-status species, non-native and invasive plant/pest management, etc. In addition, the Department follows refined trail maintenance and closure procedures, along with numerous detailed Best Management Practices specific to performing maintenance activities in and adjacent to water courses.

The Department also has a CDFW lake/streambed alteration agreement (No. 1600-2012-0013-3) permitting routine maintenance for 28 County park units, including Calero. It allows specific activities including culvert replacement, repair/maintenance, relocation, and removal; bridge/ford replacement and repair/maintenance; road and trail drainage/erosion control and minor relocation; dam maintenance; vegetation removal/routine clearing for water supplies and park facilities/structures; fire control; lake/pond/channel maintenance; and habitat enhancement activities. These approvals are subject to numerous measures and conditions to protect biological resources.

To protect special-status biological resources, on-the-ground alignment of each new trail segment or facility footprint will be defined in phases and determined/flagged prior to construction. For each trail/facility construction phase, focused species surveys will be conducted concurrent with the determination of trail positioning to avoid any special-status plant populations, minimize tree removals, limit impacts to sensitive communities and wildlife habitats, etc.

For example, to protect water quality, project construction in riparian areas will be scheduled to avoid the wet season (generally November through April). Regarding rural development design, new kiosks and restrooms would have low-intensity lighting and would comply with the Green Building Policy and Leadership in Energy and Environmental Design (LEED) program requirements and the County's Green Building Policy for Government Buildings (adopted by the Board of Supervisors on April 25, 2006 and amended on September 29, 2009).

As the County (including the Parks and Recreation Department) is a Valley Habitat Plan permittee that helped to develop the detailed compliance conditions to protect natural resources, all applicable Valley Habitat Plan conditions for the Trails Master Plan project will be met

through continued implementation of standard Best Management Practices and County policies employed by County Park staff.

The Valley Habitat Plan's conditions on covered activities would apply to proposed trail routes that have potential impacts to the covered species. During project implementation, specific trail alignments will be designed to avoid and minimize impacts to sensitive habitat communities. Once further refinements in the field have been identified with these specific trail alignments, it is anticipated that the conditions will be applied if potential impacts are anticipated to the species covered under the Valley Habitat Plan.

For covered species shown in Tables 1 and 2, with potential to be affected by the proposed project, [Table 3, Valley Habitat Plan Covered Species: Conditions on Covered Activities](#), shows the conditions that will be followed during each phase of the project.

Implementation of the applicable covered species conditions required by the Valley Habitat Plan shown in Table 3 as project design features will reduce potential project impacts to covered species to a less than significant level, and no further mitigation is required for these species.

### **Mitigation Measure for Santa Clara Valley Habitat Plan Covered Species**

BIO-1. To minimize/avoid impacts to Santa Clara Valley Habitat Plan covered species, all applicable conditions listed in Table 3 for each covered species with potential to be impacted will be implemented during each phase of the project.

## **6.2 SPECIAL-STATUS PLANTS**

Due to the extensive, high quality habitat present at the project site, especially found on serpentine soils that support endemic species, construction of proposed new trails and other facilities has the potential to impact many special-status plant species that do or may occur on the site due to the presence of suitable habitat. In addition to the conditions for each Santa Clara Valley Habitat Plan covered plant species with potential to be impacted by the proposed project listed in Table 3, the proposed project has potential to impact many plant species considered special-status by the CNPS, shown in Table 1, and a very low potential to impact federally listed Endangered and CNPS Rare Plant Rank 1B Contra Costa goldfields, also shown in Table 1.



**Table 3 Valley Habitat Plan Covered Species: Conditions on Covered Activities**

<b>Covered Species</b>	<b>Applicable Valley Habitat Plan Condition(s), Tables, and Figures</b>	<b>Species Conditions on Covered Activities Excerpted from Final Santa Clara Valley Habitat Plan Executive Summary (Table ES-2)</b>
Coyote ceanothus	Condition 20: Avoid and Minimize Impacts to Covered Plant Occurrences; Condition 19: Plant Salvage when Impacts are Avoidable; Condition 9: Prepare and Implement a Recreation Plan; Condition 13: Serpentine and Associated Covered Species Avoidance and Minimization; Table 6-9: Survey Periods for Covered Plant Species; Table 3-6: Covered Plant Species and Land Cover Types; Figure 3-10: Santa Clara Valley Habitat Plan Land Cover	Development guidelines will ensure that impacts from covered activities are minimized (Condition 20). Plant surveys will be required during appropriate survey period (Table 6-9) if the project site occurs in an area mapped as land cover associated with coyote ceanothus (Table 3-6; Figure 3-10). Individuals to be removed by covered activities will be salvaged to the extent possible using appropriate plant salvage techniques and a new separate occurrence will be established in suitable habitat (Condition 19). The condition of each covered plant occurrence will be documented to ensure that occurrences are protected within the Reserve System are in as good or better condition than those lost to covered activities. Exotic plants and recreational use will be controlled within reserves to benefit the species (Condition 9). Covered activities will avoid serpentine land cover types whenever feasible during project planning (Condition 13). If serpentine cannot be avoided, minimization measures described in Condition 13 will be followed.
Fragrant fritillary	Condition 20: Avoid and Minimize Impacts to Covered Plant Occurrences; Condition 19: Plant Salvage when Impacts are Avoidable; Condition 9: Prepare and Implement a Recreation Plan; Condition 13: Serpentine and Associated Covered Species Avoidance and Minimization; Table 6-9: Survey Periods for Covered Plant Species; Table 3-6: Covered Plant	Development guidelines will ensure that impacts from covered activities are minimized (Condition 20). Plant surveys will be required during the appropriate survey period (Table 6-9) if the project site occurs in an area mapped as land cover associated with fragrant fritillary (Table 3-6; Figure 3-10). Occurrences to be removed by covered activities will be salvaged to the extent possible using appropriate plant salvage techniques and a new separate occurrence will be established in suitable habitat (Condition 19). The condition of each covered plant occurrence will be documented to ensure that occurrences are protected within the Reserve System are in as good or better condition than those lost to covered activities. Exotic plants and recreational use will be controlled in reserves to benefit the species (Condition 9). Covered activities will avoid serpentine land cover types whenever feasible during project

<b>Covered Species</b>	<b>Applicable Valley Habitat Plan Condition(s), Tables, and Figures</b>	<b>Species Conditions on Covered Activities Excerpted from Final Santa Clara Valley Habitat Plan Executive Summary (Table ES-2)</b>
	Species and Land Cover Types; Figure 3-10: Santa Clara Valley Habitat Plan Land Cover	planning (Condition 13). If serpentine cannot be avoided, minimization measures described in Condition 13 will be followed.
Loma Prieta hoita	Condition 20: Avoid and Minimize Impacts to Covered Plant Occurrences; Condition 19: Plant Salvage when Impacts are Avoidable; Condition 9: Prepare and Implement a Recreation Plan; Table 6-9: Survey Periods for Covered Plant Species; Table 3-6: Covered Plant Species and Land Cover Types; Figure 3-10: Santa Clara Valley Habitat Plan Land Cover	Development guidelines will ensure that impacts from covered activities are minimized (Condition 20). Plant surveys will be required during the appropriate survey period (Table 6-9) if the project site occurs in an area mapped as land cover associated with Loma Prieta hoita (Table 3-6; Figure 3-10). Occurrences to be removed by covered activities will be salvaged to the extent possible using appropriate plant salvage techniques and a new separate occurrence will be established in suitable habitat (Condition 19). The condition of each covered plant occurrence will be documented to ensure that occurrences are protected within the Reserve System are in as good or better condition than those lost to covered activities. Exotic plants and recreational use will be controlled in reserves to benefit the species (Condition 9).
Metcalf Canyon jewel-flower	Condition 20: Avoid and Minimize Impacts to Covered Plant Occurrences; Condition 19: Plant Salvage when Impacts are Avoidable; Condition 9: Prepare and Implement a Recreation Plan; Condition 13: Serpentine and Associated Covered Species Avoidance and Minimization; Table 6-9: Survey Periods for Covered Plant Species; Table 3-6: Covered Plant Species and Land Cover Types; Figure 3-10: Santa Clara Valley Habitat Plan Land Cover	Development guidelines will ensure that impacts from covered activities are minimized (Condition 20). Plant surveys will be required during the appropriate survey period (Table 6-9) if the project site occurs in an area mapped as land cover associated with Metcalf Canyon jewelflower (Table 3-6; Figure 3-10). Occurrences to be removed by covered activities will be salvaged to the extent possible using appropriate plant salvage techniques, and a new separate occurrence will be established in suitable habitat (Condition 19). The condition of each covered plant occurrence will be documented to ensure that occurrences are protected within the Reserve System are in as good or better condition than those lost to covered activities. Exotic plants and recreational use will be controlled within reserves to benefit the species (Condition 9). Covered activities will avoid serpentine land cover types whenever feasible during project planning (Condition 13). If serpentine cannot be avoided, minimization measures described in Condition 13 will be followed.

<b>Covered Species</b>	<b>Applicable Valley Habitat Plan Condition(s), Tables, and Figures</b>	<b>Species Conditions on Covered Activities Excerpted from Final Santa Clara Valley Habitat Plan Executive Summary (Table ES-2)</b>
Most beautiful jewel-flower	Condition 20: Avoid and Minimize Impacts to Covered Plant Occurrences; Condition 19: Plant Salvage when Impacts are Avoidable; Condition 9: Prepare and Implement a Recreation Plan; Condition 13: Serpentine and Associated Covered Species Avoidance and Minimization; Table 6-9: Survey Periods for Covered Plant Species; Table 3-6: Covered Plant Species and Land Cover Types; Figure 3-10: Santa Clara Valley Habitat Plan Land Cover	Development guidelines will ensure that impacts from covered activities are minimized (Condition 20). Plant surveys will be required during the appropriate survey period (Table 6-9) if the project site occurs in an area mapped as land cover associated with most beautiful jewel-flower (Table 3-6; Figure 3-10). Occurrences to be removed by covered activities will be salvaged to the extent possible using appropriate plant salvage techniques and a new separate occurrence will be established in suitable habitat (Condition 19). The condition of each covered plant occurrence will be documented to ensure that occurrences are protected within the Reserve System are in as good or better condition than those lost to covered activities. Exotic plants and recreational use will be controlled in reserves to benefit the species (Condition 9). Covered activities will avoid serpentine land cover types whenever feasible during project planning (Condition 13). If serpentine cannot be avoided, minimization measures described in Condition 13 will be followed.
Mt. Hamilton fountain thistle	Condition 20: Avoid and Minimize Impacts to Covered Plant Occurrences; Condition 19: Plant Salvage when Impacts are Avoidable; Condition 9: Prepare and Implement a Recreation Plan; Condition 13: Serpentine and Associated Covered Species Avoidance and Minimization; Table 6-9: Survey Periods for Covered Plant Species; Table 3-6: Covered Plant Species and Land Cover Types; Figure 3-10: Santa Clara Valley Habitat Plan Land Cover	Development guidelines will ensure that impacts from covered activities are minimized (Condition 20). Plant surveys will be required during the appropriate survey period (Table 6-9) if the project site occurs in an area mapped as land cover associated with Mt. Hamilton thistle (Table 3-6; Figure 3-10). Occurrences to be removed by covered activities will be salvaged to the extent possible using appropriate plant salvage techniques and a new separate occurrence will be established in suitable habitat (Condition 19). The condition of each covered plant occurrence will be documented to ensure that occurrences are protected within the Reserve System are in as good or better condition than those lost to covered activities. Exotic plants and recreational use will be controlled within reserves to benefit the species (Condition 9). Covered activities will avoid serpentine land cover types whenever feasible during project planning (Condition 13). If serpentine cannot be avoided, minimization measures described in Condition 13 will be followed.

<b>Covered Species</b>	<b>Applicable Valley Habitat Plan Condition(s), Tables, and Figures</b>	<b>Species Conditions on Covered Activities Excerpted from Final Santa Clara Valley Habitat Plan Executive Summary (Table ES-2)</b>
Santa Clara Valley dudleya	Condition 20: Avoid and Minimize Impacts to Covered Plant Occurrences; Condition 19: Plant Salvage when Impacts are Avoidable; Condition 9: Prepare and Implement a Recreation Plan; Condition 13: Serpentine and Associated Covered Species Avoidance and Minimization; Table 6-9: Survey Periods for Covered Plant Species; Table 3-6: Covered Plant Species and Land Cover Types; Figure 3-10: Santa Clara Valley Habitat Plan Land Cover	Development guidelines will ensure that impacts on Santa Clara Valley dudleya from covered activities are minimized (Condition 20). Plant surveys will be required during the appropriate survey period (Table 6-9) if the project site occurs in an area mapped as land cover associated with Santa Clara Valley dudleya (Table 3-6; Figure 3-10). Occurrences to be removed by covered activities will be salvaged to the extent possible using appropriate plant salvage techniques, and a new separate occurrence will be established in suitable habitat (Condition 19). The condition of each covered plant occurrence will be documented to ensure that occurrences are protected within the Reserve System are in as good or better condition than those lost to covered activities. Exotic plants and recreational use will be controlled within reserves to benefit the species (Condition 9). Covered activities will avoid serpentine land cover types whenever feasible during project planning (Condition 13). If serpentine cannot be avoided, minimization measures described in Condition 13 will be followed.
Smooth lessingia	Condition 20: Avoid and Minimize Impacts to Covered Plant Occurrences; Condition 19: Plant Salvage when Impacts are Avoidable; Condition 9: Prepare and Implement a Recreation Plan; Condition 13: Serpentine and Associated Covered Species Avoidance and Minimization; Table 6-9: Survey Periods for Covered Plant Species; Table 3-6: Covered Plant Species and Land Cover Types; Figure 3-10: Santa Clara Valley Habitat Plan Land Cover	Development guidelines will ensure that impacts from covered activities are minimized (Condition 20). Plant surveys will be required during the appropriate survey period (Table 6-9) if the project site occurs in an area mapped as land cover associated with smooth lessingia (Table 3-6; Figure 3-10). Occurrences to be removed by covered activities will be salvaged to the extent possible using appropriate plant salvage techniques and a new separate occurrence will be established in suitable habitat (Condition 19). The condition of each covered plant occurrence will be documented to ensure that occurrences are protected within the Reserve System are in as good or better condition than those lost to covered activities. Exotic plants and recreational use will be controlled in reserves to benefit the species (Condition 9). Covered activities will avoid serpentine land cover types whenever feasible during project planning (Condition 13). If serpentine cannot be avoided, minimization measures described in Condition 13 will be followed.

<b>Covered Species</b>	<b>Applicable Valley Habitat Plan Condition(s), Tables, and Figures</b>	<b>Species Conditions on Covered Activities Excerpted from Final Santa Clara Valley Habitat Plan Executive Summary (Table ES-2)</b>
Tiburon paintbrush	Condition 9: Prepare and Implement a Recreation Plan; Condition 13: Serpentine and Associated Covered Species Avoidance and Minimization; Table 6-9: Survey Periods for Covered Plant Species; Table 3-6: Covered Plant Species and Land Cover Types; Figure 3-10: Santa Clara Valley Habitat Plan Land Cover	Plant surveys will be required during appropriate survey period (Table 6-9) if a project site occurs in an area mapped as land cover associated with Tiburon Indian paintbrush (Table 3-6; Figure 3-10). The condition of any new occurrences that may be found during the permit as a result of project surveys will be documented to ensure they are not affected. Exotic plants and recreational use will be controlled in reserves to benefit the species (Condition 9). Covered activities will avoid serpentine land cover types whenever feasible during project planning (Condition 13).
Bay checkerspot butterfly	Condition 13: Serpentine and Associated Covered Species Avoidance and Minimization	Development guidelines will ensure that impacts on this species from covered activities are minimized (Condition 13). This includes design measures to limit project footprint, buffer establishment, and landscaping restrictions. Surveys will be conducted to evaluate habitat quality and allow for development to occur as far as possible from high-quality habitat.
Burrowing owl	Condition 15: Western Burrowing Owl	Development and operations and maintenance guidelines will ensure that impacts from covered activities are avoided or minimized (Condition 15). Species-specific surveys will be conducted during project planning phase, and potential impacts to occupied breeding habitat will be mapped. Preconstruction surveys will establish species presence/absence. Project monitoring will be coordinated with other regional efforts. Avoidance and minimization measures, including the establishment of a 250-foot buffer zone, will avoid all nest sites that could be disturbed by project construction throughout the breeding season. During the non-breeding season, active burrows will be avoided by the establishment of a 160-foot border, and exclusion doors will be put in place for 48 hours prior to excavation. All project monitoring will be conducted by a qualified biologist.

<b>Covered Species</b>	<b>Applicable Valley Habitat Plan Condition(s), Tables, and Figures</b>	<b>Species Conditions on Covered Activities Excerpted from Final Santa Clara Valley Habitat Plan Executive Summary (Table ES-2)</b>
California red-legged frog	Condition 4: Avoidance and Minimization for In-Stream Projects; Condition 5: Avoidance and Minimization Measures for In-Stream Operations and Maintenance; Condition 11: Stream and Riparian Setbacks; Condition 12: Wetland and Pond Avoidance and Minimization; Condition 14: Valley Oak and Blue Oak Woodland Avoidance and Minimization; Condition 9: Prepare and Implement a Recreation Plan	Development guidelines for wetlands, ponds, and streams (breeding habitat) and valley oak and blue oak woodlands (upland habitat) will ensure that impacts from covered activities are minimized (Conditions 4, 5, 11, 12, 14). Project planning guidelines include maintenance of landscape connectivity, maintenance of site hydrology to the extent possible, and establishment of buffer/setback requirements. Construction guidelines include buffer zone establishment and fencing; staking of wetlands/ponds during construction; staff training by professional biologist; erosion control measures; and restrictions on seasonality of activities, vegetative management, use of heavy machinery, access points, and ground disturbance. Recreational use guidelines include leash law restrictions and public access limitations within reserve recreational use areas to prevent potential species impacts from domestic dogs (Condition 9).
California tiger salamander	Condition 12: Wetland and Pond Avoidance and Minimization; Condition 14: Valley Oak and Blue Oak Woodland Avoidance and Minimization; Condition 11: Stream and Riparian Setbacks; Condition 9: Prepare and Implement a Recreation Plan	Development guidelines for wetlands and ponds (breeding habitat) and valley oak and blue oak woodlands (upland habitat) will minimize effects of covered activities (Conditions 12, 14). Stream and Riparian Setbacks, may also have ancillary benefits to this species. Although the streams themselves do not provide habitat, aquatic breeding sites and dispersal corridors may be located within the riparian areas protected by the setbacks (Condition 11). Project planning guidelines include maintenance of landscape connectivity, maintenance of site hydrology to the extent possible, and establishment of buffer/setback requirements. Construction guidelines include buffer zone establishment and fencing; staking of wetlands/ponds during construction; staff training by professional biologist; erosion control measures; and restrictions on seasonality of activities, vegetative management, use of heavy machinery, access points, and ground disturbance (Conditions 12, 14). Recreational use guidelines include leash law restrictions and public access limitations within reserve recreational use areas to prevent potential species impacts from domestic dogs (Condition 9).

<b>Covered Species</b>	<b>Applicable Valley Habitat Plan Condition(s), Tables, and Figures</b>	<b>Species Conditions on Covered Activities Excerpted from Final Santa Clara Valley Habitat Plan Executive Summary (Table ES-2)</b>
Foothill yellow-legged frog	Condition 3: Maintain Hydrologic Conditions; Condition 4: Avoidance and Minimization for In-Stream Projects; Condition 5: Avoidance and Minimization Measures for In-Stream Operations and Maintenance; Condition 7: Rural Development Design and Construction Requirements; Condition 9: Prepare and Implement a Recreation Plan; Condition 11: Stream and Riparian Setbacks	Development and operations and maintenance guidelines will ensure that impacts from covered activities are avoided or minimized through maintenance of hydrologic conditions and protection of water quality (Condition 3), stream avoidance and minimization for in-stream projects (Condition 4), BMPs for in-stream operations and maintenance (Condition 5), rural development design requirements (Condition 7), preparation and implementation of a Reserve System recreation plan (Condition 9), and riparian setbacks (Condition 11). Conditions include but are not limited to: creation of landscape features to maintain preproject hydrograph, remove pollutants and sediments from surface runoff prior to stream entry, and reduce runoff velocity; development of construction sediment and erosion management plans; installation of fish passage mechanisms during in-stream work; and bank stabilization. Recreational use guidelines include leash law restrictions and public access limitations within reserve recreational use areas to prevent potential species impacts from domestic dogs (Condition 9).
Tricolored blackbird	Condition 17: Tricolored Blackbird	Development and operations and maintenance guidelines ensure that impacts from covered activities are avoided or minimized (Condition 17). During the project planning phase, a qualified biologist will survey and map potential species nesting habitat. Potential nesting habitat identified by these or any other surveys, will be mapped and direct impacts to potential nesting habitat avoided and other impacts minimized. Avoidance measures include relocating impacts away from the potential nesting habitat. If a project is unable to avoid impacts on species nest colonies by locating construction and staging activities at least 250 feet from the outer edge of all hydric vegetation associated with the colony, preconstruction surveys will be required. Preconstruction surveys will conclude no more than two calendar days prior to construction. Covered activities must avoid species nesting colonies (currently occupied or occupied within the past five years) and associated habitat with a 250-foot no-activity buffer zone around the outer edge of all hydric vegetation associated with the colony. Required buffers may be adjusted on a case-by-case basis as evaluated by the Implementing

<b>Covered Species</b>	<b>Applicable Valley Habitat Plan Condition(s), Tables, and Figures</b>	<b>Species Conditions on Covered Activities Excerpted from Final Santa Clara Valley Habitat Plan Executive Summary (Table ES-2)</b>
		Entity in coordination with the Wildlife Agencies. A construction monitor will be present during breeding season construction when an active colony is present.
Western pond turtle	Condition 4: Avoidance and Minimization for In-Stream Projects; Condition 5: Avoidance and Minimization Measures for In-Stream Operations and Maintenance; Condition 11: Stream and Riparian Setbacks; Condition 12: Wetland and Pond Avoidance and Minimization; Condition 14: Valley Oak and Blue Oak Woodland Avoidance and Minimization; Condition 9: Prepare and Implement a Recreation Plan	Development guidelines for wetlands, ponds, and streams and valley oak and blue oak woodlands will ensure that impacts from covered activities are avoided and minimized (Conditions 4, 5, 11, 12 & 14). Project planning guidelines include maintenance of landscape connectivity, maintenance of site hydrology to the extent possible, and establishment of buffer/setback requirements. Construction guidelines include buffer zone establishment and fencing; staking of wetlands/ponds during construction; staff training by professional biologist; erosion control measures; and restrictions on seasonality of activities, vegetative management, use of heavy machinery, access points, and ground disturbance. Recreational use guidelines include leash law restrictions and public access limitations within reserve recreational use areas to prevent potential species impacts from domestic dogs (Condition 9).
Note: All information contained in this table refers to the <i>Final Santa Clara Valley Habitat Plan</i> (ICF International 2012).		



### **Mitigation Measure for Special-Status Plants**

BIO-2. To avoid impacts to special-status plants, for the impact area of each project phase, focused botanical surveys will be conducted prior to construction by a qualified biologist or County Parks Natural Resource Program staff for all special-status plant species with potential to occur in the various plant communities as identified in this report. The surveys will conform to current protocols established by the CDFW and CNPS (CDFW 2009 and CNPS 2001), and will include surveys during the appropriate blooming periods for every target species (which will overlap for many species during spring months). Optimal survey times vary from year to year depending on temperature, rainfall amount and timing, etc., so will be confirmed by the monitoring of known reference populations for as many target species in the project vicinity as possible. The final field positioning of each project component will avoid all observed special-status plant species occurrences.

## **6.3 SPECIAL-STATUS ANIMALS**

Due to the site's extensive high quality habitat, the construction of proposed new trails and other facilities will have the potential to impact several special-status animal species (and/or their habitats) that may occur or which are known to occur at the site. However, due to the incorporation of recommended mitigation measures (listed below), none of the proposed Trails Master Plan habitat impacts are expected generate long-term adverse affects. The conditions for each Santa Clara Valley Habitat Plan covered plant species with potential to be impacted by the proposed project that will be implemented are listed in Table 3. In addition, as shown in Table 2, the proposed project has low potential to impact the state-listed Endangered and Fully Protected bald eagle, and six species that are considered Species of Special Concern or Fully Protected Species by the CDFW: American badger, black swift, coast horned lizard, golden eagle, northern harrier, and white-tailed kite.

### **Mitigation Measure for Potentially Occurring Nesting Birds**

BIO-3. To avoid potential adverse impacts to nesting birds (including raptors), trail building/construction activities (including any tree trimming/removal or generation of loud, sustained noises) should be scheduled to take place outside the breeding bird season (February 1 through August 31). If trail building/construction activities will occur during the breeding bird season, then a qualified biologist or County Parks Natural Resource Program staff will conduct a pre-construction survey for nesting birds to ensure that no nests would be disturbed during project implementation. This survey will be conducted no more than 15 days prior to the initiation of disturbance activities during the early part of

the nesting season (February 1 through April 30) and no more than 30 days prior to the initiation of disturbance activities during the late part of the nesting season (May 1 through August 31).

If no active nests are present within 500 feet of project activities, then activities can proceed as scheduled. However, if an active nest is detected during the survey within 500 feet of project activities, then the establishment of a protective buffer zone around each active nest (typically 250 to 500 feet for raptors but possibly 1,000 to 1,300 feet for ground-nesting and/or special-status raptors, with appropriate setback distance to be determined by a qualified biologist or County Parks Natural Resource Program staff) and 75 to 250 feet for passerines [perching and songbird species]) will be clearly delineated or fenced by the qualified biologist or County Parks Natural Resource Program staff until the juvenile bird(s) have fledged (left the nest), unless the biologist determines that proposed activities would not impact nesting success or fledgling/juvenile rearing. Limited monitoring of active nests located within 500 feet of trail or facility construction is recommended in order to monitor nesting activities and to prevent nest failure or abandonment.

### **Mitigation Measure for Special-Status Animals**

BIO-4. To avoid/minimize impacts to special-status animals, for each project phase, impact areas will be positioned away from high quality habitat features such as burrows or wetlands as determined prior to construction by a qualified biologist or County Parks Natural Resource Program staff through a trail location survey. In particular, new trails and facilities will be sited in the field prior to construction to avoid potential American badger den sites/active burrows, seasonal wetlands, and other features that could provide habitat for special-status species. Further, temporary exclusion barriers will be utilized to keep wildlife out of construction sites, as deemed appropriate by a qualified biologist or Parks Natural Resource Program staff. Construction monitoring will be conducted periodically by a qualified biologist or Parks Natural Resource Program staff to ensure that disturbance limits are correctly established and that avoidance/minimization measures are implemented properly.

## **6.4 SPECIAL-STATUS NATURAL COMMUNITIES**

Impacts to sensitive natural communities will require the enrollment of appropriate parkland areas into the proposed Valley Habitat Plan Reserve System as determined through the Valley Habitat Plan application package process. In addition, new trail segments will be aligned in the field to purposely minimize impacts to special-status natural communities present on the site, including oak woodlands, riparian/marsh/wetland areas, and serpentine grassland and

chaparral plant communities. Through such avoidance and minimization as part of the phased project design, impacts to special-status natural communities will be less than significant and therefore no mitigation is required (in addition to compliance with the Valley Habitat Plan).

## **6.5 JURISDICTIONAL WETLANDS AND WATERS**

Because the proposed project will install span bridges above ordinary high water mark levels at the new stream crossings and avoid seasonal wetlands, there will be no impacts to jurisdictional wetlands or waters, and therefore no mitigation is required.

## **6.6 WILDLIFE MOVEMENT CORRIDORS**

The creation of new regional trail linkages due to project implementation will have long-term beneficial impacts on wildlife movement. However, creation of these new trails will include an increase in human presence during daylight hours (plus the presence of horses and dogs-on-leash on certain trails). This increase in human and horse/dog presence would have only less than significant adverse impacts on wildlife movement, and therefore no mitigation is required.

## **6.7 PROTECTED TREES**

Although new impact areas will be positioned purposely to avoid trees as much as possible, some protected trees will be removed by the proposed project. No heritage trees will be removed.

### **Mitigation Measure for Protected Trees**

BIO-5. Mitigation will be required for the removal of any tree which measures over thirty-seven and seven-tenths (37.7) inches in circumference (twelve (12) inches or more in diameter) measured four and one-half (4.5) feet above the ground, or which exceeds twenty (20) feet in height. In compliance with the Santa Clara County Tree Preservation Ordinance, an administrative permit will be obtained from the County Planning Department prior to removal of protected trees on the project site and any stipulated mitigation will be completed, such as the planting of replacement trees in appropriate sites.

## 7.0 REFERENCES

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## 7.0 REFERENCES

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- ICF International. *Final Santa Clara Valley Habitat Plan*. Prepared for County of Santa Clara, City of San José, City of Morgan Hill, City of Gilroy, Santa Clara Valley Water District, and Santa Clara Valley Transportation Authority. San Francisco, California, August 2012. [http://www.scv-habitatplan.org/www/site/alias\\_\\_default/346/final\\_habitat\\_plan.aspx](http://www.scv-habitatplan.org/www/site/alias__default/346/final_habitat_plan.aspx)
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- Santa Clara County Trails Plan Advisory Committee. *Santa Clara County Countywide Trails Master Plan Update*. November 1995.
- Sawyer, John, and Todd Keeler-Wolf. *A Manual of California Vegetation*. California Native Plant Society. Sacramento, California, 1995.
- U.S. Fish and Wildlife Service (USFWS). *Endangered Species Database*. Species list for Santa Clara County. Washington, D.C., May 2013. <http://www.fws.gov/endangered/>

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## **APPENDIX A**

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE (CDFW)  
CALIFORNIA NATURAL DIVERSITY DATABASE (CNDDDB) LIST

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Selected Elements by Scientific Name  
California Department of Fish and Wildlife  
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<b>American badger</b> <i>Taxidea taxus</i>	AMAJF04010	None	None	G5	S4	SSC
<b>American peregrine falcon</b> <i>Falco peregrinus anatum</i>	ABNKD06071	Delisted	Delisted	G4T3	S2	FP
<b>An isopod</b> <i>Calasellus californicus</i>	ICMAL34010	None	None	G2	S2	
<b>Anderson's manzanita</b> <i>Arctostaphylos andersonii</i>	PDERI04030	None	None	G2	S2?	1B.2
<b>arcuate bush-mallow</b> <i>Malacothamnus arcuatus</i>	PDMAL0Q0E0	None	None	G2Q	S2.2	1B.2
<b>Bay checkerspot butterfly</b> <i>Euphydryas editha bayensis</i>	IILEPK4055	Threatened	None	G5T1	S1	
<b>Ben Lomond spineflower</b> <i>Chorizanthe pungens var. hartwegiana</i>	PDPGN040M1	Endangered	None	G2T1	S1	1B.1
<b>bent-flowered fiddleneck</b> <i>Amsinckia lunaris</i>	PDBOR01070	None	None	G2?	S2?	1B.2
<b>big-scale balsamroot</b> <i>Balsamorhiza macrolepis</i>	PDAST11061	None	None	G2	S2	1B.2
<b>black swift</b> <i>Cypseloides niger</i>	ABNUA01010	None	None	G4	S2	SSC
<b>Bonny Doon manzanita</b> <i>Arctostaphylos silvicola</i>	PDERI041F0	None	None	G2	S2.1	1B.2
<b>bristly sedge</b> <i>Carex comosa</i>	PMCYP032Y0	None	None	G5	S2	2.1
<b>burrowing owl</b> <i>Athene cunicularia</i>	ABNSB10010	None	None	G4	S2	SSC
<b>California red-legged frog</b> <i>Rana draytonii</i>	AAABH01022	Threatened	None	G4T2T3	S2S3	SSC
<b>California tiger salamander</b> <i>Ambystoma californiense</i>	AAAAA01180	Threatened	Threatened	G2G3	S2S3	SSC
<b>chaparral harebell</b> <i>Campanula exigua</i>	PDCAM020A0	None	None	G2	S2.2	1B.2
<b>coast horned lizard</b> <i>Phrynosoma blainvillii</i>	ARACF12100	None	None	G4G5	S3S4	SSC
<b>coho salmon - central California coast ESU</b> <i>Oncorhynchus kisutch</i>	AFCHA02034	Endangered	Endangered	G4	S2?	
<b>Congdon's tarplant</b> <i>Centromadia parryi ssp. congdonii</i>	PDAST4R0P1	None	None	G4T2	S2	1B.1
<b>Contra Costa goldfields</b> <i>Lasthenia conjugens</i>	PDAST5L040	Endangered	None	G1	S1	1B.1
<b>Cooper's hawk</b> <i>Accipiter cooperii</i>	ABNKC12040	None	None	G5	S3	WL





Selected Elements by Scientific Name  
California Department of Fish and Wildlife  
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<b>Coyote ceanothus</b> <i>Ceanothus ferrisiae</i>	PDRHA041N0	Endangered	None	G2	S2	1B.1
<b>foothill yellow-legged frog</b> <i>Rana boylei</i>	AAABH01050	None	None	G3	S2S3	SSC
<b>fragrant fritillary</b> <i>Fritillaria liliacea</i>	PMLIL0V0C0	None	None	G2	S2	1B.2
<b>golden eagle</b> <i>Aquila chrysaetos</i>	ABNKC22010	None	None	G5	S3	FP
<b>great blue heron</b> <i>Ardea herodias</i>	ABNGA04010	None	None	G5	S4	
<b>hairless popcornflower</b> <i>Plagiobothrys glaber</i>	PDBOR0V0B0	None	None	GH	SH	1A
<b>Hall's bush-mallow</b> <i>Malacothamnus hallii</i>	PDMAL0Q0F0	None	None	G2Q	S2	1B.2
<b>hoary bat</b> <i>Lasiurus cinereus</i>	AMACC05030	None	None	G5	S4?	
<b>Hom's micro-blind harvestman</b> <i>Microcina homi</i>	ILARA47020	None	None	G1	S1	
<b>Indian Valley bush-mallow</b> <i>Malacothamnus aboriginum</i>	PDMAL0Q020	None	None	G2	S2	1B.2
<b>Jung's micro-blind harvestman</b> <i>Microcina jungi</i>	ILARA47030	None	None	G1	S1	
<b>Loma Prieta hoita</b> <i>Hoita strobilina</i>	PDFAB5Z030	None	None	G2	S2	1B.1
<b>long-eared myotis</b> <i>Myotis evotis</i>	AMACC01070	None	None	G5	S4?	
<b>Metcalf Canyon jewel-flower</b> <i>Streptanthus albidus ssp. albidus</i>	PDBRA2G011	Endangered	None	G2T1	S1	1B.1
<b>minute pocket moss</b> <i>Fissidens pauperculus</i>	NBMUS2W0U0	None	None	G3?	S1	1B.2
<b>Monterey spineflower</b> <i>Chorizanthe pungens var. pungens</i>	PDPGN040M2	Threatened	None	G2T2	S2	1B.2
<b>most beautiful jewel-flower</b> <i>Streptanthus albidus ssp. peramoenus</i>	PDBRA2G012	None	None	G2T2	S2.2	1B.2
<b>Mt. Diablo phacelia</b> <i>Phacelia phacelioides</i>	PDHYD0C3Q0	None	None	G1	S1	1B.2
<b>Mt. Hamilton coreopsis</b> <i>Leptosyne hamiltonii</i>	PDAST2L0C0	None	None	G2	S2.2	1B.2
<b>Mt. Hamilton fountain thistle</b> <i>Cirsium fontinale var. campylon</i>	PDAST2E163	None	None	G2T2	S2	1B.2
<b>Mt. Hamilton lomatium</b> <i>Lomatium observatorium</i>	PDAPI1B2J0	None	None	G1	S1?	1B.2



Selected Elements by Scientific Name  
California Department of Fish and Wildlife  
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<b>North Central Coast Drainage Sacramento Sucker/Roach River</b> <i>North Central Coast Drainage Sacramento Sucker/Roach River</i>	CARA2623CA	None	None	GNR	SNR	
<b>Northern Maritime Chaparral</b> <i>Northern Maritime Chaparral</i>	CTT37C10CA	None	None	G1	S1.2	
<b>Ohlone tiger beetle</b> <i>Cicindela ohlone</i>	IICOL026L0	Endangered	None	G1	S1	
<b>Opler's longhorn moth</b> <i>Adela oplerella</i>	IILEE0G040	None	None	G2G3	S2S3	
<b>osprey</b> <i>Pandion haliaetus</i>	ABNKC01010	None	None	G5	S3	WL
<b>pallid bat</b> <i>Antrozous pallidus</i>	AMACC10010	None	None	G5	S3	SSC
<b>pink creamsacs</b> <i>Castilleja rubicundula ssp. rubicundula</i>	PDSCR0D482	None	None	G5T2	S2	1B.2
<b>robust spineflower</b> <i>Chorizanthe robusta var. robusta</i>	PDPGN040Q2	Endangered	None	G2T1	S1	1B.1
<b>rock sanicle</b> <i>Sanicula saxatilis</i>	PDAP1Z0H0	None	Rare	G2	S2	1B.2
<b>round-leaved filaree</b> <i>California macrophylla</i>	PDGER01070	None	None	G2	S2	1B.1
<b>saline clover</b> <i>Trifolium hydrophilum</i>	PDFAB400R5	None	None	G2	S2	1B.2
<b>San Francisco collinsia</b> <i>Collinsia multicolor</i>	PDSCR0H0B0	None	None	G2	S2.2	1B.2
<b>San Francisco dusky-footed woodrat</b> <i>Neotoma fuscipes annectens</i>	AMAFF08082	None	None	G5T2T3	S2S3	SSC
<b>San Francisco popcornflower</b> <i>Plagiobothrys diffusus</i>	PDBOR0V080	None	Endangered	G1Q	S1	1B.1
<b>San Joaquin kit fox</b> <i>Vulpes macrotis mutica</i>	AMAJA03041	Endangered	Threatened	G4T2T3	S2S3	
<b>Santa Clara red ribbons</b> <i>Clarkia concinna ssp. automixa</i>	PDONA050A1	None	None	G5?T3	S3.3	4.3
<b>Santa Clara Valley dudleya</b> <i>Dudleya abramsii ssp. setchellii</i>	PDCRA040Z0	Endangered	None	G3T2	S2	1B.1
<b>Santa Cruz clover</b> <i>Trifolium buckwestiorum</i>	PDFAB402W0	None	None	G2	S2	1B.1
<b>Santa Cruz kangaroo rat</b> <i>Dipodomys venustus venustus</i>	AMAFD03042	None	None	G4T1	S1	
<b>Santa Cruz Mountains beardtongue</b> <i>Penstemon rattanii var. kleei</i>	PDSCR1L5B1	None	None	G4T2	S2.2	1B.2
<b>Santa Cruz Mountains pussypaws</b> <i>Calyptridium parryi var. hesseae</i>	PDPOR09052	None	None	G3G4T2	S2	1B.1



**Selected Elements by Scientific Name**  
**California Department of Fish and Wildlife**  
**California Natural Diversity Database**



<b>Species</b>	<b>Element Code</b>	<b>Federal Status</b>	<b>State Status</b>	<b>Global Rank</b>	<b>State Rank</b>	<b>Rare Plant Rank/CDFW SSC or FP</b>
<b>Santa Cruz tarplant</b> <i>Holocarpha macradenia</i>	PDAST4X020	Threatened	Endangered	G1	S1	1B.1
<b>Santa Cruz wallflower</b> <i>Erysimum teretifolium</i>	PDBRA160N0	Endangered	Endangered	G2	S2	1B.1
<b>Scotts Valley polygonum</b> <i>Polygonum hickmanii</i>	PDPGN0L310	Endangered	Endangered	G1	S1	1B.1
<b>Scotts Valley spineflower</b> <i>Chorizanthe robusta var. hartwegii</i>	PDPGN040Q1	Endangered	None	G2T1	S1	1B.1
<b>Serpentine Bunchgrass</b> <i>Serpentine Bunchgrass</i>	CTT42130CA	None	None	G2	S2.2	
<b>showy golden madia</b> <i>Madia radiata</i>	PDAST650E0	None	None	G2	S2	1B.1
<b>smooth lessingia</b> <i>Lessingia micradenia var. glabrata</i>	PDAST5S062	None	None	G2T2	S2	1B.2
<b>steelhead - central California coast DPS</b> <i>Oncorhynchus mykiss irideus</i>	AFCHA0209G	Threatened	None	G5T2Q	S2	
<b>steelhead - south/central California coast DPS</b> <i>Oncorhynchus mykiss irideus</i>	AFCHA0209H	Threatened	None	G5T2Q	S2	SSC
<b>Sycamore Alluvial Woodland</b> <i>Sycamore Alluvial Woodland</i>	CTT62100CA	None	None	G1	S1.1	
<b>Tiburon paintbrush</b> <i>Castilleja affinis ssp. neglecta</i>	PDSCR0D013	Endangered	Threatened	G4G5T1	S1	1B.2
<b>tricolored blackbird</b> <i>Agelaius tricolor</i>	ABPBXB0020	None	None	G2G3	S2	SSC
<b>western pond turtle</b> <i>Emys marmorata</i>	ARAAD02030	None	None	G3G4	S3	SSC
<b>white-rayed pentachaeta</b> <i>Pentachaeta bellidiflora</i>	PDAST6X030	Endangered	Endangered	G1	S1	1B.1
<b>woodland woollythreads</b> <i>Monolopia gracilens</i>	PDAST6G010	None	None	G2G3	S2S3	1B.2
<b>Yuma myotis</b> <i>Myotis yumanensis</i>	AMACC01020	None	None	G5	S4?	
<b>Zayante band-winged grasshopper</b> <i>Trimerotropis infantilis</i>	IIORT36030	Endangered	None	G1	S1	

**Record Count: 80**

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## **APPENDIX B**

### U.S. FISH AND WILDLIFE SERVICE (USFWS) ENDANGERED SPECIES PROGRAM LIST

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Group	Name	Population	Status	Lead Office	Recovery Plan Name	Recovery Plan Stage
Amphibians	California tiger Salamander	U.S.A. (CA - Sonoma County)	Endangered	Sacramento Fish And Wildlife		
Amphibians	California red-legged frog (Rana)	Entire	Threatened	Sacramento Fish And Wildlife	Recovery Plan for the California	Final
Birds	Western snowy plover	Pacific coastal pop.	Threatened	Arcata Fish And Wildlife Office	Final Recovery Plan for the	Final
Crustaceans	Conservancy fairy shrimp	Entire	Endangered	Sacramento Fish And Wildlife	Recovery Plan for Vernal Pool	Final
Crustaceans	Vernal pool tadpole shrimp	Entire	Endangered	Sacramento Fish And Wildlife	Recovery Plan for Vernal Pool	Final
Flowering Plants	Calistoga allocarya		Endangered	Sacramento Fish And Wildlife		
Flowering Plants	Coyote ceanothus (Ceanothus)		Endangered	Sacramento Fish And Wildlife	Recovery Plan for Serpentine	Final
Flowering Plants	Metcalf Canyon jewelflower		Endangered	Sacramento Fish And Wildlife	Recovery Plan for Serpentine	Final
Flowering Plants	Tiburon paintbrush (Castilleja)		Endangered	Sacramento Fish And Wildlife	Recovery Plan for Serpentine	Final
Flowering Plants	San Mateo woolly sunflower		Endangered	Sacramento Fish And Wildlife	Recovery Plan for Serpentine	Final
Flowering Plants	Santa Clara Valley dudleya		Endangered	Sacramento Fish And Wildlife	Recovery Plan for Serpentine	Final
Mammals	San Joaquin kit fox (Vulpes)	U.S.A.(CA)	Endangered	Sacramento Fish And Wildlife	Recovery Plan for Upland	Final
Mammals	Salt marsh harvest mouse	U.S.A.(CA)	Endangered	Sacramento Fish And Wildlife	Salt Marsh Harvest Mouse and	Final
Mammals	Salt marsh harvest mouse	U.S.A.(CA)	Endangered	Sacramento Fish And Wildlife	Draft Recovery Plan for the	Draft
Reptiles	Alameda whipsnake (=striped)	Entire	Threatened	Sacramento Fish And Wildlife	Draft Recovery Plan for	Draft
Reptiles	Giant garter snake (Thamnophis)	Entire	Threatened	Sacramento Fish And Wildlife	Draft Recovery Plan for the	Draft



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## **APPENDIX C**

### CALIFORNIA NATIVE PLANT SOCIETY (CNPS) INVENTORY OF RARE AND ENDANGERED PLANTS LIST

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## Plant List

43 matches found. *Click on scientific name for details*

### Search Criteria

Rare Plant Rank is one of [1B, 2], Found in 9 Quads around 37121B7

Common Name	Scientific Name	Rare Plant Rank	State Listing Status	Federal Listing Status
Anderson's manzanita	<a href="#">Arctostaphylos andersonii</a>	1B.2		
arcuate bush-mallow	<a href="#">Malacothamnus arcuatus</a>	1B.2		
Ben Lomond spineflower	<a href="#">Chorizanthe pungens var. hartwegiana</a>	1B.1		FE
bent-flowered fiddleneck	<a href="#">Amsinckia lunaris</a>	1B.2		
big-scale balsamroot	<a href="#">Balsamorhiza macrolepis</a>	1B.2		
bristly sedge	<a href="#">Carex comosa</a>	2.1		
chaparral harebell	<a href="#">Campanula exigua</a>	1B.2		
chaparral ragwort	<a href="#">Senecio aphanactis</a>	2.2		
Congdon's tarplant	<a href="#">Centromadia parryi ssp. congdonii</a>	1B.1		
Contra Costa goldfields	<a href="#">Lasthenia conjugens</a>	1B.1		FE
Coyote ceanothus	<a href="#">Ceanothus ferrisiae</a>	1B.1		FE
deceiving sedge	<a href="#">Carex saliniformis</a>	1B.2		
fragrant fritillary	<a href="#">Fritillaria liliacea</a>	1B.2		
Hall's bush-mallow	<a href="#">Malacothamnus hallii</a>	1B.2		
Indian Valley bush-mallow	<a href="#">Malacothamnus aboriginum</a>	1B.2		
Loma Prieta hoita	<a href="#">Hoita strobilina</a>	1B.1		
Metcaif Canyon jewel-flower	<a href="#">Streptanthus albidus ssp. albidus</a>	1B.1		FE
minute pocket moss	<a href="#">Fissidens pauperculus</a>	1B.2		
Monterey spineflower	<a href="#">Chorizanthe pungens var. pungens</a>	1B.2		FT
most beautiful jewel-flower	<a href="#">Streptanthus albidus ssp. peramoenus</a>	1B.2		
Mt. Diablo phacelia	<a href="#">Phacelia phacelioides</a>	1B.2		
Mt. Hamilton coreopsis	<a href="#">Leptosyne hamiltonii</a>	1B.2		
Mt. Hamilton fountain thistle	<a href="#">Cirsium fontinale var. campylon</a>	1B.2		
Mt. Hamilton lomatium	<a href="#">Lomatium observatorium</a>	1B.2		
pink creamsacs	<a href="#">Castilleja rubicundula ssp. rubicundula</a>	1B.2		
robust spineflower	<a href="#">Chorizanthe robusta var. robusta</a>	1B.1		FE
rock sanicle	<a href="#">Sanicula saxatilis</a>	1B.2	CR	

round-leaved filaree	<a href="#"><u>California macrophylla</u></a>	1B.1		
saline clover	<a href="#"><u>Trifolium hydrophilum</u></a>	1B.2		
San Francisco collinsia	<a href="#"><u>Collinsia multicolor</u></a>	1B.2		
San Francisco popcorn-flower	<a href="#"><u>Plagiobothrys diffusus</u></a>	1B.1	CE	
Santa Clara Valley dudleya	<a href="#"><u>Dudleya abramsii ssp. setchellii</u></a>	1B.1		FE
Santa Cruz clover	<a href="#"><u>Trifolium buckwestiorum</u></a>	1B.1		
Santa Cruz Mountains beardtongue	<a href="#"><u>Penstemon rattanii var. kleei</u></a>	1B.2		
Santa Cruz Mountains pussypaws	<a href="#"><u>Calyptridium parryi var. hesseae</u></a>	1B.1		
Santa Cruz tarplant	<a href="#"><u>Holocarpha macradenia</u></a>	1B.1	CE	FT
Santa Cruz wallflower	<a href="#"><u>Erysimum teretifolium</u></a>	1B.1	CE	FE
Scotts Valley polygonum	<a href="#"><u>Polygonum hickmanii</u></a>	1B.1	CE	FE
Scotts Valley spineflower	<a href="#"><u>Chorizanthe robusta var. hartwegii</u></a>	1B.1		FE
showy golden madia	<a href="#"><u>Madia radiata</u></a>	1B.1		
smooth lessingia	<a href="#"><u>Lessingia micradenia var. glabrata</u></a>	1B.2		
Tiburon paintbrush	<a href="#"><u>Castilleja affinis ssp. neglecta</u></a>	1B.2	CT	FE
woodland woollythreads	<a href="#"><u>Monolopia gracilens</u></a>	1B.2		

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# **APPENDIX C**

## GREENHOUSE GAS MEMO

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GREENHOUSE GAS ANALYSIS REPORT

# CALERO COUNTY PARK DRAFT TRAILS MASTER PLAN

San Jose, Santa Clara County, California

PREPARED FOR  
Bellinger Foster Steinmetz

June 10, 2013

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# CALERO COUNTY PARK DRAFT TRAILS MASTER PLAN

Greenhouse Gas Analysis Report

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# SUMMARY

A qualitative assessment of the potential greenhouse gas emission impacts of implementing the proposed Draft Calero County Park Trails Master Plan has been conducted. The methodology employed includes an evaluation of the proposed project against greenhouse gas impact significance screening criteria provided by the *California Environmental Quality Act Air Quality Guidelines* (Bay Area Air Quality Management District 2011).

Increased vehicle trips to and from Calero County Park (mobile sources) will be the primary source of operational greenhouse gas emissions from the proposed project. Average daily trip volumes from the proposed project were compared to those of representative projects described in the project screening criteria in *California Environmental Quality Act Air Quality Guidelines* as having a less than significant impact on the environment. Average daily trip volumes were used as a “proxy” for comparing greenhouse gas emissions from the project to representative projects with a less than significant impact. The average daily trip volume for the proposed project would be within the range of average daily trip volumes for projects determined to have a less than significant impact. Further, the proposed project would likely generate significant lower volumes of greenhouse gas emissions from other sources (e.g. electricity, area sources, solid waste disposal, etc.) than would representative projects found to have a less than significant impact. For these reasons, the operational impact of the proposed project from greenhouse gas emissions is less than significant.

The volume of greenhouse gas emissions generated during construction of proposed project improvements is also qualitatively assumed to be within the range of emissions for representative projects determined in the *California Environmental Quality Act Air Quality Guidelines* to have a less than significant impact.

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# 1.0 INTRODUCTION

The proposed Draft Calero County Park Trails Master Plan (Trails Master Plan) provides a framework for expansion of the existing park trail system into a multi-use trail network over 10-year time period, while supporting protection and enhancement of the sensitive cultural and environmental resources within the park. The proposed Trails Master Plan will:

- Allow 966 acres of newly acquired areas in the park to be opened for recreational trail use;
- Expand the existing trail system by approximately 14,7 miles to 35.9 miles at build-out;
- Designate 26.6 miles of trails as multi-use, to be shared by hikers, bicyclists and equestrians;
- Retain 7.5 miles of trails as limited use for equestrian and hiking only;
- Designate 1.8 miles of trails as hiking only;
- Remove 4.9 miles of existing service road and trails and restore to native landscape;
- Remove dogs on-leash restriction on most trails in the park;
- Upgrade existing in-stream creek channel crossings with bridges spanning the creek/drainage ways or other crossing techniques to minimize in-channel hiking, bicycle, and equestrian water quality disturbance;
- Expand existing trail head staging facilities at Calero Park Ranger Station;
- Create new trail head staging facility off McKean Road;
- Create new trail head staging facility off Almaden Road;

- Install new fences, gates, signage, picnic and rest facilities and pet waste stations; and
- Install surface drainage facilities at new and existing trail head facilities that will maintain or improve storm water quality.

This Greenhouse Gas Analysis Technical Memorandum (hereinafter “Technical Memo”) has been prepared to support the Santa Clara County Parks’ California Environmental Quality Act (CEQA) analysis process. Its purpose is to evaluate whether the greenhouse gas emissions (GHG) that would be generated during the operation and construction of the proposed project may have a significant impact on the environment.

This Technical Memo includes the following four sections:

#### Summary

- 1.0 Introduction
- 2.0 Greenhouse Gas/Climate Change Setting
- 3.0 Analysis Methodology
- 4.0 Project GHG Emissions Profile and Screening Analysis
- 5.0 References

# GREENHOUSE GAS/CLIMATE CHANGE SETTING

## 2.1 GLOBAL, NATIONAL, STATE AND LOCAL ENVIRONMENTAL SETTING

### ***Science of Climate Change***

The international scientific community has concluded with a high degree of confidence that human activities are causing an accelerated warming of the atmosphere. The resulting change in climate has serious global implications and consequently, human activities that contribute to climate change may have a potentially significant effect on the environment. In recent years, concern about climate change and its potential impacts has risen dramatically. That concern has translated into a range of international treaties and national and regional agreements aimed at diminishing the rate at global warming is occurring. The federal government has begun to tackle concerns about climate change through a range of initiatives and regulatory actions. Many states and local agencies, private sector interests, and other public and private interests have also taken initiative to combat climate change. At the state level, California has taken a leadership role in tackling climate change, as evidenced by the programs outlined in the Regulatory Setting section below.

### ***Causes and Effects of Climate Change***

Temperatures at the Earth's surface increased by an estimated 1.4°F (0.8°C) between 1900 and 2005. The past decade was the warmest of the past 150 years and perhaps the past millennium. The warmest 23 years on record have occurred since 1980. The years of 2005 and 2010 were the warmest on record for the United States (NOAA 2011). Scientific consensus is that this warming



is largely the result of emissions of carbon dioxide and other greenhouse gases from human activities including industrial processes, fossil fuel combustion, and changes in land use, such as deforestation.

Unaddressed, climate change will have significant impacts across the United States and around the world. The generalized potential effects of climate change in California have been summarized by the California Environmental Protection Agency in its April 2006 report entitled, *Climate Action Team Report to Governor Schwarzenegger and the Legislature*. Among the key effects are: substantially reduced availability of water supply; temperature increases projected at 8.0 to 10.4 degrees Fahrenheit under more severe emissions scenarios; exacerbation and acceleration of coastal erosion; impacts on surface water quality from seawater intrusion into the Sacramento Delta; general decline in agricultural production resulting from increased scarcity of water supply; increased vulnerability of natural areas and agricultural production from rising temperatures and increases in potential pest infestation; increased growth rates and expanded ranges of weeds, insect pests, and pathogens with elevated temperatures; increased energy demand especially during hot summer months; and economic impacts resulting from reduced winter recreation.

Numerous climate change models have been developed since the Climate Action Team report noted above was released in 2006. Over time, modelers have been refining the models themselves as well as the inputs to the models in an effort to more precisely project climate change impacts. For example, refined modeling of conditions in the San Francisco Bay Area conducted by Scripps Institute for Oceanography for the California Energy Commission suggests that by the end of the twenty-first century, the range of warming ranges from about 2°C to 6°C (about 3.5 °F to 11°F) under one model scenario, with temperatures averaging 1.5°C greater under a second scenario (Cayan, Tyree, and Iacobellis 2012). The California Energy Commission has funded the Cal-Adapt program, which has developed on-line compendium of climate change information for California that, among other things, identifies a range of future global warming scenarios that can be accessed interactively. This information can be found at: <http://cal-adapt.org/page/about-caladapt>.

## **Greenhouse Gases**

Gases that trap heat in the atmosphere are called greenhouse gases (GHGs). GHGs are emitted by natural processes and human activities. The human-produced GHGs most responsible for global warming and their relative contribution to it are carbon dioxide, methane, nitrous oxide and chlorofluorocarbons. The contribution of these GHGs to global warming is summarized in [Table 1, Greenhouse Gas Types and Their Contribution to Global Warming](#).

**Table 1 Greenhouse Gas Types and Their Contribution to Global Warming**

<b>Greenhouse Gas</b>	<b>Percent of all GHG</b>	<b>Typical Sources</b>
Carbon dioxide (CO <sub>2</sub> )	83.0 percent	Combustion of fuels, solid waste, wood
Methane (CH <sub>4</sub> )	10.3 percent	Fuel production/combustion; livestock, decay of organic materials
Nitrous Oxide (N <sub>2</sub> O)	4.5 percent	Combustion of fuels, solid waste; agricultural and industrial processes
Chlorofluorocarbons (CFCs)	2.2 percent	Industrial processes

*Note:* Percentages reflect weighting for global warming potential.

*Source:* EPA 2011

## ***Greenhouse Gas Global Warming Potentials***

Each type of GHG has a different capacity to trap heat in the atmosphere and each type remains in the atmosphere for a particular length of time. The ability of a GHG to trap heat is measured by an index called the global warming potential expressed as carbon dioxide equivalent. Carbon dioxide is considered the baseline GHG in this index and has a global warming potential of one. Methane has a global warming potential of 21 times that of carbon dioxide and nitrous oxide has a global warming potential of 310 times that of carbon dioxide. The families of chlorofluorocarbons, hydrofluorocarbons and perfluorocarbons have a substantially greater global warming potential than other GHGs, generally ranging from approximately 1,300 to over 10,000 times that of carbon dioxide. While carbon dioxide represents the vast majority of the total volume of GHGs released into the atmosphere, the release of even small quantities of other types of GHGs can be significant for their contribution to climate change.

## ***Inventories of Greenhouse Gases***

### **World/U.S. Estimates of GHG Emissions**

In 2004, total worldwide GHG emissions were estimated to be 49,000 teragrams carbon dioxide equivalent (Intergovernmental Panel on Climate Change 2007). A teragram equals one million metric tons. In 2009, U.S. GHG emissions were 6,633.2 teragrams carbon dioxide equivalent (CO<sub>2</sub>e). GHG emissions vary annually due to factors such as weather, economic conditions, and cost of various energy sources. The highest GHG emissions year in the United States was 2007, with total emissions of 7,263 teragrams CO<sub>2</sub>e. In 1990, the year frequently used as a baseline for emissions, GHG emissions in the United States were 6,182 teragrams CO<sub>2</sub>e (EPA 2011).

## California GHG Emissions Inventory

California is a substantial contributor of global greenhouse gases. Based on the most recent state GHG inventory prepared by the California Air Resources Board (CARB), a net of about 451.6 million tons of carbon dioxide (CO<sub>2</sub>) equivalents (CO<sub>2</sub>e) were generated in 2010 (CARB 2013). In 2010, about 38 percent of all GHG emitted in the state came from the transportation sector. Electric power generation (in state generation and out of state generation for imported electricity) and industrial uses were the second and third largest categories at about 21 percent and 19 percent, respectively. The commercial and residential use sectors combined to generate about 10 percent of the 2010 emissions, while the agricultural sector contributed about seven percent. Other sources include high global warming potential gases at about three percent and landfill waste emissions at about two percent of the total state inventory.

## 2.2 CLIMATE CHANGE IMPACT AND MITIGATION ANALYSIS GUIDANCE

### *State Level Guidance*

State guidance on evaluating climate change impacts of new development has been and continues to develop in response to Assembly Bill 32 (AB 32). One such response, Senate Bill 97 (SB 97) was signed in August 2007. SB 97 directed the California Office of Planning and Research to prepare, develop, and transmit to the Natural Resources Agency guidelines for the feasible mitigation of GHG emissions. The law identifies the CEQA process as an appropriate tool for addressing and mitigating global warming impacts from new development projects and prompted amendments to the CEQA Guidelines to guide impact analysis and mitigation approaches that were adopted in 2010.

The California Attorney General has issued a range of opinions that have reinforced CEQA as the appropriate tool for assessing climate change impacts of new development and supporting implementation of AB 32. The California Attorney General's *Addressing Climate Change at the Project Level*, released in 2008 and updated in 2010, lists a range of GHG reduction measures to be considered for inclusion in development projects to reduce their GHG emissions.

Additional guidance on potential GHG reduction measures has been provided from a variety of other sources. Two comprehensive and useful sources are the California Air Pollution Control Officers Association's *CEQA and Climate Change – Evaluating and Addressing Greenhouse Gas Emissions from Project Subject to the Environmental Quality Act*, published in 2008 and its *Quantifying Greenhouse Gas Mitigation Measures*, published in 2010.

## ***Bay Area Air Quality Management District Guidance***

The proposed project is located within Santa Clara County, which is included in the boundary of the Bay Area Air Quality Management District (“Air District”). The Air District is a responsible agency under CEQA and has discretion over development projects which require permits from the Air District pursuant to its rules and regulations. The Air District has published comprehensive guidance on evaluating, determining significance of, and mitigating GHG impacts of projects and plans. The Air District’s guidance is contained in its *California Environmental Quality Act Air Quality Guidelines* (“guidelines”) which were initially adopted in 1999. The 2010 version of the guidelines were the first to include draft thresholds of significance for GHG emissions and screening criteria designed to assess project types and intensities whose GHG emissions would not exceed the project-specific operational source GHG standards of significance.

On March 5, 2012 the Alameda County Superior Court issued a judgment finding that the Air District had failed to comply with CEQA when it officially adopted GHG thresholds of significance in June 2010. The court found that adoption of the thresholds was a project under CEQA. The court did not determine whether the thresholds are or are not based on substantial evidence and thus valid on the merits. The court issued a writ of mandate ordering the Air District to set aside the thresholds and cease disseminating and recommending their use by lead agencies until the Air District had complied with CEQA. The Air District has appealed the Alameda County Superior Court’s decision. The appeal is currently pending in the Court of Appeal of the State of California, First Appellate District. The Air District has stated that lead agencies may continue to rely on the Air District’s CEQA Guidelines for assistance in calculating air pollution emissions, obtaining information regarding the health impacts of air pollutants, and identifying potential mitigation measures. However, the Air District has stated that lead agencies are encouraged to rely on their own thresholds of significance.

In 2012, the Air District again revised its CEQA guidelines. In response to the noted lawsuit, the Air District omitted reference to GHG thresholds of significance and to project screening criteria. Despite this fact, lead agencies within the boundary of the Air District generally continue to use the thresholds and project screening criteria as guidance for accessing the GHG impacts of projects under CEQA. The decision to do so has largely been based on the fact that the court did not explicitly challenge the substantial evidence used by the Air District to define the thresholds or the project screening information. In this light, GHG analysis and impact assessment guidance provided by the Air District is utilized by Santa Clara County as a basis for assessing GHG impacts of new development projects for which Santa Clara County is the lead agency, and the guidance is used in this Technical Memo as the basis for identifying the GHG impacts of the proposed project.

## 3.0

# ANALYSIS METHODOLOGY

The proposed project will generate GHG emissions from two primary sources – operations and construction. As a first step in assessing potential operational phase GHG impacts, Table 3-1, Operational-Related Criteria Air Pollutant and Precursor Screening Level Sizes, contained in the 2010 guidelines on page 3-2 was reviewed. The table is included as [Appendix A](#) to this Technical Memo. The table includes project screening size information for GHG emissions as well as for criteria air pollutants and construction emissions for over 60 project types. If the size of a listed project type is below that listed in Table 3-1, the proposed project’s operational impacts for criteria pollutants and GHG emissions would not be potentially significant relative to the related thresholds of significance contained in the 2010 Air District guidelines. In this case, detailed air quality assessment would not be needed.

Because of the unique nature of the proposed project, there is no project type listed in Table 3-1 against which the proposed project can be directly compared. The Air District was consulted to discuss an alternative screening approach. The proposed approach is to identify the average daily trip (ADT) volume for the proposed project and compare it to the ADT volume for several diverse representative project types listed in Table 3-1. If the proposed project ADT volume falls within the range of ADT for the representative project types, a conclusion can be drawn that the proposed project GHG impacts would have a less than significant impact from GHG emissions. Air District staff concurred with this analysis approach (Telephone conversation with Dave Vintz, Bay Area Air Quality Management District, May 9, 2013).

The analysis methodology is conservative. It assumes that ADT volume, which is a proxy for mobile source (vehicle) GHG emissions, is the only variable that contributes to a project’s GHG emissions inventory. This is not the case. Nearly all of the project types listed in Table 3-1 would generate significant volumes of GHGs from non-mobile sources that would be largely absent from the proposed project. Unlike most land development project types, during its operational phase, the proposed project will not be a source of significant indirect GHG emissions from

energy consumption, area sources (e.g. on-site combustion of natural gas), or solid waste decomposition. However, no increase in boating activity is anticipated based on the proposed project improvements. Use of ADTs as comparison metric does not reflect the less intensive non-mobile source GHG emissions profile of the proposed project relative to nearly all projects listed in Table 3-1.

## 4.0

# PROJECT GHG EMISSIONS PROFILE AND SCREENING ANALYSIS

This section includes analysis of the GHG emissions characteristics of the proposed project as a basis to qualitatively evaluate its potential impacts. The analysis is considered to be qualitative because based on the analysis methodology described in Section 3.0, Methodology, modeling to quantify project emissions is not deemed necessary. The analysis focuses on whether the proposed project can be found to meet the Air District's screening criteria for projects having a less than significant impact from generation of GHGs. To follow the methodology, a projection of total new ADTs that would be generated under post-park expansion conditions is needed. This number represents the ADT value that will be compared to representative projects contained in the Air District's Table 3-1, Operational-Related Criteria Air Pollutant and Precursor Screening Level Sizes.

### 4.1 EXISTING OPERATIONAL ADT/GHG BASELINE

Under existing conditions, the primary source of GHG emissions associated with the park is mobile source vehicle trips taken by visitors to the park. A traffic impact analysis memo entitled *Focused Transportation Analysis for Calero County Park Trails Master Plan* (Fehr and Peers 2013) ("Traffic Memo") was prepared for the proposed project to evaluate traffic and circulation impacts. The Traffic Memo, which is attached as [Appendix B](#), included an analysis of peak vehicle trips to the park and found that the worst-case, maximum ADT volume occurs during peak weekends in the spring. Existing ADT volumes were based on an assumption that 75 percent of the existing 28 parking spaces at the Ranger Station staging area, the primary park access location, turn over three times per day while the remaining 25 percent turn over two times per day as park users arrive and depart. The rates were based on the average length of stay at the park for hikers (approximately three hours) and for equestrian trail users (approximately five hours).

Table 4, Trip Generation, in the Traffic Memo summarizes existing and future daily trip generation. Under existing conditions, maximum use of the existing 28 existing parking spaces at the Ranger Station generates about 154 ADT. GHG emissions are generated by each of these vehicle trips.

Other existing park activities are sources of negligible volumes of GHGs. These include electricity use at the Ranger Station/Visitor Center, disposal and treatment of wastewater from several existing portable restrooms, operation of park facility maintenance vehicles and equipment, and periodic water pumping to fill a storage tank used for park-specific water supply and fire flow. Fuel-powered boating activities on the reservoir within the park also generate GHGs. However, improvements proposed as part of the park master plan are not expected to result in an increase in boating activity.

## **4.2 PROPOSED PROJECT OPERATIONAL ADT/GHG EMISSIONS**

Under post-project conditions, vehicle trips will continue to be the dominant source of GHG emissions generated by the use and operation of Calero County Park. The capacity of the park to accommodate visitors arriving by vehicle will increase significantly. A net of up to 185 new parking spaces will be provided at the existing and new staging areas (65 new spaces at Ranger Station, and 115 new spaces at Rancho San Vicente, and five new spaces at Almaden Road).

Table 4 in the Traffic Memo includes a summary of the worst-case, maximum total daily volume of new daily traffic trips that would be generated with the addition of 185 new parking spaces. The 65 new spaces at Ranger Station would enable up to 358 new ADT (512 ADT new – 154 ADT existing), the 115 new spaces at Rancho San Vicente would enable up to 633 new ADT, and the five new spaces at Almaden Road would enable up to 28 new ADT for a maximum total of 1,019 ADT.

It must be re-emphasized that this is the worst-case ADT volume that is assumed to occur during a limited number of weekends during a limited season of the year. Based on further discussion with Calero Park staff, use of the park declines during other seasons of the year. For example, peak maximum season is mid-March through May (2.5 months). Visitor numbers decline to approximately 80 percent of maximum from June through mid-October (4.5 months), and to 20 percent of maximum from mid-October through the remainder of the off season (5.0 months). The weighted average of seasonal use is about 60 percent of the maximum peak season (Email Communication with Alexandra Sweet, Fehr & Peers, June 5, 2013). Therefore, it is assumed that over the course of an entire year, average ADT is 60 percent of the peak season ADT. At this average rate of use, vehicle trips would average about 611 ADT.



Non-mobile sources of GHG emissions will also increase, but continue to represent a very minor percentage of the mobile sources volume. These sources would mirror those noted under existing conditions (e.g. electricity demand at the Ranger Station, energy to dispose and treat wastewater, and energy to pump water). As noted previously, use of fuel-powered boats at the park reservoir will continue, but are not expected to intensify relative to existing conditions. No new sources of GHGs are expected under post-project conditions that do not currently exist.

### 4.3 OPERATIONAL GHG IMPACT SCREENING ANALYSIS

As described above, the proposed project would generate a maximum of approximately 1,019 new ADT per day under the most heavy park use scenario and is assumed to average 611 ADT over the course of an entire year. As a means to compare project ADT to the ADT of representative projects listed in Table 3-1 of the Air District guidelines, [Table 2, Average Daily Traffic Screening Comparison](#), shows representative project types from Table 3-1, along with trip generation rates and estimates of ADTs for each. Trip generation rates and ADT are based on a spreadsheet using *Institute of Transportation Engineers ITE Trip Generation Rates – 8<sup>th</sup> Edition*, accessed at: <http://www.mikeontraffic.com/2009/08/trip-generation-8th-edition-spreadsheet.html>.

**Table 2 Average Daily Traffic Screening Comparison**

<b>Representative Screening Project Type</b>	<b>Project Size/Intensity<sup>1</sup></b>	<b>Trip Generation Rate<sup>2</sup></b>	<b>Average Daily Trips<sup>2</sup></b>
Single-Family Residential	56 units	9.57 trips/unit	536
Condo/Townhouse	78 units	5.81 trips/unit	453
Hardware/Paint Store	16,000	51.29 trips/1,000 sq. ft.	821
General Office Building	53,000	11.01 trips/1,000 sq. ft.	584
Supermarket	8,000	102.24 trips/1,000 sq. ft.	818
City Park	600 acres	1.59 trips/acre	954
Library	15,000	56.24 trips/1,000 sq. ft.	844
Quality Restaurant	9,000	89.95 trips/1,000 sq. ft.	810
Industrial Park	65,000	6.96 trips/1,000 sq. ft.	452
Proposed Project (County Park)	185 new parking spaces	2.5-3.0 trips/parking space x 185 new spaces x 2 trips (in and out) <sup>3</sup> – worst case	1,019 - max <sup>4</sup> 611 – avg <sup>5</sup>

**Sources:** Bay Area Air Quality Management District. *2010 California Environmental Quality Act Guidelines*, Table 3-1. Fehr & Peers. *Focused Transportation Analysis for the Calero County Park Trails Master Plan*. 2013.

**Note:** <sup>1</sup>Project size/intensity for is from the “Operational GHG Screening Size” column in Table 3-1, Criteria Air Pollutants and Precursors and GHG Screening Level Sizes, contained in the Air District’s *California Environmental Quality Act Air Quality Guidelines*, 2010.

<sup>2</sup>Trip generation rates and daily trip generation based on Institute of Traffic Engineers’ *ITE Trip Generation Rates – 8<sup>th</sup> Edition*, with spreadsheet calculator found at: <http://www.mikeontraffic.com/2009/08/trip-generation-8th-edition-spreadsheet.html>.

<sup>3</sup>A multiplier is used to convert horse trailer parking space size to average vehicle parking space size.

<sup>4/5</sup>The maximum 1,019 ADT is for worst-case conditions during the peak use season when all available spaces are full for the entire day. It is conservatively assumed that the average ADT over the full year is 60 percent of the maximum peak season demand, or approximately 611 ADT.

The average ADT for the proposed project is shown as the last entry in the table. As shown, the daily 611 ADT for the proposed project is well within the range of ADT for the representative project types illustrated. Further, as described previously, the volume of GHG emissions generated by the project from other sources (e.g. electricity consumption) would be significantly lower than most of the representative projects listed in the table. Based on this information, it can be qualitatively concluded that, like many other project types included in Table 3-1, the proposed project would not generate annual operational GHG emissions that would have a significant impact on the environment.

## 4.4 CONSTRUCTION PHASE GHG EMISSIONS

Construction of the proposed project will result in GHG emissions during the short-term construction period. Table 3-1 in the Air District guidelines also includes screening criteria for construction emissions. However, due to the highly variable construction processes, and equipment types and durations of use involved in constructing the diverse types of projects listed, the construction screening criteria are not particularly useful for screening the proposed project.

The primary demand for use of construction equipment, the primary source of GHG emissions during the construction process, would be in site preparation and construction of parking facilities at the new staging areas and for expanding the existing Ranger Station parking facilities. These activities would involve use of construction equipment that is typical of most construction project types. Construction of new trails may also involve limited use of typical, fossil-fuel powered equipment. But given that many proposed trail locations are within existing fire road locations or along other previously graded/manipulated locations, extensive or intensive use of heavy, fuel-powered equipment for trail construction is not anticipated. Based on the limited improvements proposed (e.g. no construction of significant structures, above- or below-ground utilities/infrastructure, etc.), the types and duration of use of fossil-fueled construction equipment would be similar to or lower than required to construct the project types

shown in Table 3-1. It can be qualitatively assumed that construction emission volume for the proposed project would be within or below that generated by the threshold project sizes shown in Table 3-1. Therefore, construction emissions for the proposed project are not anticipated to have a significant impact on the environment.

## **4.5 CONCLUSIONS**

Based on the analyses conducted in Section 4.4 above, the proposed project would have a less than significant impact on the environment from generation of GHGs during its operational phase. Greenhouse gas emissions generated during the construction phase of the proposed project would also have a less than significant impact on the environment.

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## **APPENDIX A**

TABLE 3-1, OPERATIONAL-RELATED CRITERIA AIR  
POLLUTANT AND PRECURSOR SCREENING LEVEL SIZES

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<b>Land Use Type</b>	<b>Operational Criteria Pollutant Screening Size</b>	<b>Operational GHG Screening Size</b>	<b>Construction-Related Screening Size</b>
Single-family	325 du (NOX)	56 du	114 du (ROG)
Apartment, low-rise	451 du (ROG)	78 du	240 du (ROG)
Apartment, mid-rise	494 du (ROG)	87 du	240 du (ROG)
Apartment, high-rise	510 du (ROG)	91 du	249 du (ROG)
Condo/townhouse, general	451 du (ROG)	78 du	240 du (ROG)
Condo/townhouse, high-rise	511 du (ROG)	92 du	252 du (ROG)
Mobile home park	450 du (ROG)	82 du	114 du (ROG)
Retirement community	487 du (ROG)	94 du	114 du (ROG)
Congregate care facility	657 du (ROG)	143 du	240 du (ROG)
Day-care center	53 ksf (NOX)	11 ksf	277 ksf (ROG)
Elementary school	271 ksf (NOX)	44 ksf	277 ksf (ROG)
Elementary school	2747 students (ROG)	-	3904 students (ROG)
Junior high school	285 ksf (NOX)	-	277 ksf (ROG)
Junior high school	2460 students (NOX)	46 ksf	3261 students (ROG)
High school	311 ksf (NOX)	49 ksf	277 ksf (ROG)
High school	2390 students (NOX)	-	3012 students (ROG)
Junior college (2 years)	152 ksf (NOX)	28 ksf	277 ksf (ROG)
Junior college (2 years)	2865 students (ROG)	-	3012 students (ROG)
University/college (4 years)	1760 students (NOX)	320 students	3012 students (ROG)
Library	78 ksf (NOX)	15 ksf	277 ksf (ROG)
Place of worship	439 ksf (NOX)	61 ksf	277 ksf (ROG)
City park	2613 acres (ROG)	600 acres	67 acres (PM10)
Racquet club	291 ksf (NOX)	46 ksf	277 ksf (ROG)
Racquetball/health	128 ksf (NOX)	24 ksf	277 ksf (ROG)
Quality restaurant	47 ksf (NOX)	9 ksf	277 ksf (ROG)
High turnover restaurant	33 ksf (NOX)	7 ksf	277 ksf (ROG)
Fast food rest. w/ drive thru	6 ksf (NOX)	1 ksf	277 ksf (ROG)
Fast food rest. w/o drive thru	8 ksf (NOX)	1 ksf	277 ksf (ROG)
Hotel	489 rooms (NOX)	83 rooms	554 rooms (ROG)
Motel	688 rooms (NOX)	106 rooms	554 rooms (ROG)
Free-standing discount store	76 ksf (NOX)	15 ksf	277 ksf (ROG)
Free-standing discount superstore	87 ksf (NOX)	17 ksf	277 ksf (ROG)
Discount club	102 ksf (NOX)	20 ksf	277 ksf (ROG)
Regional shopping center	99 ksf (NOX)	19 ksf	277 ksf (ROG)
Electronic Superstore	95 ksf (NOX)	18 ksf	277 ksf (ROG)
Home improvement superstore	142 ksf (NOX)	26 ksf	277 ksf (ROG)
Strip mall	99 ksf (NOX)	19 ksf	277 ksf (ROG)
Hardware/paint store	83 ksf (NOX)	16 ksf	277 ksf (ROG)
Supermarket	42 ksf (NOX)	8 ksf	277 ksf (ROG)
Convenience market (24 hour)	5 ksf (NOX)	1 ksf	277 ksf (ROG)
Convenience market with gas pumps	4 ksf (NOX)	1 ksf	277 ksf (ROG)
Bank (with drive-through)	17 ksf (NOX)	3 ksf	277 ksf (ROG)





**Table 3-1  
Operational-Related Criteria Air Pollutant and Precursor Screening Level Sizes**

Land Use Type	Operational Criteria Pollutant Screening Size	Operational GHG Screening Size	Construction-Related Screening Size
General office building	346 ksf (NOX)	53 ksf	277 ksf (ROG)
Office park	323 ksf (NOX)	50 ksf	277 ksf (ROG)
Government office building	61 ksf (NOX)	12 ksf	277 ksf (ROG)
Government (civic center)	149 ksf (NOX)	27 ksf	277 ksf (ROG)
Pharmacy/drugstore w/ drive through	49 ksf (NOX)	10 ksf	277 ksf (ROG)
Pharmacy/drugstore w/o drive through	48 ksf (NOX)	10 ksf	277 ksf (ROG)
Medical office building	117 ksf (NOX)	22 ksf	277 ksf (ROG)
Hospital	226 ksf (NOX)	39 ksf	277 ksf (ROG)
Hospital	334 beds (NOX)	84 ksf	337 beds (ROG)
Warehouse	864 ksf (NOX)	64 ksf	259 ksf (NOX)
General light industry	541 ksf (NOX)	121 ksf	259 ksf (NOX)
General light industry	72 acres (NOX)	-	11 acres (NOX)
General light industry	1249 employees (NOX)	-	540 employees (NOX)
General heavy industry	1899 ksf (ROG)	-	259 ksf (NOX)
General heavy industry	281 acres (ROG)	-	11 acres (NOX)
Industrial park	553 ksf (NOX)	65 ksf	259 ksf (NOX)
Industrial park	61 acres (NOX)	-	11 acres (NOX)
Industrial park	1154 employees (NOX)	-	577 employees (NOX)
Manufacturing	992 ksf (NOX)	89 ksf	259 ksf (NOX)

Notes: du = dwelling units; ksf = thousand square feet; NO<sub>x</sub> = oxides of nitrogen; ROG = reactive organic gases. Screening levels include indirect and area source emissions. Emissions from engines (e.g., back-up generators) and industrial sources subject to Air District Rules and Regulations embedded in the land uses are not included in the screening estimates and must be added to the above land uses. Refer to Appendix D for support documentation. Source: Modeled by EDAW 2009.

### 3.2. COMMUNITY RISK AND HAZARD IMPACTS

Please refer to Chapter 5 for discussion of screening criteria for local community risk and hazard impacts.

### 3.3. CARBON MONOXIDE IMPACTS

This preliminary screening methodology provides the Lead Agency with a conservative indication of whether the implementation of the proposed project would result in CO emissions that exceed the *Thresholds of Significance* shown in Table 2-3.

The proposed project would result in a less-than-significant impact to localized CO concentrations if the following screening criteria is met:

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## **APPENDIX B**

FOCUSED TRANSPORTATION ANALYSIS FOR THE  
CALERO COUNTY PARK TRAILS MASTER PLAN

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## MEMORANDUM

Date: June 10, 2013  
To: Teri Wissler Adam, EMC Planning Group Inc.  
From: Alexandra Sweet, Katy Cole, and Alisar Aoun  
Subject: **Focused Transportation Analysis for the Calero County Park Trails Master Plan**

*SJ13-1438*

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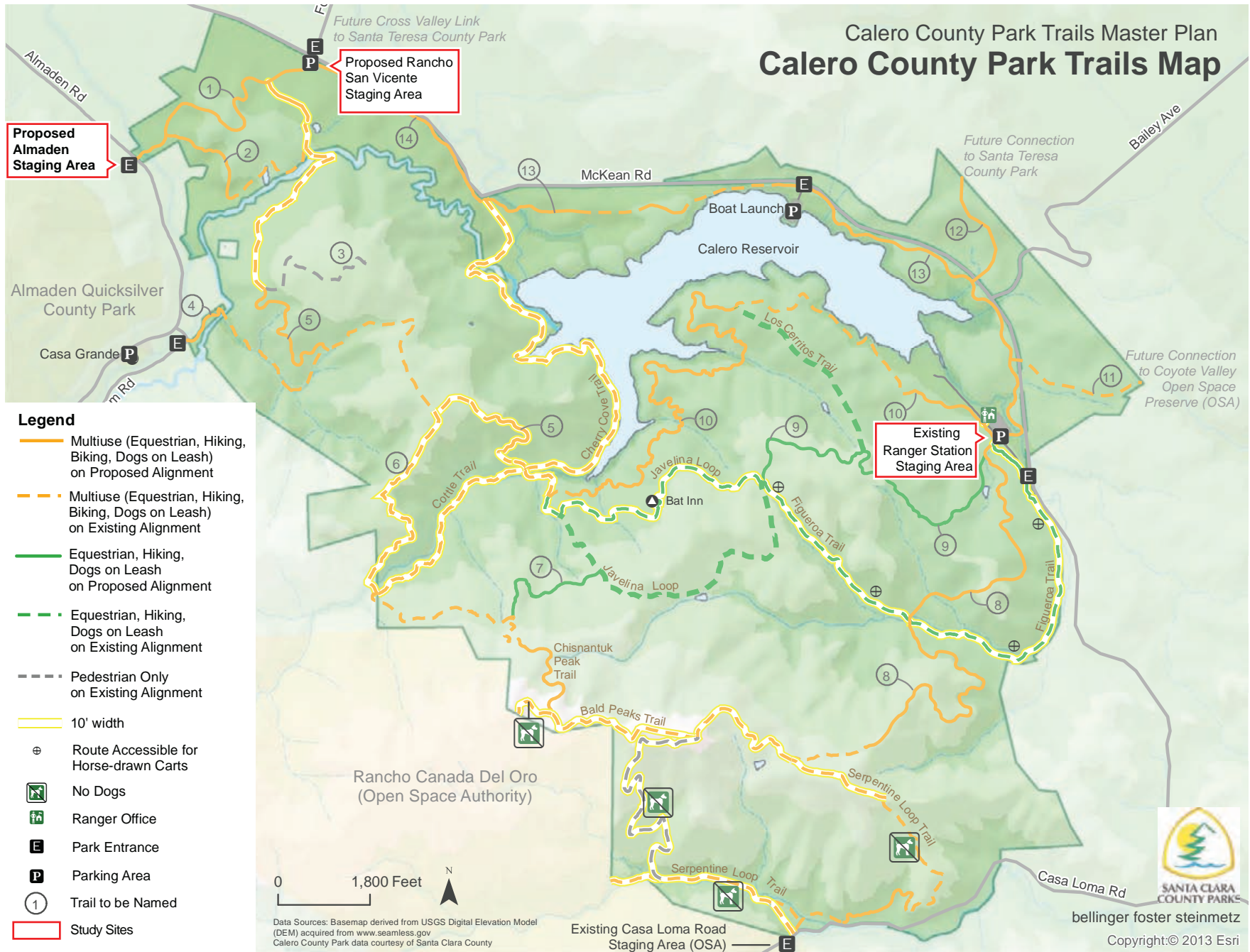
This memorandum presents results of the focused traffic analysis for the Draft Calero County Park Trails Master Plan in San Jose, California. The proposed project will improve and expand the park's trail system and modify the existing Ranger Station staging area and construct two new staging areas (Rancho San Vicente and Almaden Road) which will include new parking, picnic, restroom, and equestrian amenities in addition to providing a new park entrance and ultimately connecting to existing trails in the park.

### INTRODUCTION

The Department of Parks and Recreation is proposing to construct two new areas that will include parking and equestrian staging, and to modify the existing Ranger Station staging area. The proposed Almaden Road staging area is located off Almaden Road in the northwest quadrant of the park. The proposed Rancho San Vicente staging area is located off McKean Road near the Fortini Road intersection, also in the northwest quadrant of the park. The existing Ranger Station staging area is located off McKean Road on the east edge of the park. This analysis focused on the operations of Almaden Road and McKean Road at the access points to the two new proposed staging areas. The site locations are shown on **Figure 1**.

# Calero County Park Trails Master Plan

## Calero County Park Trails Map





## EXISTING CONDITIONS

Five-day traffic counts (Wednesday through Sunday) were conducted on Almaden Road and McKean Road adjacent to the proposed staging areas to determine the existing vehicle volumes. **Table 1** presents the daily traffic volumes for each day counted. The average daily volumes are shown in **Table 2**. The average AM and PM peak hour volumes for weekdays and weekend days are shown in **Table 3**. The survey data is attached as an appendix.

The data survey results indicate an average of 1,930 vehicles per day (vpd) use Almaden Road and 5,092 vpd use McKean Road on a typical weekday, and 2,182 vpd use Almaden Road and 3,953 vpd use McKean Road on a typical weekend day. The peak hours vary by direction. Almaden Road has the highest volume of traffic at 7:45am and 5:00pm on weekdays, and 10:30am and 12:15pm on weekend days. McKean Road has the highest volume of traffic at 7:30am and 4:30pm on weekdays, and 11:15am and 2:15pm on weekend days.

**TABLE 1 DAILY VOLUMES**

<b>Almaden Road</b>	<b>Northbound</b>	<b>Southbound</b>	<b>Total</b>
Wednesday	938	948	1,886
Thursday	883	865	1,748
Friday	1,031	1,042	2,073
Saturday	1,142	1,172	2,314
Sunday	994	1,056	2,050
<b>McKean Road</b>	<b>Eastbound</b>	<b>Westbound</b>	<b>Total</b>
Wednesday	2,055	2,067	4,122
Thursday	1,977	1,979	3,956
Friday	2,219	2,008	4,227
Saturday	2,015	1,996	4,011
Sunday	1,915	1,980	3,895

Source: Fehr & Peers (2013)



**TABLE 2 AVERAGE DAILY VOLUMES**

<b>Almaden Road</b>	<b>Northbound</b>	<b>Southbound</b>	<b>Total</b>
Weekday	951	952	1,902
Weekend	1,068	1,114	2,182
<b>McKean Road</b>	<b>Eastbound</b>	<b>Westbound</b>	<b>Total</b>
Weekday	2,084	2,018	4,102
Weekend	1,965	1,988	3,953

Source: Fehr & Peers (2013)

**TABLE 3 PEAK HOUR VOLUMES**

<b>Almaden Road</b>	<b>AM Peak Hour</b>			<b>PM Peak Hour</b>		
	<b>Northbound volume (peak hour)</b>	<b>Southbound volume (peak hour)</b>	<b>Northbound &amp; Southbound Combined</b>	<b>Northbound volume (peak hour)</b>	<b>Southbound volume (peak hour)</b>	<b>Northbound &amp; Southbound Combined</b>
Weekday	95 (7:00am)	58 (11:30am)	<b>125 (7:45am)</b>	73 (2:15pm)	95 (5:00pm)	<b>155 (5:00pm)</b>
Weekend	96 (10:45am)	92 (10:00am)	<b>186 (10:30am)</b>	97 (4:15pm)	98 (3:00pm)	<b>187 (12:15pm)</b>
<b>McKean Road</b>	<b>AM Peak Hour</b>			<b>PM Peak Hour</b>		
	<b>Eastbound volume (peak hour)</b>	<b>Westbound volume (peak hour)</b>	<b>Eastbound &amp; Westbound Combined</b>	<b>Eastbound volume (peak hour)</b>	<b>Westbound volume (peak hour)</b>	<b>Eastbound &amp; Westbound Combined</b>
Weekday	159 (8:00am)	268 (7:15am)	<b>396 (7:30am)</b>	247 (4:45pm)	170 (5:15)	<b>398 (4:30pm)</b>
Weekend	175 (11:15am)	153 (11:15am)	<b>327 (11:15am)</b>	178 (12:00pm)	191 (3:30PM)	<b>344 (2:15PM)</b>

Source: Fehr & Peers (2013)



The 2010 *Highway Capacity Manual* (HCM) states that a two-lane highway has the capacity of up to 1,700 vehicles per hour in a peak direction. The average peak hour volumes on Almaden Road and McKean Road are well within their capacity.

Observations were also conducted on McKean Road and Almaden Road near the proposed new staging areas. No operational deficiencies, such as vehicle queuing, were identified in the project vicinity.

### PEAK WEEKEND TRIP GENERATION ESTIMATES

The amount of traffic generated by the proposed project was established by estimating the maximum number of vehicles that are expected to access the site on a peak weekend, which is typically a Spring weekend. The number of new proposed automobile and trailer parking spaces was obtained from the May 2013 *Draft Calero County Park Trails Master Plan*. These two types of parking spaces were added together to get a total new parking supply number. Parking turnover rates were determined based on parking lot size and park use information provided by a Senior Ranger at the Park. A parking turnover rate of 3 times per day was applied to 75% of the parking spaces, and a turnover rate of 2 for the remaining 25% of spaces. These rates were based on the average length of stay at the park for hikers (approximately 3 hours) and equestrian trail users (approximately 5 hours), and the estimated proportion of visitors who hike and ride horses. Each vehicle produces two trips: one inbound and one outbound. The daily number of vehicles estimated from the parking turnover rates was doubled to arrive at the daily number of trips. The daily trip generation was then multiplied by a K-factor of 0.1. The K-factor represents the ratio of peak hour trips to daily trips and is commonly used to convert daily trips to peak hour trips. Typically, the peak hour trips represent approximately 10% of the daily trips (K-factor=0.1). As an example, we estimate the Almaden Road staging area to produce 28 new daily trips, three of which will occur in the peak hour ( $28 \times 0.1 = 3$ ). The trip generation results are shown in **Table 4**. The table estimates the number of total daily trips assuming the proposed parking lot size and subtracts the existing trips (based on the number of existing parking spaces) to arrive at the net new trips.





**TABLE 4 TRIP GENERATION**

<b>ALMADEN ROAD</b>	<b>Total Parking Spaces</b> <i>(automobiles &amp; trailers)</i>	<b>Daily Vehicle Space Turnover</b> <i>(75% of Spaces)</i>	<b>Daily Vehicle Space Turnover</b> <i>(25% of Spaces)</i>	<b>Vehicles per Day</b>	<b>Trips per Vehicle</b> <i>(Inbound &amp; Outbound)</i>	<b>Total Vehicle Trips per Day</b>
Proposed (A)	5	3	2	14	2	28
Existing (B)	0	3	2	0	2	0
Net New Daily Trips (= A-B)						<b>28</b>
Net New Peak Hour Trips (10% of Daily Trips)						<b>3</b>
<b>RANCHO SAN VICENTE</b>	<b>Parking Spaces</b> <i>(automobiles &amp; trailers)</i>	<b>Daily Vehicle Space Turnover</b> <i>(75% of Spaces)</i>	<b>Daily Vehicle Space Turnover</b> <i>(25% of Spaces)</i>	<b>Vehicles per Day</b>	<b>Trips per Vehicle</b> <i>(Inbound &amp; Outbound)</i>	<b>Total Vehicle Trips per Day</b>
Proposed (A)	115	3	2	316	2	633
Existing (B)	0	3	2	0	2	0
Net New Daily Trips (= A-B)						<b>633</b>
Net New Peak Hour Trips (10% of Daily Trips)						<b>63</b>
<b>RANGER STATION</b>	<b>Total Parking Spaces</b> <i>(automobiles &amp; trailers)</i>	<b>Daily Vehicle Space Turnover</b> <i>(75% of Spaces)</i>	<b>Daily Vehicle Space Turnover</b> <i>(25% of Spaces)</i>	<b>Vehicles per Day</b>	<b>Trips per Vehicle</b> <i>(Inbound &amp; Outbound)</i>	<b>Total Vehicle Trips per Day</b>
Proposed (A)	93	3	2	256	2	512
Existing (B)	28	3	2	77	2	154
Net New Daily Trips (= A-B)						<b>358</b>
Net New Peak Hour Trips (10% of Daily Trips)						<b>36</b>

Source: Fehr & Peers (2013)



In total, the proposed staging areas will provide approximately 185 net new automobile and trailer parking spaces: five at Almaden Road, 115 at Rancho San Vicente, and 65 at the Ranger Station. These new parking spaces would add approximately 28 new daily trips on Almaden Road, and 990 new daily trips on McKean Road (633 trips generated by Rancho San Vicente and 358 generated by the Ranger Station).

## EXISTING PLUS PROJECT TRAFFIC VOLUMES

The trip generation estimates were added to the existing traffic volumes to arrive at the future vehicle volumes, which are shown in **Table 5**. The project's peak hour volumes are added to the existing peak AM volumes.

**TABLE 5 EXISTING PLUS PROJECT TRAFFIC VOLUMES**

<b>Almaden Road</b>	<b>Existing Daily</b>	<b>Daily Project</b>	<b>Total</b>	<b>Existing AM Peak</b>	<b>Peak Project</b>	<b>Total</b>
Average Weekday	1,902	28	1,930	125	3	128
Average Weekend	2,182	28	2,210	186	3	189
<b>McKean Road</b>	<b>Existing Daily</b>	<b>Daily Project</b>	<b>Total</b>	<b>Existing AM Peak</b>	<b>Peak Project</b>	<b>Total</b>
Average Weekday	4,102	991	5,092	396	99	495
Average Weekend	3,953	991	4,943	327	99	426

The roadway volumes with the staging area projects are still well within the roadway's peak hour capacity of 1,700 trips per peak direction on both Almaden Road and McKean Road.

The primary land use along both McKean Road and Almaden Road is rural residential, with open lots that border Calero County Park. Rural residential land use generally produces a small numbers of trips per day, which results in limited potential for conflicts between vehicles and/or equestrians.



## SIGHT DISTANCE

Due to the increase in vehicles with trailers accessing the staging area locations, the stopping sight distance was analyzed. As defined by the Caltrans *Highway Design manual*, sight distance is the continuous length of highway ahead, visible to the highway user. Stopping sight distance is the minimum sight distance for a given design speed to be provided on multilane highways and on 2-lane roads. The available stopping sight distance was measured in the field.

The Highway Design Manual requires a stopping sight distance of 250 for roadways with a design speed of 35 MPH, and 300 feet for roadways with a design speed of 40 mph. However, sight observations indicate that vehicles on McKean Road typically exceed the posted speed limit. Therefore, a design speed of 50 mph was used, which corresponds to a minimum stopping sight distance of 430 feet. The results of the sight distance review are presented in **Table 6**.

The sight distance from the Ranger Station entrance south on McKean Road is approximately 400', which is less than the required sight distance of 430'. The tree located about 400' south of the Ranger Station entrance on the east edge of McKean Road could be trimmed to potentially increase sight distance to 430 feet. All other sight distances are adequate.

**TABLE 6 SITE DISTANCE**

Staging Area	Roadway	Design Speed	Required Stopping Distance	Measured Stopping Distance (direction of approach)
Rancho San Vicente Staging Area	McKean Road	50 MPH (Posted 40 MPH)	430'	>500' (east) >500' (west)
Ranger Station Staging Area	McKean Road	50 MPH (Posted 40 MPH)	430'	>500' (north) 400' (south)
Almaden Road Staging Area	Almaden Road	35 MPH	250'	492' (southeast) >500' (northwest)

Source: Caltrans Highway Design Manual (2012), Fehr & Peers (2013)



## BICYCLE, PEDESTRIAN, AND EQUESTRIAN TRAVEL

A few bicyclists were observed using McKean Road and Almaden Road on the weekend. There are no bicycle lanes on either roadway and the shoulders are narrow on McKean Road. Bicyclists typically traveled on the right side of the travel lane, or in the shoulder when space allowed. The existing daily volumes indicate that the number of conflicts with bicycles and vehicles are low. Due to the minimal amount of traffic added by the proposed staging areas, the number of conflicts between these two modes would not substantially increase.

Pedestrian activity on McKean Road is very low. McKean Road is a rural roadway and there are no pedestrian facilities near the staging areas. The proposed Rancho San Vicente staging area is expected to generate cross traffic to Fortini Road as pedestrians access Santa Teresa Park. Due to the high speed limit on McKean Road and the low pedestrian volumes, we recommend installing a Rectangular Rapid Flashing Beacon (RRFB), a device which includes small rectangular yellow flashing lights that are deployed with pedestrian crossing warning signs. The lights are actuated by a pedestrian pushbutton and flash for a predetermined amount of time to allow the pedestrian to cross the roadway. RRFBs help warn drivers of crossing pedestrians ahead. A high-visibility crosswalk should be placed adjacent to the RRFB to direct pedestrians to the proper place to cross the street. In addition, a pedestrian and equestrian warning sign (W11-2 and W11-7) should be provided to warn drivers of the potential for pedestrians and equestrians in the roadway. The pedestrian signs should be installed approximately 20 feet in advance of the crosswalk. Almaden Road runs through a rural residential neighborhood and field observations indicated very low pedestrian activity. However, because the staging area will be located within vicinity of several residences, we can expect that some pedestrians will walk to the staging area and the appropriate signage (W11-2 and W11-7) should be provided to warn drivers of the potential for pedestrians and equestrians in the roadway.

## SITE PLAN REVIEW

Two conceptual site plans were reviewed from the *Draft Calero County Park Trails Master Plan*. A plan for the Almaden Road staging area has not yet been developed. The Rancho San Vicente staging area site plan can be seen on **Figure 2**, and the Ranger Station staging area site plan can be seen on **Figure 3**.



### **Rancho San Vicente Staging Area Site Plan**

The Rancho San Vicente staging area will be located on the south side of McKean Road, across from Fortini Road. A sign at the entrance will identify the staging area. The driveway includes a gate and an entrance kiosk, followed by automobile and trailer parking. Fifteen early bird parking spaces are available prior to the entrance gate and kiosk. A turnout/overflow space is available at the end of the regular parking area to accommodate turning vehicles. Trail entrances are south of the regular parking area in addition to a restroom and picnic area. The front entrance sign should stand perpendicular to McKean Road so vehicles can identify the staging area as they approach. Signage should also be provided within the parking area to identify trailer parking and automobile parking. A vehicle parking space should be removed at the trail entrance to provide adequate space to enter and exit the trail (see **Figure 2**). The Rancho San Vicente staging area driveway entrance should include one inbound and one outbound lane. To facilitate the trailers that will be turning into the staging area, consider adding an eastbound right-turn deceleration lane and a westbound left-turn pocket on McKean Road. The deceleration lane and turn-pocket should extend approximately 200 feet from the intersection.

### **Ranger Station Staging Area Site Plan**

The existing Ranger Station staging area will be modified to increase automobile and trailer parking and accommodate space for special events. The staging area will remain in its current location on Entrance Road, off McKean Road. The plan's circulation will be adequate to accommodate the users of the staging area. Signage should also be provided within the parking area to identify trailer parking and automobile parking and to direct visitors to the picnic and restroom area.

### **Almaden Road Staging Area**

The Draft Master Plan does not include a conceptual plan for the Almaden Road staging area, but lists the elements proposed for the area, including five parking spaces, a picnic area, and trailer access to Rancho San Vicente. The proposed staging area will not include trailer access. The entrance should include one inbound and one outbound lane, and an entrance sign perpendicular to the roadway.



## CONCLUSIONS

The amount of traffic generated by the proposed new and modified staging areas is not expected to substantially affect the traffic operations of the surrounding roadway system. The following improvements are recommended for the proposed project:

### **Almaden Road Staging Area**

- 1) The Almaden Road staging driveway entrance should include one inbound and one outbound lane.
- 2) Install the Almaden Road staging area entrance sign perpendicular to Almaden Road to maximize its visibility.
- 3) Install pedestrian and equestrian warning signs (W11-2 and W11-7) on Almaden Road to alert drivers for pedestrians and equestrians in the roadway.

### **Rancho San Vicente Staging Area**

- 1) Install a Rectangular Rapid Flashing Beacon (RRFB) on McKean Road at the Fortini Road intersection to alert drivers of crossing pedestrians.
- 2) Install a high-visibility crosswalk adjacent to the RRFB to direct pedestrians to the proper crossing location on McKean Road.
- 3) Place pedestrian and equestrian warning signs (W11-2 and W11-7) approximately 20 feet in advance of the high-visibility crosswalk on McKean Road.
- 4) Install the Rancho San Vicente entrance sign perpendicular to McKean Road to maximize its visibility.
- 5) Install signage within the parking area to identify trailer parking and automobile parking.
- 6) Remove a vehicle space at the trail entrance to provide adequate space to enter and exit the trail.
- 7) The Rancho San Vicente driveway entrance should include one inbound and one outbound lane.
- 8) Consider adding an eastbound right-turn deceleration lane and a westbound left-turn pocket on McKean Road.

### **Ranger Station Staging Area**

1. Trim the tree located about 400' south of the entrance to increase sight distance.
2. Install signage within the parking area to identify trailer parking and automobile parking and to direct visitors to the picnic and restroom area.





## Rancho San Vicente Staging Area

Conceptual Design Only

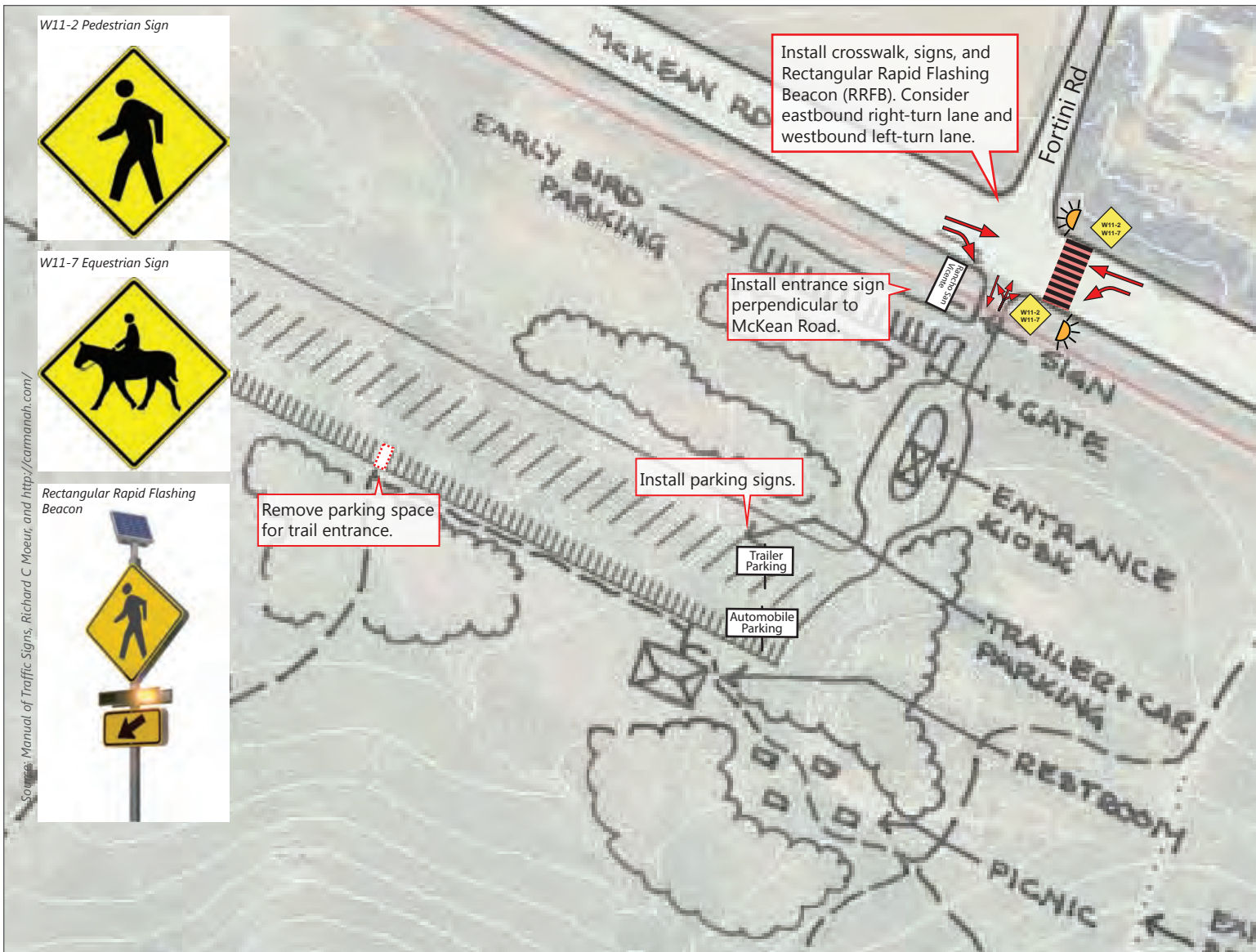


Features:

- 25 trailer spaces
- 15 early bird car spaces
- 75 regular car spaces
- Compact parking design
- Turnout / Overflow parking
- Restroom
- Entrance kiosk with gated car access
- Picnic area

-  Denotes W11-2 and W11-7 signs to be placed approximately 20 feet in advance of crosswalk.
-  High visibility crosswalk
-  Travel lanes
-  Rectangular Rapid Flashing Beacon (RRFB)

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W11-2 Pedestrian Sign



W11-7 Equestrian Sign



Rectangular Rapid Flashing Beacon



Source: Manual of Traffic Signs, Richard C Moeur, and <http://cammanah.com/>



## Ranger Station Staging Area

Concept Design Only



- Features:
- 75 regular car spaces 10' x 20'
  - 18 trailer spaces 28' x 55'
  - Restroom
  - Picnic Area
  - Separate car and trailer parking areas
  - Formal circulation layout
  - Equestrian corral
  - Overflow parking area



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**APPENDIX:**

**TRAFFIC COUNTS**

## MEMORANDUM

Date: June 6, 2013

To: Terri Wissler Adam, EMC Planning Group Inc.

From: Alexandra Sweet, Katy Cole, and Alisar Aoun

**Subject: Focused Transportation Analysis for the Calero County Park Trails Master Plan**

*SJ13-1438*

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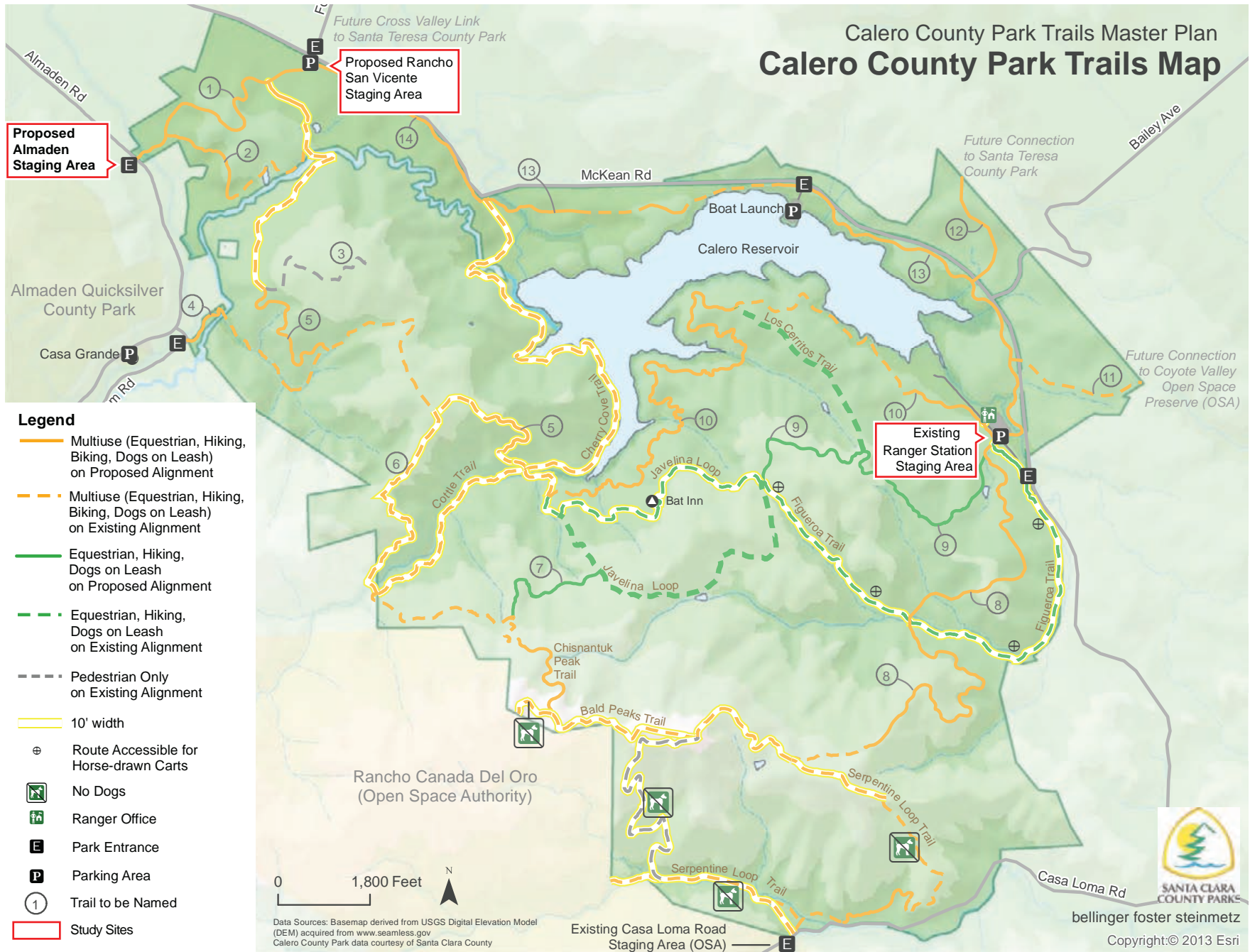
This memorandum presents results of the focused traffic analysis for the Calero County Park Trails Master Plan in San Jose, California. The proposed project will modify the existing Ranger Station staging area and construct two new staging areas (Rancho San Vicente and Almaden Road) which will include new parking, picnic, restroom, and equestrian amenities in addition to providing a new park entrance and ultimately connecting to existing trails in the park.

### INTRODUCTION

The Santa Clara County Open Space Authority (OSA) is proposing to construct two new areas that will comprise of parking and equestrian staging, and to modify the existing Ranger Station staging area. The proposed Almaden Road staging area is located off Almaden Road in the northwest quadrant of the park. The proposed Rancho San Vicente staging area is located off McKean Road near the Fortini Road intersection, also in the northwest quadrant of the park. The existing Ranger Station staging area is located off McKean Road on the east edge of the park. This analysis focused on the operations of Almaden Road and McKean Road at the access points to the two new proposed staging areas. The site locations are shown on **Figure 1**.

# Calero County Park Trails Master Plan

## Calero County Park Trails Map





## EXISTING CONDITIONS

Five-day traffic counts (Wednesday through Sunday) were conducted on Almaden Road and McKean Road adjacent to the proposed staging areas to determine the existing vehicle volumes. **Table 1** presents the daily traffic volumes for each day counted. The average daily volumes are shown in **Table 2**. The average AM and PM peak hour volumes for weekdays and weekend days are shown in **Table 3**. The survey data is attached as an appendix.

The data survey results indicate an average of 1,930 vehicles per day (vpd) use Almaden Road and 5,092 vpd use McKean Road on a typical weekday, and 2,182 vpd use Almaden Road and 3,953 vpd use McKean Road on a typical weekend day. The peak hours vary by direction. Almaden Road has the highest volume of traffic at 7:45am and 5:00pm on weekdays, and 10:30am and 12:15pm on weekend days. McKean Road has the highest volume of traffic at 7:30am and 4:30pm on weekdays, and 11:15am and 2:15pm on weekend days.

**TABLE 1 DAILY VOLUMES**

<b>Almaden Road</b>	<b>Northbound</b>	<b>Southbound</b>	<b>Total</b>
Wednesday	938	948	1,886
Thursday	883	865	1,748
Friday	1,031	1,042	2,073
Saturday	1,142	1,172	2,314
Sunday	994	1,056	2,050
<b>McKean Road</b>	<b>Eastbound</b>	<b>Westbound</b>	<b>Total</b>
Wednesday	2,055	2,067	4,122
Thursday	1,977	1,979	3,956
Friday	2,219	2,008	4,227
Saturday	2,015	1,996	4,011
Sunday	1,915	1,980	3,895

Source: Fehr & Peers (2013)



**TABLE 2 AVERAGE DAILY VOLUMES**

<b>Almaden Road</b>	<b>Northbound</b>	<b>Southbound</b>	<b>Total</b>
Weekday	951	952	1,902
Weekend	1,068	1,114	2,182
<b>McKean Road</b>	<b>Eastbound</b>	<b>Westbound</b>	<b>Total</b>
Weekday	2,084	2,018	4,102
Weekend	1,965	1,988	3,953

Source: Fehr & Peers (2013)

**TABLE 3 PEAK HOUR VOLUMES**

<b>Almaden Road</b>	<b>AM Peak Hour</b>			<b>PM Peak Hour</b>		
	<b>Northbound volume (peak hour)</b>	<b>Southbound volume (peak hour)</b>	<b>Northbound &amp; Southbound Combined</b>	<b>Northbound volume (peak hour)</b>	<b>Southbound volume (peak hour)</b>	<b>Northbound &amp; Southbound Combined</b>
Weekday	95 (7:00am)	58 (11:30am)	<b>125 (7:45am)</b>	73 (2:15pm)	95 (5:00pm)	<b>155 (5:00pm)</b>
Weekend	96 (10:45am)	92 (10:00am)	<b>186 (10:30am)</b>	97 (4:15pm)	98 (3:00pm)	<b>187 (12:15pm)</b>
<b>McKean Road</b>	<b>AM Peak Hour</b>			<b>PM Peak Hour</b>		
	<b>Eastbound volume (peak hour)</b>	<b>Westbound volume (peak hour)</b>	<b>Eastbound &amp; Westbound Combined</b>	<b>Eastbound volume (peak hour)</b>	<b>Westbound volume (peak hour)</b>	<b>Eastbound &amp; Westbound Combined</b>
Weekday	159 (8:00am)	268 (7:15am)	<b>396 (7:30am)</b>	247 (4:45pm)	170 (5:15)	<b>398 (4:30pm)</b>
Weekend	175 (11:15am)	153 (11:15am)	<b>327 (11:15am)</b>	178 (12:00pm)	191 (3:30PM)	<b>344 (2:15PM)</b>

Source: Fehr & Peers (2013)



The 2010 *Highway Capacity Manual* (HCM) states that a two-lane highway has the capacity of up to 1,700 vehicles per hour in a peak direction. The average peak hour volumes on Almaden Road and McKean Road are well within their capacity.

Observations were also conducted on McKean Road and Almaden Road near the proposed new staging areas. No operational deficiencies, such as vehicle queuing, were identified in the project vicinity.

### PEAK WEEKEND TRIP GENERATION ESTIMATES

The amount of traffic generated by the proposed project was established by estimating the maximum number of vehicles that are expected to access the site on a peak weekend, which is typically a Spring weekend. The number of new proposed automobile and trailer parking spaces was obtained from the May 2013 *Calero County Park Trails Master Plan*. These two types of parking spaces were added together to get a total new parking supply number. Parking turnover rates were determined based on parking lot size and park use information provided by a Senior Ranger at the Park. A parking turnover rate of 3 times per day was applied to 75% of the parking spaces, and a turnover rate of 2 for the remaining 25% of spaces. These rates were based on the average length of stay at the park for hikers (approximately 3 hours) and equestrian trail users (approximately 5 hours), and the estimated proportion of visitors who hike and ride horses. Each vehicle produces two trips: one inbound and one outbound. The daily number of vehicles estimated from the parking turnover rates was doubled to arrive at the daily number of trips. The daily trip generation was then multiplied by a K-factor of 0.1. The K-factor represents the ratio of peak hour trips to daily trips and is commonly used to convert daily trips to peak hour trips. Typically, the peak hour trips represent approximately 10% of the daily trips (K-factor=0.1). As an example, we estimate the Almaden Road staging area to produce 28 new daily trips, three of which will occur in the peak hour ( $28 \cdot 0.1 = 3$ ). The trip generation results are shown in **Table 4**. The table estimates the number of total daily trips assuming the proposed parking lot size and subtracts the existing trips (based on the number of existing parking spaces) to arrive at the net new trips.



**TABLE 4 TRIP GENERATION**

<b>ALMADEN ROAD</b>	<b>Total Parking Spaces</b> <i>(automobiles &amp; trailers)</i>	<b>Daily Vehicle Space Turnover</b> <i>(75% of Spaces)</i>	<b>Daily Vehicle Space Turnover</b> <i>(25% of Spaces)</i>	<b>Vehicles per Day</b>	<b>Trips per Vehicle</b> <i>(Inbound &amp; Outbound)</i>	<b>Total Vehicle Trips per Day</b>
Proposed (A)	5	3	2	14	2	28
Existing (B)	0	3	2	0	2	0
Net New Daily Trips (= A-B)						<b>28</b>
Net New Peak Hour Trips (10% of Daily Trips)						<b>3</b>
<b>RANCHO SAN VICENTE</b>	<b>Parking Spaces</b> <i>(automobiles &amp; trailers)</i>	<b>Daily Vehicle Space Turnover</b> <i>(75% of Spaces)</i>	<b>Daily Vehicle Space Turnover</b> <i>(25% of Spaces)</i>	<b>Vehicles per Day</b>	<b>Trips per Vehicle</b> <i>(Inbound &amp; Outbound)</i>	<b>Total Vehicle Trips per Day</b>
Proposed (A)	115	3	2	316	2	633
Existing (B)	0	3	2	0	2	0
Net New Daily Trips (= A-B)						<b>633</b>
Net New Peak Hour Trips (10% of Daily Trips)						<b>63</b>
<b>RANGER STATION</b>	<b>Total Parking Spaces</b> <i>(automobiles &amp; trailers)</i>	<b>Daily Vehicle Space Turnover</b> <i>(75% of Spaces)</i>	<b>Daily Vehicle Space Turnover</b> <i>(25% of Spaces)</i>	<b>Vehicles per Day</b>	<b>Trips per Vehicle</b> <i>(Inbound &amp; Outbound)</i>	<b>Total Vehicle Trips per Day</b>
Proposed (A)	93	3	2	256	2	512
Existing (B)	28	3	2	77	2	154
Net New Daily Trips (= A-B)						<b>358</b>
Net New Peak Hour Trips (10% of Daily Trips)						<b>36</b>

Source: Fehr & Peers (2013)



In total, the proposed staging areas will provide approximately 185 net new automobile and trailer parking spaces: five at Almaden Road, 115 at Rancho San Vicente, and 65 at the Ranger Station. These new parking spaces would add approximately 28 new daily trips on Almaden Road, and 990 new daily trips on McKean Road (633 trips generated by Rancho San Vicente and 358 generated by the Ranger Station).

## EXISTING PLUS PROJECT TRAFFIC VOLUMES

The trip generation estimates were added to the existing traffic volumes to arrive at the future vehicle volumes, which are shown in **Table 5**. The project's peak hour volumes are added to the existing peak AM volumes.

**TABLE 5 EXISTING PLUS PROJECT TRAFFIC VOLUMES**

<b>Almaden Road</b>	<b>Existing Daily</b>	<b>Daily Project</b>	<b>Total</b>	<b>Existing AM Peak</b>	<b>Peak Project</b>	<b>Total</b>
Average Weekday	1,902	28	1,930	125	3	128
Average Weekend	2,182	28	2,210	186	3	189
<b>McKean Road</b>	<b>Existing Daily</b>	<b>Daily Project</b>	<b>Total</b>	<b>Existing AM Peak</b>	<b>Peak Project</b>	<b>Total</b>
Average Weekday	4,102	991	5,092	396	99	495
Average Weekend	3,953	991	4,943	327	99	426

The roadway volumes with the staging area projects are still well within the roadway's peak hour capacity of 1,700 trips per peak direction on both Almaden Road and McKean Road.

The primary land use along both McKean Road and Almaden Road is rural residential, with open lots that border Calero County Park. Rural residential land use generally produces a small numbers of trips per day, which results in limited potential for conflicts between vehicles and/or equestrians.





## SIGHT DISTANCE

Due to the increase in vehicles with trailers accessing the staging area locations, the stopping sight distance was analyzed. As defined by the Caltrans *Highway Design manual*, sight distance is the continuous length of highway ahead, visible to the highway user. Stopping sight distance is the minimum sight distance for a given design speed to be provided on multilane highways and on 2-lane roads. The available stopping sight distance was measured in the field.

The Highway Design Manual requires a stopping sight distance of 250 for roadways with a design speed of 35 MPH, and 300 feet for roadways with a design speed of 40 mph. However, sight observations indicate that vehicles on McKean Road typically exceed the posted speed limit. Therefore, a design speed of 50 mph was used, which corresponds to a minimum stopping sight distance of 430 feet. The results of the sight distance review are presented in **Table 6**.

The sight distance from the Ranger Station entrance south on McKean Road is approximately 400', which is less than the required sight distance of 430'. The tree located about 400' south of the Ranger station entrance on the east edge of McKean Rd could be trimmed to potentially increase sight distance to 430 feet. All other sight distances are adequate.

**TABLE 6 SITE DISTANCE**

Staging Area	Roadway	Design Speed	Required Stopping Distance	Measured Stopping Distance (direction of approach)
Rancho San Vicente Staging Area	McKean Road	50 MPH (Posted 40 MPH)	430'	>500' (east) >500' (west)
Ranger Station Staging Area	McKean Road	50 MPH (Posted 40 MPH)	430'	>500' (north) 400' (south)
Almaden Road Staging Area	Almaden Road	35 MPH	250'	492' (southeast) >500' (northwest)

Source: Caltrans Highway Design Manual (2012), Fehr & Peers (2013)



## BICYCLE, PEDESTRIAN, AND EQUESTRIAN TRAVEL

A few bicyclists were observed using McKean Road and Almaden Road on the weekend. There are no bicycle lanes on either roadway and the shoulders are narrow on McKean Road. Bicyclists typically traveled on the right side of the travel lane, or in the shoulder when space allowed. The existing daily volumes indicate that the number of conflicts with bicycles and vehicles are low. Due to the minimal amount of traffic added by the proposed staging areas, the number of conflicts between these two modes would not substantially increase.

Pedestrian activity on McKean Road is very low. McKean Road is a rural roadway and there are no pedestrian facilities near the staging areas. The proposed Rancho San Vicente staging area is expected to generate cross traffic to Fortini Road as pedestrians access Santa Teresa Park. Due to the high speed limit on McKean Road and the low pedestrian volumes, we recommend installing a Rectangular Rapid Flashing Beacon (RRFB), a device which includes small rectangular yellow flashing lights that are deployed with pedestrian crossing warning signs. The lights are actuated by a pedestrian pushbutton and flash for a predetermined amount of time to allow the pedestrian to cross the roadway. RRFBs help warn drivers of crossing pedestrians ahead. A high-visibility crosswalk should be placed adjacent to the RRFB to direct pedestrians to the proper place to cross the street. In addition, a pedestrian and equestrian warning sign (W11-2 and W11-7) should be provided to warn drivers of the potential for pedestrians and equestrians in the roadway. The pedestrian signs should be installed approximately 20 feet in advance of the crosswalk. Almaden Road runs through a rural residential neighborhood and field observations indicated very low pedestrian activity. However, because the staging area will be located within vicinity of several residences, we can expect that some pedestrians will walk to the staging area and the appropriate signage (W11-2 and W11-7) should be provided to warn drivers of the potential for pedestrians and equestrians in the roadway.

## SITE PLAN REVIEW

Two conceptual site plans were reviewed from the Calero County Park Trails Master Plan. A plan for the Almaden Road staging area has not yet been developed. The Rancho San Vicente staging area site plan can be seen on **Figure 2**, and the Ranger Station staging area site plan can be seen on **Figure 3**.



### **Rancho San Vicente Staging Area Site Plan**

The Rancho San Vicente staging area will be located on the south side of McKean Road, across from Fortini Road. A sign at the entrance will identify the staging area. The driveway includes a gate and an entrance kiosk, followed by automobile and trailer parking. Fifteen early bird parking spaces are available prior to the entrance gate and kiosk. A turnout/overflow space is available at the end of the regular parking area to accommodate turning vehicles. Trail entrances are south of the regular parking area in addition to a restroom and picnic area. The front entrance sign should stand perpendicular to McKean Road so vehicles can identify the staging area as they approach. Signage should also be provided within the parking area to identify trailer parking and automobile parking. A vehicle parking space should be removed at the trail entrance to provide adequate space to enter and exit the trail (see **Figure 2**). The Rancho San Vicente staging area driveway entrance should include one inbound and one outbound lane. To facilitate the trailers that will be turning into the staging area, consider adding an eastbound right-turn deceleration lane and a westbound left turn pocket on McKean Road. The deceleration lane and turn-pocket should extend approximately 200 feet from the intersection.

### **Ranger Station Staging Area Site Plan**

The existing Ranger Station staging area will be modified to increase automobile and trailer parking and accommodate space for special events. The staging area will remain in its current location on Entrance Road, off McKean Road. The plan's circulation will be adequate to accommodate the users of the staging area. Signage should also be provided within the parking area to identify trailer parking and automobile parking and to direct visitors to the picnic and restroom area.

### **Almaden Road Staging Area**

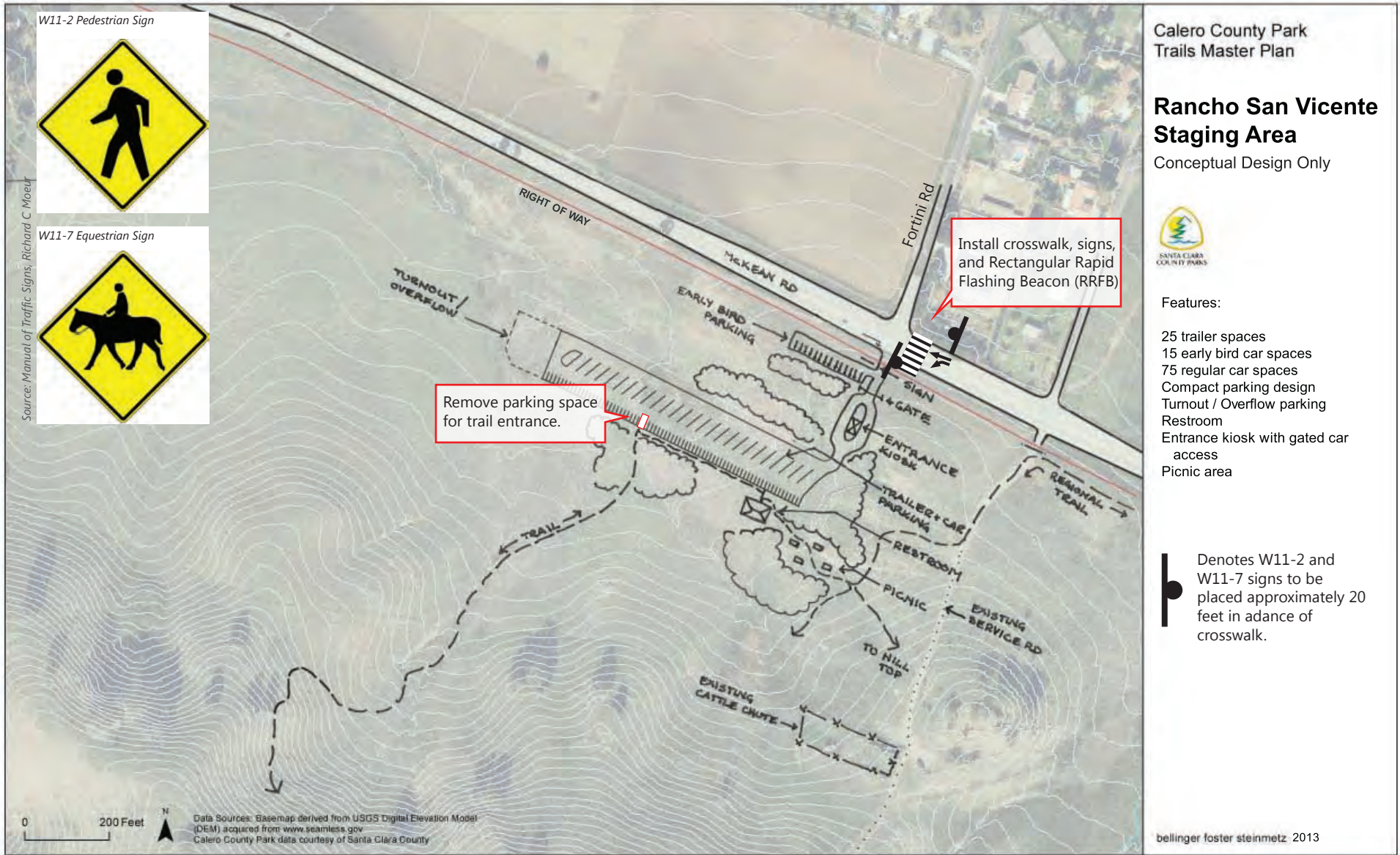
The Master Plan does not include a conceptual plan for the Almaden Road staging area, but lists the elements proposed for the area, including five parking spaces, a picnic area, and trailer access to Rancho San Vicente. The proposed staging area will not include trailer access. The entrance should include one inbound and one outbound lane, and an entrance sign perpendicular to the roadway.



## CONCLUSIONS

The amount of traffic generated by the proposed new and modified staging areas is not expected to substantially affect the traffic operations of the surrounding roadway system.

Appropriate signage should be installed on both McKean Road and Almaden Road to alert drivers to pedestrians and equestrians on the roadways.









**APPENDIX:**

**TRAFFIC COUNTS**

## Traffic Data Service -- Campbell, CA Vehicle Counts

### VehicleCount-1471 -- English (ENU)

**Datasets:**

**Site:** [1] ALMADEN RD N OF ROME DR

**Profile:**

**Included classes:** 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13  
**Speed range:** 0 - 100 mph.  
**Direction:** North (bound)  
**Scheme:** Vehicle classification (Scheme F)  
**Units:** Non metric (ft, mi, ft/s, mph, lb, ton)

**\* Wednesday, May 15, 2013 - Total=938, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
3	0	1	3	5	22	54	106	73	42	61	55	55	53	74	60	59	66	42	32	41	21	6	4	
1	0	0	0	0	2	7	20	13	9	15	15	13	10	13	14	11	19	12	6	9	6	5	1	0
1	0	0	1	0	6	7	30	21	7	12	11	14	18	13	11	13	14	6	10	12	8	1	2	0
0	0	1	1	3	5	21	26	21	15	17	19	11	16	30	16	19	14	10	8	10	6	0	0	1
1	0	0	1	2	9	19	30	18	11	17	10	17	9	18	19	16	19	14	8	10	1	0	1	0

AM Peak 0700 - 0800 (106), AM PHF=0.88 PM Peak 1415 - 1515 (75), PM PHF=0.63

**\* Thursday, May 16, 2013 - Total=883, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
1	0	1	1	5	23	53	101	66	58	57	52	41	52	59	39	59	57	49	34	31	20	20	4	
0	0	0	0	1	1	8	24	11	16	16	13	8	17	17	11	15	13	11	8	7	5	3	2	1
0	0	0	1	1	4	12	25	19	17	13	12	14	13	13	8	18	16	15	3	9	6	2	2	3
1	0	1	0	1	8	13	23	23	10	13	8	11	11	12	9	14	10	14	13	7	6	1	0	1
0	0	0	0	2	10	20	29	13	15	15	19	8	11	17	11	12	18	9	10	8	3	14	0	1

AM Peak 0700 - 0800 (101), AM PHF=0.87 PM Peak 1400 - 1500 (59), PM PHF=0.87

**\* Friday, May 17, 2013 - Total=1031, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
6	3	0	3	7	20	45	78	77	66	69	70	57	56	84	60	59	59	52	48	42	35	25	10	
1	2	0	0	2	6	6	21	22	14	16	24	11	22	13	20	17	18	18	8	15	8	6	4	2
3	0	0	1	1	4	11	17	20	17	19	9	22	18	33	16	23	17	13	16	7	6	8	2	8
1	1	0	1	2	5	14	24	23	17	14	23	12	9	19	16	12	6	9	13	13	11	5	2	2
1	0	0	1	2	5	14	16	12	18	20	14	12	7	19	8	7	18	12	11	7	10	6	2	1

AM Peak 0730 - 0830 (82), AM PHF=0.85 PM Peak 1415 - 1515 (91), PM PHF=0.69

**\* Saturday, May 18, 2013 - Total=1142, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
13	3	1	0	4	14	13	22	34	78	95	93	81	85	76	87	106	93	52	48	49	37	44	14	
2	0	0	0	2	2	1	7	4	20	20	24	15	26	27	24	23	32	18	9	12	9	11	4	5
8	1	1	0	0	5	5	2	10	18	29	27	21	15	13	24	20	18	7	16	21	6	10	3	0
2	2	0	0	0	3	3	8	12	24	15	16	19	19	20	22	27	26	10	12	7	10	11	3	0
1	0	0	0	2	4	4	5	8	16	31	26	26	25	16	17	36	17	17	11	9	12	12	4	0

AM Peak 1015 - 1115 (99), AM PHF=0.80 PM Peak 1615 - 1715 (115), PM PHF=0.80

**\* Sunday, May 19, 2013 - Total=994, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
5	1	1	4	5	8	12	30	33	83	83	93	82	85	66	80	83	67	44	43	44	26	11	5	
5	0	0	0	0	2	3	9	9	21	22	31	19	26	16	15	21	17	11	13	12	13	2	1	4
0	1	0	0	1	2	3	5	7	19	14	16	22	24	13	23	21	18	10	9	10	6	2	1	0
0	0	0	4	3	3	3	9	9	23	23	23	19	18	19	24	25	13	10	14	9	6	3	3	1
0	0	1	0	1	1	3	7	8	20	24	23	22	17	18	18	16	19	13	7	13	1	4	0	0

AM Peak 1030 - 1130 (94), AM PHF=0.76 PM Peak 1230 - 1330 (91), PM PHF=0.88



## Traffic Data Service -- Campbell, CA Vehicle Counts

### VehicleCount-1472 -- English (ENU)

**Datasets:**

**Site:** [1] ALMADEN RD N OF ROME DR

**Profile:**

**Included classes:** 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13

**Speed range:** 0 - 100 mph.

**Direction:** South (bound)

**Scheme:** Vehicle classification (Scheme F)

**Units:** Non metric (ft, mi, ft/s, mph, lb, ton)

**\* Wednesday, May 15, 2013 - Total=948, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
6	1	0	2	2	5	16	29	37	64	35	36	61	52	62	89	91	95	82	70	47	37	19	10	
2	0	0	1	0	1	2	8	12	12	8	7	28	15	16	24	25	25	20	23	15	8	4	1	1
1	0	0	0	2	2	5	6	5	16	10	11	16	12	19	29	23	18	25	15	11	10	3	8	2
3	1	0	1	0	1	6	5	14	20	9	6	6	11	8	15	23	26	18	13	14	7	6	1	0
0	0	0	0	0	1	3	10	6	16	8	12	11	14	19	21	20	26	19	19	7	12	6	0	1

AM Peak 0900 - 1000 (64), AM PHF=0.80 PM Peak 1730 - 1830 (97), PM PHF=0.93

**\* Thursday, May 16, 2013 - Total=865, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
4	2	0	0	0	1	16	23	40	50	41	35	59	52	54	68	66	93	83	69	41	42	21	5	
1	2	0	0	0	0	2	6	17	13	10	8	18	16	18	21	16	27	17	19	10	12	5	1	4
2	0	0	0	0	1	7	5	9	21	7	11	8	10	9	19	11	17	29	21	15	12	7	0	1
0	0	0	0	0	0	6	7	9	10	9	9	11	13	16	12	18	24	17	11	7	9	5	1	1
1	0	0	0	0	0	1	5	5	6	15	7	22	13	11	16	21	25	20	18	9	9	4	3	4

AM Peak 0900 - 1000 (50), AM PHF=0.60 PM Peak 1730 - 1830 (95), PM PHF=0.82

**\* Friday, May 17, 2013 - Total=1042, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
10	5	2	1	0	1	14	27	50	57	65	50	76	48	67	85	81	96	81	78	59	38	30	21	
4	3	0	0	0	0	4	6	10	11	16	13	16	6	22	27	15	24	28	14	16	9	8	2	2
1	0	0	1	0	0	4	6	14	17	18	7	23	10	17	17	23	29	15	32	21	15	9	5	1
1	2	1	0	0	0	5	7	14	16	17	15	13	17	11	18	17	22	17	18	10	10	6	5	5
4	0	1	0	0	1	1	8	12	13	14	15	24	15	17	23	26	21	21	14	12	4	7	9	1

AM Peak 1130 - 1230 (69), AM PHF=0.75 PM Peak 1645 - 1745 (101), PM PHF=0.87

**\* Saturday, May 18, 2013 - Total=1172, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
9	6	4	2	1	3	11	37	53	54	108	81	92	81	85	109	85	75	89	50	46	34	32	25	
2	1	0	0	0	0	1	7	13	10	36	21	14	22	14	30	23	9	23	14	9	3	5	5	4
1	1	3	1	0	1	4	9	11	8	21	21	22	19	31	16	22	18	19	11	14	7	5	6	1
5	1	0	0	1	2	2	13	12	16	18	20	37	18	20	26	14	24	21	11	9	12	11	7	2
1	3	1	1	0	0	4	8	17	20	33	19	19	22	20	37	26	24	26	14	14	12	11	7	2

AM Peak 1000 - 1100 (108), AM PHF=0.75 PM Peak 1500 - 1600 (109), PM PHF=0.74

**\* Sunday, May 19, 2013 - Total=1056, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
9	5	4	2	1	3	13	30	51	69	75	76	98	80	87	86	70	81	70	48	40	26	21	11	
4	3	1	1	0	0	3	4	4	21	18	19	23	18	28	25	23	20	22	14	13	10	4	1	1
1	1	2	0	0	1	2	6	11	18	12	23	19	14	17	20	21	26	13	12	15	8	6	1	4
2	1	0	1	0	2	4	11	20	17	20	17	29	16	19	18	14	15	20	10	3	5	3	5	1
2	0	1	0	1	0	4	9	16	13	25	17	27	32	23	23	12	20	15	12	9	3	8	4	0

AM Peak 1145 - 1245 (88), AM PHF=0.76 PM Peak 1200 - 1300 (98), PM PHF=0.84

## Traffic Data Service -- Campbell, CA Vehicle Counts

### VehicleCount-1474 -- English (ENU)

**Datasets:**

**Site:** [2] MCKEAN RD E OF FORTINI RD

**Profile:**

**Included classes:** 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13

**Speed range:** 0 - 100 mph.

**Direction:** East (bound)

**Scheme:** Vehicle classification (Scheme F)

**Units:** Non metric (ft, mi, ft/s, mph, lb, ton)

**\* Wednesday, May 15, 2013 - Total=2055, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
6	3	1	2	8	15	54	101	177	166	106	94	108	99	115	174	198	223	148	104	69	48	27	9	
1	2	1	0	1	2	8	20	52	43	28	20	29	20	24	47	43	64	47	20	15	17	10	4	5
2	0	0	0	4	0	9	19	31	42	22	23	29	27	28	42	51	59	35	29	22	14	6	1	4
3	1	0	1	1	5	17	30	46	43	23	23	25	26	39	38	51	57	32	31	16	9	7	3	0
0	0	0	1	2	8	20	32	48	38	33	28	25	26	24	47	53	43	34	24	16	8	4	1	2

AM Peak 0830 - 0930 (179), AM PHF=0.93 PM Peak 1645 - 1745 (233), PM PHF=0.91

**\* Thursday, May 16, 2013 - Total=1977, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
11	2	2	1	8	11	41	106	160	136	100	80	97	94	116	156	209	236	176	82	64	41	33	15	
5	1	0	0	1	1	4	28	45	41	27	21	15	27	19	36	48	51	56	25	19	8	7	1	6
4	1	0	0	2	2	8	21	38	32	29	22	35	26	27	53	43	56	45	23	21	14	15	7	3
0	0	1	0	3	4	16	26	38	34	22	15	29	30	38	35	54	68	42	17	14	10	5	4	4
2	0	1	1	2	4	13	31	39	29	22	22	18	11	32	32	64	61	33	17	10	9	6	3	0

AM Peak 0800 - 0900 (160), AM PHF=0.89 PM Peak 1715 - 1815 (241), PM PHF=0.89

**\* Friday, May 17, 2013 - Total=2219, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
13	4	5	4	8	12	48	91	140	109	151	174	127	109	105	195	227	250	187	89	78	42	29	22	
6	2	1	2	1	1	9	26	38	29	34	44	24	29	28	43	57	76	56	25	25	9	12	9	3
3	1	1	1	2	4	9	18	40	30	33	62	24	29	23	44	43	67	46	26	20	9	3	6	3
4	1	1	1	2	3	14	17	37	20	35	42	35	29	31	60	61	59	47	19	13	13	9	3	2
0	0	2	0	3	4	16	30	25	30	49	26	44	22	23	48	66	48	38	19	20	11	5	4	2

AM Peak 1045 - 1145 (197), AM PHF=0.79 PM Peak 1630 - 1730 (270), PM PHF=0.89

**\* Saturday, May 18, 2013 - Total=2015, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
10	9	6	4	3	10	43	84	125	123	162	162	172	141	175	150	150	120	110	66	63	58	35	34	
3	2	2	0	0	1	5	14	25	29	39	30	51	33	42	38	40	37	30	21	18	11	9	13	5
3	3	0	2	1	1	11	17	40	36	34	32	32	29	37	37	36	31	27	15	14	15	11	8	4
2	4	1	1	1	4	11	23	24	27	39	61	40	38	47	44	35	23	28	13	13	24	9	8	4
2	0	3	1	1	4	16	30	36	31	50	39	49	41	49	31	39	29	25	17	18	8	6	5	5

AM Peak 1115 - 1215 (183), AM PHF=0.75 PM Peak 1400 - 1500 (175), PM PHF=0.89

**\* Sunday, May 19, 2013 - Total=1915, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
18	6	5	2	4	37	44	99	74	129	161	165	184	166	134	143	133	122	87	67	53	49	21	12	
5	2	1	0	2	4	14	18	18	25	44	42	43	57	32	40	39	34	27	24	13	20	9	5	4
4	3	1	1	0	9	10	24	16	21	34	46	44	36	35	35	28	35	25	17	17	10	6	5	3
4	0	1	0	0	11	10	23	19	39	46	40	48	35	33	28	34	29	20	14	13	11	3	0	1
5	1	2	1	2	13	10	34	21	44	37	37	49	38	34	40	32	24	15	12	10	8	3	2	1

AM Peak 1145 - 1245 (172), AM PHF=0.90 PM Peak 1215 - 1315 (198), PM PHF=0.87

## Traffic Data Service -- Campbell, CA Vehicle Counts

### VehicleCount-1473 -- English (ENU)

**Datasets:**

**Site:** [2] MCKEAN RD E OF FORTINI RD

**Profile:**

**Included classes:** 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13

**Speed range:** 0 - 100 mph.

**Direction:** West (bound)

**Scheme:** Vehicle classification (Scheme F)

**Units:** Non metric (ft, mi, ft/s, mph, lb, ton)

**\* Wednesday, May 15, 2013 - Total=2067, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
6	4	0	2	4	23	103	294	178	93	81	94	80	113	131	133	158	162	164	109	69	41	15	10	
3	0	0	1	0	4	16	59	50	17	28	29	24	28	18	37	42	32	55	37	24	12	8	2	2
1	2	0	0	1	5	23	72	63	22	15	22	20	41	28	33	30	48	51	28	21	15	3	2	3
1	1	0	0	0	4	28	99	28	29	20	17	24	23	42	36	44	41	24	22	12	6	3	3	2
1	1	0	1	3	10	36	64	37	25	18	26	12	21	43	27	42	41	34	22	12	8	1	3	0

AM Peak 0700 - 0800 (294), AM PHF=0.74 PM Peak 1730 - 1830 (188), PM PHF=0.85

**\* Thursday, May 16, 2013 - Total=1979, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
7	2	3	2	5	20	92	283	203	93	94	66	84	92	116	121	127	167	144	118	72	44	15	9	
2	0	1	1	1	4	10	59	66	39	20	14	28	23	25	27	40	35	43	41	17	20	2	2	5
3	1	1	0	1	5	16	72	60	21	28	19	19	29	33	28	34	43	40	28	20	8	4	2	2
2	1	1	1	1	4	27	75	38	17	21	18	18	22	29	39	32	44	21	18	21	7	5	5	4
0	0	0	0	2	7	39	77	39	16	25	15	19	18	29	27	21	45	40	31	14	9	4	0	1

AM Peak 0715 - 0815 (290), AM PHF=0.94 PM Peak 1715 - 1815 (175), PM PHF=0.97

**\* Friday, May 17, 2013 - Total=2008, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
12	6	1	2	4	23	73	224	144	84	88	79	91	101	121	199	147	142	128	117	102	58	40	22	
5	3	1	0	0	3	6	45	50	20	24	19	33	20	32	25	32	31	39	33	32	13	8	8	4
2	1	0	0	1	4	12	42	38	22	21	25	21	28	28	75	39	41	34	28	33	17	13	5	3
4	2	0	1	2	7	22	75	27	23	22	14	18	34	32	57	32	31	31	34	21	19	7	4	4
1	0	0	1	1	9	33	62	29	19	21	21	19	19	29	42	44	39	24	22	16	9	12	5	1

AM Peak 0715 - 0815 (229), AM PHF=0.76 PM Peak 1515 - 1615 (206), PM PHF=0.69

**\* Saturday, May 18, 2013 - Total=1996, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
12	9	6	3	5	5	28	69	87	89	139	131	130	134	167	186	164	143	132	130	101	60	43	23	
4	4	4	1	1	0	3	8	19	17	28	27	31	28	39	51	50	35	38	31	26	15	9	10	4
3	3	0	0	0	1	6	16	25	19	29	38	34	38	57	35	37	25	42	27	30	15	10	3	5
4	1	1	2	2	1	9	23	18	24	46	36	30	29	36	50	41	55	30	41	29	12	8	6	2
1	1	1	0	2	3	10	22	25	29	36	30	35	39	35	50	36	28	22	31	16	18	16	4	2

AM Peak 1030 - 1130 (147), AM PHF=0.80 PM Peak 1530 - 1630 (187), PM PHF=0.94

**\* Sunday, May 19, 2013 - Total=1980, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
13	6	4	5	1	5	12	34	71	90	122	171	137	165	186	185	171	185	125	114	92	44	27	15	
4	2	0	3	0	2	2	6	12	18	24	34	33	43	38	47	39	46	40	25	22	17	6	6	3
5	0	2	1	0	0	1	8	20	28	27	43	44	38	41	34	51	43	27	33	28	9	11	2	2
2	2	1	1	0	1	2	11	20	23	33	49	34	43	44	50	47	58	29	28	23	8	6	3	1
2	2	1	0	1	2	7	9	19	21	38	45	26	41	63	54	34	38	29	28	19	10	4	4	1

AM Peak 1100 - 1200 (171), AM PHF=0.87 PM Peak 1415 - 1515 (195), PM PHF=0.77

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## **APPENDIX D**

### **FOCUSED TRANSPORTATION ANALYSIS FOR CALERO COUNTY PARK TRAILS MASTER PLAN**

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## MEMORANDUM

Date: June 27, 2013

To: Teri Wissler Adam, EMC Planning Group Inc.

From: Alexandra Sweet, Katy Cole, and Alisar Aoun

**Subject: Focused Transportation Analysis for the Calero County Park Trails Master Plan**

*SJ13-1438*

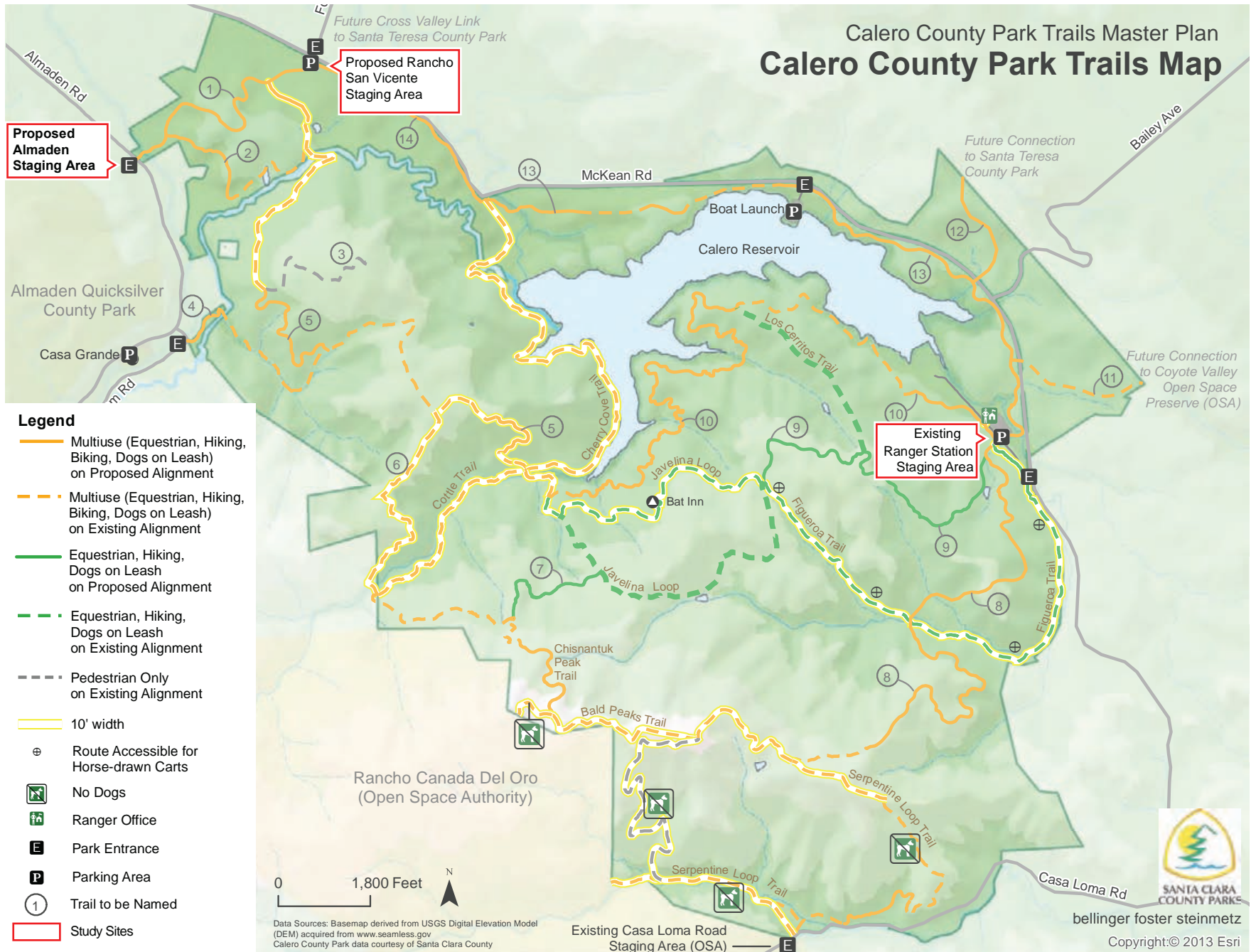
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This memorandum presents results of the focused traffic analysis for the Draft Calero County Park Trails Master Plan in San Jose, California. The proposed project will improve and expand the park's trail system and modify the existing Ranger Station staging area and construct two new staging areas (Rancho San Vicente and Almaden Road) which will include new parking, picnic, restroom, and equestrian amenities in addition to providing a new park entrance and ultimately connecting to existing trails in the park.

### INTRODUCTION

The Department of Parks and Recreation is proposing to construct two new areas that will include parking and equestrian staging, and to modify the existing Ranger Station staging area. The proposed Almaden Road staging area is located off Almaden Road in the northwest quadrant of the park. The proposed Rancho San Vicente staging area is located off McKean Road near the Fortini Road intersection, also in the northwest quadrant of the park. The existing Ranger Station staging area is located off McKean Road on the east edge of the park. This analysis focused on the operations of Almaden Road and McKean Road at the access points to the two new proposed staging areas. The site locations are shown on **Figure 1**.

# Calero County Park Trails Master Plan Calero County Park Trails Map





## EXISTING CONDITIONS

Five-day traffic counts (Wednesday through Sunday) were conducted on Almaden Road and McKean Road adjacent to the proposed staging areas to determine the existing vehicle volumes. **Table 1** presents the daily traffic volumes for each day counted. The average daily volumes are shown in **Table 2**. The average AM and PM peak hour volumes for weekdays and weekend days are shown in **Table 3**. The survey data is attached as an appendix.

The data survey results indicate an average of 1,930 vehicles per day (vpd) use Almaden Road and 5,092 vpd use McKean Road on a typical weekday, and 2,182 vpd use Almaden Road and 3,953 vpd use McKean Road on a typical weekend day. The peak hours vary by direction. Almaden Road has the highest volume of traffic at 7:45am and 5:00pm on weekdays, and 10:30am and 12:15pm on weekend days. McKean Road has the highest volume of traffic at 7:30am and 4:30pm on weekdays, and 11:15am and 2:15pm on weekend days.

**TABLE 1 DAILY VOLUMES**

<b>Almaden Road</b>	<b>Northbound</b>	<b>Southbound</b>	<b>Total</b>
Wednesday	938	948	1,886
Thursday	883	865	1,748
Friday	1,031	1,042	2,073
Saturday	1,142	1,172	2,314
Sunday	994	1,056	2,050
<b>McKean Road</b>	<b>Eastbound</b>	<b>Westbound</b>	<b>Total</b>
Wednesday	2,055	2,067	4,122
Thursday	1,977	1,979	3,956
Friday	2,219	2,008	4,227
Saturday	2,015	1,996	4,011
Sunday	1,915	1,980	3,895

Source: Fehr & Peers (2013)





**TABLE 2 AVERAGE DAILY VOLUMES**

<b>Almaden Road</b>	<b>Northbound</b>	<b>Southbound</b>	<b>Total</b>
Weekday	951	952	1,902
Weekend	1,068	1,114	2,182
<b>McKean Road</b>	<b>Eastbound</b>	<b>Westbound</b>	<b>Total</b>
Weekday	2,084	2,018	4,102
Weekend	1,965	1,988	3,953

Source: Fehr & Peers (2013)

**TABLE 3 PEAK HOUR VOLUMES**

<b>Almaden Road</b>	<b>AM Peak Hour</b>			<b>PM Peak Hour</b>		
	<b>Northbound volume (peak hour)</b>	<b>Southbound volume (peak hour)</b>	<b>Northbound &amp; Southbound Combined</b>	<b>Northbound volume (peak hour)</b>	<b>Southbound volume (peak hour)</b>	<b>Northbound &amp; Southbound Combined</b>
Weekday	95 (7:00am)	58 (11:30am)	<b>125 (7:45am)</b>	73 (2:15pm)	95 (5:00pm)	<b>155 (5:00pm)</b>
Weekend	96 (10:45am)	92 (10:00am)	<b>186 (10:30am)</b>	97 (4:15pm)	98 (3:00pm)	<b>187 (12:15pm)</b>
<b>McKean Road</b>	<b>AM Peak Hour</b>			<b>PM Peak Hour</b>		
	<b>Eastbound volume (peak hour)</b>	<b>Westbound volume (peak hour)</b>	<b>Eastbound &amp; Westbound Combined</b>	<b>Eastbound volume (peak hour)</b>	<b>Westbound volume (peak hour)</b>	<b>Eastbound &amp; Westbound Combined</b>
Weekday	159 (8:00am)	268 (7:15am)	<b>396 (7:30am)</b>	247 (4:45pm)	170 (5:15)	<b>398 (4:30pm)</b>
Weekend	175 (11:15am)	153 (11:15am)	<b>327 (11:15am)</b>	178 (12:00pm)	191 (3:30PM)	<b>344 (2:15PM)</b>

Source: Fehr & Peers (2013)



The 2010 *Highway Capacity Manual* (HCM) states that a two-lane highway has the capacity of up to 1,700 vehicles per hour in a peak direction. The average peak hour volumes on Almaden Road and McKean Road are well within their capacity.

Observations were also conducted on McKean Road and Almaden Road near the proposed new staging areas. No operational deficiencies, such as vehicle queuing, were identified in the project vicinity.

### PEAK WEEKEND TRIP GENERATION ESTIMATES

The amount of traffic generated by the proposed project was established by estimating the maximum number of vehicles that are expected to access the site on a peak weekend, which is typically a Spring weekend. The number of new proposed automobile and trailer parking spaces was obtained from the May 2013 *Draft Calero County Park Trails Master Plan*. These two types of parking spaces were added together to get a total new parking supply number. Parking turnover rates were determined based on parking lot size and park use information provided by a Senior Ranger at the Park. A parking turnover rate of 3 times per day was applied to 75% of the parking spaces, and a turnover rate of 2 for the remaining 25% of spaces. These rates were based on the average length of stay at the park for hikers (approximately 3 hours) and equestrian trail users (approximately 5 hours), and the estimated proportion of visitors who hike and ride horses. Each vehicle produces two trips: one inbound and one outbound. The daily number of vehicles estimated from the parking turnover rates was doubled to arrive at the daily number of trips. The daily trip generation was then multiplied by a K-factor of 0.1. The K-factor represents the ratio of peak hour trips to daily trips and is commonly used to convert daily trips to peak hour trips. Typically, the peak hour trips represent approximately 10% of the daily trips (K-factor=0.1). As an example, we estimate the Almaden Road staging area to produce 28 new daily trips, three of which will occur in the peak hour ( $28 \times 0.1 = 3$ ). The trip generation results are shown in **Table 4**. The table estimates the number of total daily trips assuming the proposed parking lot size and subtracts the existing trips (based on the number of existing parking spaces) to arrive at the net new trips.



**TABLE 4 TRIP GENERATION**

<b>ALMADEN ROAD</b>	<b>Total Parking Spaces</b> <i>(automobiles &amp; trailers)</i>	<b>Daily Vehicle Space Turnover</b> <i>(75% of Spaces)</i>	<b>Daily Vehicle Space Turnover</b> <i>(25% of Spaces)</i>	<b>Vehicles per Day</b>	<b>Trips per Vehicle</b> <i>(Inbound &amp; Outbound)</i>	<b>Total Vehicle Trips per Day</b>
Proposed (A)	5	3	2	14	2	28
Existing (B)	0	3	2	0	2	0
Net New Daily Trips (= A-B)						<b>28</b>
Net New Peak Hour Trips (10% of Daily Trips)						<b>3</b>
<b>RANCHO SAN VICENTE</b>	<b>Parking Spaces</b> <i>(automobiles &amp; trailers)</i>	<b>Daily Vehicle Space Turnover</b> <i>(75% of Spaces)</i>	<b>Daily Vehicle Space Turnover</b> <i>(25% of Spaces)</i>	<b>Vehicles per Day</b>	<b>Trips per Vehicle</b> <i>(Inbound &amp; Outbound)</i>	<b>Total Vehicle Trips per Day</b>
Proposed (A)	115	3	2	316	2	633
Existing (B)	0	3	2	0	2	0
Net New Daily Trips (= A-B)						<b>633</b>
Net New Peak Hour Trips (10% of Daily Trips)						<b>63</b>
<b>RANGER STATION</b>	<b>Total Parking Spaces</b> <i>(automobiles &amp; trailers)</i>	<b>Daily Vehicle Space Turnover</b> <i>(75% of Spaces)</i>	<b>Daily Vehicle Space Turnover</b> <i>(25% of Spaces)</i>	<b>Vehicles per Day</b>	<b>Trips per Vehicle</b> <i>(Inbound &amp; Outbound)</i>	<b>Total Vehicle Trips per Day</b>
Proposed (A)	93	3	2	256	2	512
Existing (B)	28	3	2	77	2	154
Net New Daily Trips (= A-B)						<b>358</b>
Net New Peak Hour Trips (10% of Daily Trips)						<b>36</b>

Source: Fehr & Peers (2013)



In total, the proposed staging areas will provide approximately 185 net new automobile and trailer parking spaces: five at Almaden Road, 115 at Rancho San Vicente, and 65 at the Ranger Station. These new parking spaces would add approximately 28 new daily trips on Almaden Road, and 990 new daily trips on McKean Road (633 trips generated by Rancho San Vicente and 358 generated by the Ranger Station). The project is not expected to generate 100 or more new weekday AM or PM peak hour trips, and therefore a transportation impact analysis is not required per the Santa Clara VTA Transportation Impact Analysis Guidelines.

### EXISTING PLUS PROJECT TRAFFIC VOLUMES

The trip generation estimates were added to the existing traffic volumes to arrive at the future vehicle volumes, which are shown in **Table 5**. The project's peak hour volumes are added to the existing peak AM volumes.

**TABLE 5 EXISTING PLUS PROJECT TRAFFIC VOLUMES**

<b>Almaden Road</b>	<b>Existing Daily</b>	<b>Daily Project</b>	<b>Total</b>	<b>Existing AM Peak</b>	<b>Peak Project</b>	<b>Total</b>
Average Weekday	1,902	28	1,930	125	3	128
Average Weekend	2,182	28	2,210	186	3	189
<b>McKean Road</b>	<b>Existing Daily</b>	<b>Daily Project</b>	<b>Total</b>	<b>Existing AM Peak</b>	<b>Peak Project</b>	<b>Total</b>
Average Weekday	4,102	991	5,092	396	99	495
Average Weekend	3,953	991	4,943	327	99	426

The roadway volumes with the staging area projects are still well within the roadway's peak hour capacity of 1,700 trips per peak direction on both Almaden Road and McKean Road.

The primary land use along both McKean Road and Almaden Road is rural residential, with open lots that border Calero County Park. Rural residential land use generally produces a small



numbers of trips per day, which results in limited potential for conflicts between vehicles and/or equestrians.

## SIGHT DISTANCE

Due to the increase in vehicles with trailers accessing the staging area locations, the stopping sight distance was analyzed. As defined by the Caltrans *Highway Design manual*, sight distance is the continuous length of highway ahead, visible to the highway user. Stopping sight distance is the minimum sight distance for a given design speed to be provided on multilane highways and on 2-lane roads. The available stopping sight distance was measured in the field.

The Highway Design Manual requires a stopping sight distance of 250 for roadways with a design speed of 35 MPH, and 300 feet for roadways with a design speed of 40 mph. However, sight observations indicate that vehicles on McKean Road typically exceed the posted speed limit. Therefore, a design speed of 50 mph was used, which corresponds to a minimum stopping sight distance of 430 feet. The results of the sight distance review are presented in **Table 6**.

The sight distance from the Ranger Station entrance south on McKean Road is approximately 400', which is less than the required sight distance of 430'. The tree located about 400' south of the Ranger Station entrance on the east edge of McKean Road could be trimmed to potentially increase sight distance to 430 feet. All other sight distances are adequate.

**TABLE 6 SITE DISTANCE**

Staging Area	Roadway	Design Speed	Required Stopping Distance	Measured Stopping Distance (direction of approach)
Rancho San Vicente Staging Area	McKean Road	50 MPH (Posted 40 MPH)	430'	>500' (east) >500' (west)
Ranger Station Staging Area	McKean Road	50 MPH (Posted 40 MPH)	430'	>500' (north) 400' (south)
Almaden Road Staging Area	Almaden Road	35 MPH	250'	492' (southeast) >500' (northwest)

Source: Caltrans Highway Design Manual (2012), Fehr & Peers (2013)



## BICYCLE, PEDESTRIAN, AND EQUESTRIAN TRAVEL

A few bicyclists were observed using McKean Road and Almaden Road on the weekend. There are no bicycle lanes on either roadway and the shoulders are narrow on McKean Road. The Santa Clara Countywide Trails Master Plan Update (1995) proposes bicycle facilities for both McKean Road and Almaden Road. An on-street bicycle route is proposed for Almaden Road and an on-street bicycle route with a parallel trail is proposed for McKean Road. Currently, bicyclists typically traveled on the right side of the travel lane, or in the shoulder when space allowed. The existing daily volumes indicate that the number of conflicts with bicycles and vehicles are low. Due to the minimal amount of traffic added by the proposed staging areas, the number of conflicts between these two modes would not substantially increase.

Pedestrian activity on McKean Road is very low. McKean Road is a rural roadway and there are no pedestrian facilities near the staging areas. The proposed Rancho San Vicente staging area is expected to generate cross traffic to Fortini Road as pedestrians access Santa Teresa Park. Due to the high speed limit on McKean Road and the low pedestrian volumes, we recommend installing a Rectangular Rapid Flashing Beacon (RRFB), a device which includes small rectangular yellow flashing lights that are deployed with pedestrian crossing warning signs. The lights are actuated by a pedestrian pushbutton and flash for a predetermined amount of time to allow the pedestrian to cross the roadway. RRFBs help warn drivers of crossing pedestrians ahead. A high-visibility crosswalk should be placed adjacent to the RRFB to direct pedestrians to the proper place to cross the street. In addition, a pedestrian and equestrian warning sign (W11-2 and W11-7) should be provided to warn drivers of the potential for pedestrians and equestrians in the roadway. The pedestrian signs should be installed approximately 20 feet in advance of the crosswalk. Almaden Road runs through a rural residential neighborhood and field observations indicated very low pedestrian activity. However, because the staging area will be located within vicinity of several residences, we can expect that some pedestrians will walk to the staging area and the appropriate signage (W11-2 and W11-7) should be provided to warn drivers of the potential for pedestrians and equestrians in the roadway.



## SITE PLAN REVIEW

Two conceptual site plans were reviewed from the *Draft Calero County Park Trails Master Plan*. A plan for the Almaden Road staging area has not yet been developed. The Rancho San Vicente staging area site plan can be seen on **Figure 2**, and the Ranger Station staging area site plan can be seen on **Figure 3**.

### **Rancho San Vicente Staging Area Site Plan**

The Rancho San Vicente staging area will be located on the south side of McKean Road, across from Fortini Road. A sign at the entrance will identify the staging area. The driveway includes a gate and an entrance kiosk, followed by automobile and trailer parking. Fifteen early bird parking spaces are available prior to the entrance gate and kiosk. A turnout/overflow space is available at the end of the regular parking area to accommodate turning vehicles. Trail entrances are south of the regular parking area in addition to a restroom and picnic area. The front entrance sign should stand perpendicular to McKean Road so vehicles can identify the staging area as they approach. Signage should also be provided within the parking area to identify trailer parking and automobile parking. A vehicle parking space should be removed at the trail entrance to provide adequate space to enter and exit the trail (see **Figure 2**). The Rancho San Vicente staging area driveway entrance should include one inbound and one outbound lane. To facilitate the trailers that will be turning into the staging area, consider adding an eastbound right-turn deceleration lane and a westbound left-turn pocket on McKean Road. The deceleration lane and turn-pocket should extend approximately 200 feet from the intersection.

### **Ranger Station Staging Area Site Plan**

The existing Ranger Station staging area will be modified to increase automobile and trailer parking and accommodate space for special events. The staging area will remain in its current location on Entrance Road, off McKean Road. The plan's circulation will be adequate to accommodate the users of the staging area. Signage should also be provided within the parking area to identify trailer parking and automobile parking and to direct visitors to the picnic and restroom area.

### **Almaden Road Staging Area**

The Draft Master Plan does not include a conceptual plan for the Almaden Road staging area, but lists the elements proposed for the area, including five parking spaces, a picnic area, and trailer



access to Rancho San Vicente. The proposed staging area will not include trailer access. The entrance should include one inbound and one outbound lane, and an entrance sign perpendicular to the roadway.

## CONCLUSIONS

The amount of traffic generated by the proposed new and modified staging areas is not expected to substantially affect the traffic operations of the surrounding roadway system. The following improvements are recommended for the proposed project:

### **Almaden Road Staging Area**

- 1) The Almaden Road staging driveway entrance should include one inbound and one outbound lane.
- 2) Install the Almaden Road staging area entrance sign perpendicular to Almaden Road to maximize its visibility.
- 3) Install pedestrian and equestrian warning signs (W11-2 and W11-7) on Almaden Road to alert drivers for pedestrians and equestrians in the roadway.

### **Rancho San Vicente Staging Area**

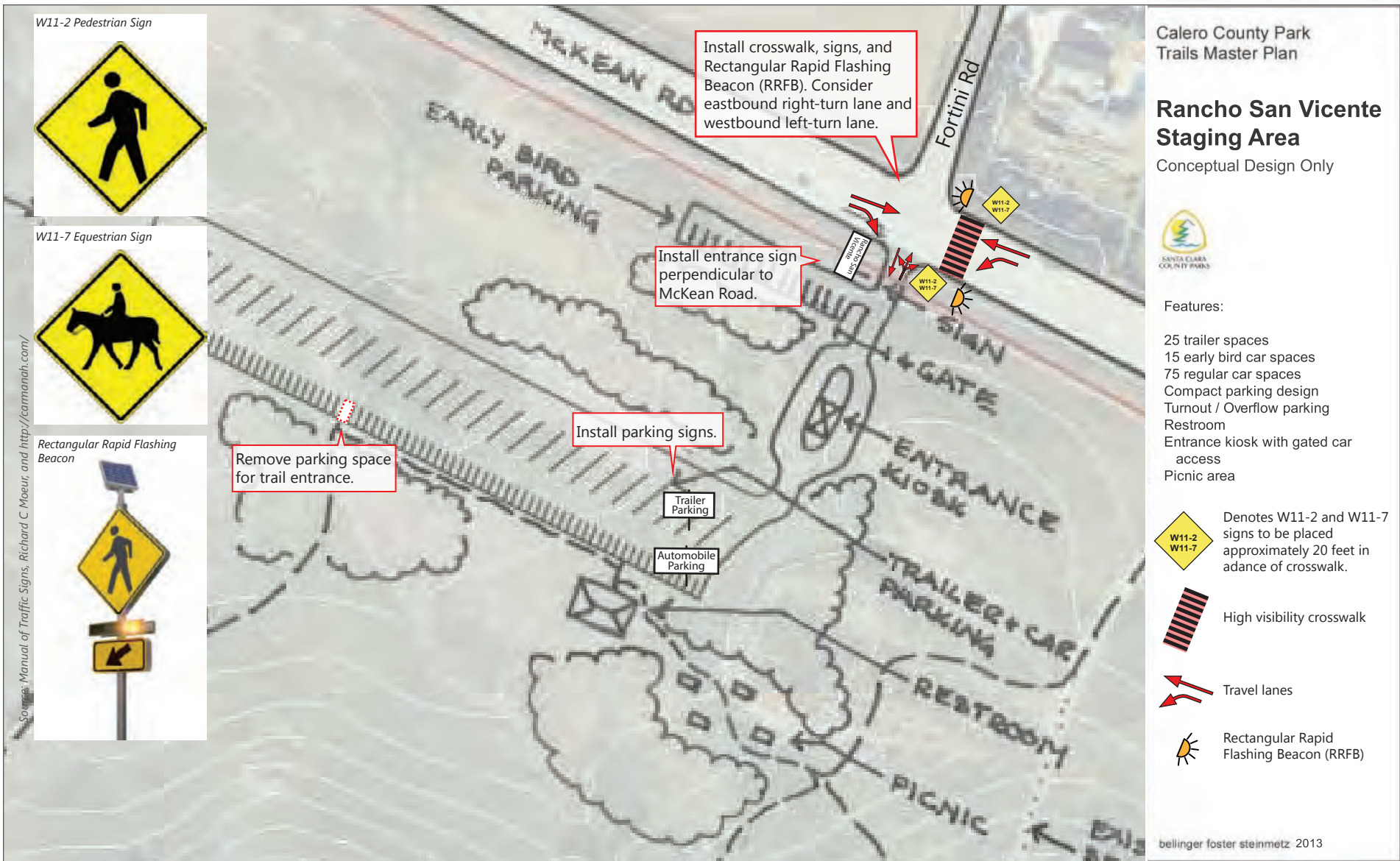
- 1) Install a Rectangular Rapid Flashing Beacon (RRFB) on McKean Road at the Fortini Road intersection to alert drivers of crossing pedestrians.
- 2) Install a high-visibility crosswalk adjacent to the RRFB to direct pedestrians to the proper crossing location on McKean Road.
- 3) Place pedestrian and equestrian warning signs (W11-2 and W11-7) approximately 20 feet in advance of the high-visibility crosswalk on McKean Road.
- 4) Install the Rancho San Vicente entrance sign perpendicular to McKean Road to maximize its visibility.
- 5) Install signage within the parking area to identify trailer parking and automobile parking.
- 6) Remove a vehicle space at the trail entrance to provide adequate space to enter and exit the trail.
- 7) The Rancho San Vicente driveway entrance should include one inbound and one outbound lane.
- 8) Consider adding an eastbound right-turn deceleration lane and a westbound left-turn pocket on McKean Road.





### **Ranger Station Staging Area**

1. Trim the tree located about 400' south of the entrance to increase sight distance.
2. Install signage within the parking area to identify trailer parking and automobile parking and to direct visitors to the picnic and restroom area.



## Ranger Station Staging Area

Concept Design Only



- Features:
- 75 regular car spaces 10' x 20'
  - 18 trailer spaces 28' x 55'
  - Restroom
  - Picnic Area
  - Separate car and trailer parking areas
  - Formal circulation layout
  - Equestrian corral
  - Overflow parking area



belling foster steinmetz 2013



**APPENDIX:**

**TRAFFIC COUNTS**

## Traffic Data Service -- Campbell, CA Vehicle Counts

### VehicleCount-1473 -- English (ENU)

**Datasets:**

**Site:** [2] MCKEAN RD E OF FORTINI RD

**Profile:**

**Included classes:** 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13

**Speed range:** 0 - 100 mph.

**Direction:** West (bound)

**Scheme:** Vehicle classification (Scheme F)

**Units:** Non metric (ft, mi, ft/s, mph, lb, ton)

**\* Wednesday, May 15, 2013 - Total=2067, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
6	4	0	2	4	23	103	294	178	93	81	94	80	113	131	133	158	162	164	109	69	41	15	10	
3	0	0	1	0	4	16	59	50	17	28	29	24	28	18	37	42	32	55	37	24	12	8	2	2
1	2	0	0	1	5	23	72	63	22	15	22	20	41	28	33	30	48	51	28	21	15	3	2	3
1	1	0	0	0	4	28	99	28	29	20	17	24	23	42	36	44	41	24	22	12	6	3	3	2
1	1	0	1	3	10	36	64	37	25	18	26	12	21	43	27	42	41	34	22	12	8	1	3	0

AM Peak 0700 - 0800 (294), AM PHF=0.74 PM Peak 1730 - 1830 (188), PM PHF=0.85

**\* Thursday, May 16, 2013 - Total=1979, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
7	2	3	2	5	20	92	283	203	93	94	66	84	92	116	121	127	167	144	118	72	44	15	9	
2	0	1	1	1	4	10	59	66	39	20	14	28	23	25	27	40	35	43	41	17	20	2	2	5
3	1	1	0	1	5	16	72	60	21	28	19	19	29	33	28	34	43	40	28	20	8	4	2	2
2	1	1	1	1	4	27	75	38	17	21	18	18	22	29	39	32	44	21	18	21	7	5	5	4
0	0	0	0	2	7	39	77	39	16	25	15	19	18	29	27	21	45	40	31	14	9	4	0	1

AM Peak 0715 - 0815 (290), AM PHF=0.94 PM Peak 1715 - 1815 (175), PM PHF=0.97

**\* Friday, May 17, 2013 - Total=2008, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
12	6	1	2	4	23	73	224	144	84	88	79	91	101	121	199	147	142	128	117	102	58	40	22	
5	3	1	0	0	3	6	45	50	20	24	19	33	20	32	25	32	31	39	33	32	13	8	8	4
2	1	0	0	1	4	12	42	38	22	21	25	21	28	28	75	39	41	34	28	33	17	13	5	3
4	2	0	1	2	7	22	75	27	23	22	14	18	34	32	57	32	31	31	34	21	19	7	4	4
1	0	0	1	1	9	33	62	29	19	21	21	19	19	29	42	44	39	24	22	16	9	12	5	1

AM Peak 0715 - 0815 (229), AM PHF=0.76 PM Peak 1515 - 1615 (206), PM PHF=0.69

**\* Saturday, May 18, 2013 - Total=1996, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
12	9	6	3	5	5	28	69	87	89	139	131	130	134	167	186	164	143	132	130	101	60	43	23	
4	4	4	1	1	0	3	8	19	17	28	27	31	28	39	51	50	35	38	31	26	15	9	10	4
3	3	0	0	0	1	6	16	25	19	29	38	34	38	57	35	37	25	42	27	30	15	10	3	5
4	1	1	2	2	1	9	23	18	24	46	36	30	29	36	50	41	55	30	41	29	12	8	6	2
1	1	1	0	2	3	10	22	25	29	36	30	35	39	35	50	36	28	22	31	16	18	16	4	2

AM Peak 1030 - 1130 (147), AM PHF=0.80 PM Peak 1530 - 1630 (187), PM PHF=0.94

**\* Sunday, May 19, 2013 - Total=1980, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
13	6	4	5	1	5	12	34	71	90	122	171	137	165	186	185	171	185	125	114	92	44	27	15	
4	2	0	3	0	2	2	6	12	18	24	34	33	43	38	47	39	46	40	25	22	17	6	6	3
5	0	2	1	0	0	1	8	20	28	27	43	44	38	41	34	51	43	27	33	28	9	11	2	2
2	2	1	1	0	1	2	11	20	23	33	49	34	43	44	50	47	58	29	28	23	8	6	3	1
2	2	1	0	1	2	7	9	19	21	38	45	26	41	63	54	34	38	29	28	19	10	4	4	1

AM Peak 1100 - 1200 (171), AM PHF=0.87 PM Peak 1415 - 1515 (195), PM PHF=0.77

## Traffic Data Service -- Campbell, CA Vehicle Counts

### VehicleCount-1474 -- English (ENU)

**Datasets:**

**Site:** [2] MCKEAN RD E OF FORTINI RD

**Profile:**

**Included classes:** 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13

**Speed range:** 0 - 100 mph.

**Direction:** East (bound)

**Scheme:** Vehicle classification (Scheme F)

**Units:** Non metric (ft, mi, ft/s, mph, lb, ton)

**\* Wednesday, May 15, 2013 - Total=2055, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
6	3	1	2	8	15	54	101	177	166	106	94	108	99	115	174	198	223	148	104	69	48	27	9	
1	2	1	0	1	2	8	20	52	43	28	20	29	20	24	47	43	64	47	20	15	17	10	4	5
2	0	0	0	4	0	9	19	31	42	22	23	29	27	28	42	51	59	35	29	22	14	6	1	4
3	1	0	1	1	5	17	30	46	43	23	23	25	26	39	38	51	57	32	31	16	9	7	3	0
0	0	0	1	2	8	20	32	48	38	33	28	25	26	24	47	53	43	34	24	16	8	4	1	2

AM Peak 0830 - 0930 (179), AM PHF=0.93 PM Peak 1645 - 1745 (233), PM PHF=0.91

**\* Thursday, May 16, 2013 - Total=1977, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
11	2	2	1	8	11	41	106	160	136	100	80	97	94	116	156	209	236	176	82	64	41	33	15	
5	1	0	0	1	1	4	28	45	41	27	21	15	27	19	36	48	51	56	25	19	8	7	1	6
4	1	0	0	2	2	8	21	38	32	29	22	35	26	27	53	43	56	45	23	21	14	15	7	3
0	0	1	0	3	4	16	26	38	34	22	15	29	30	38	35	54	68	42	17	14	10	5	4	4
2	0	1	1	2	4	13	31	39	29	22	22	18	11	32	32	64	61	33	17	10	9	6	3	0

AM Peak 0800 - 0900 (160), AM PHF=0.89 PM Peak 1715 - 1815 (241), PM PHF=0.89

**\* Friday, May 17, 2013 - Total=2219, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
13	4	5	4	8	12	48	91	140	109	151	174	127	109	105	195	227	250	187	89	78	42	29	22	
6	2	1	2	1	1	9	26	38	29	34	44	24	29	28	43	57	76	56	25	25	9	12	9	3
3	1	1	1	2	4	9	18	40	30	33	62	24	29	23	44	43	67	46	26	20	9	3	6	3
4	1	1	1	2	3	14	17	37	20	35	42	35	29	31	60	61	59	47	19	13	13	9	3	2
0	0	2	0	3	4	16	30	25	30	49	26	44	22	23	48	66	48	38	19	20	11	5	4	2

AM Peak 1045 - 1145 (197), AM PHF=0.79 PM Peak 1630 - 1730 (270), PM PHF=0.89

**\* Saturday, May 18, 2013 - Total=2015, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
10	9	6	4	3	10	43	84	125	123	162	162	172	141	175	150	150	120	110	66	63	58	35	34	
3	2	2	0	0	1	5	14	25	29	39	30	51	33	42	38	40	37	30	21	18	11	9	13	5
3	3	0	2	1	1	11	17	40	36	34	32	32	29	37	37	36	31	27	15	14	15	11	8	4
2	4	1	1	1	4	11	23	24	27	39	61	40	38	47	44	35	23	28	13	13	24	9	8	4
2	0	3	1	1	4	16	30	36	31	50	39	49	41	49	31	39	29	25	17	18	8	6	5	5

AM Peak 1115 - 1215 (183), AM PHF=0.75 PM Peak 1400 - 1500 (175), PM PHF=0.89

**\* Sunday, May 19, 2013 - Total=1915, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
18	6	5	2	4	37	44	99	74	129	161	165	184	166	134	143	133	122	87	67	53	49	21	12	
5	2	1	0	2	4	14	18	18	25	44	42	43	57	32	40	39	34	27	24	13	20	9	5	4
4	3	1	1	0	9	10	24	16	21	34	46	44	36	35	35	28	35	25	17	17	10	6	5	3
4	0	1	0	0	11	10	23	19	39	46	40	48	35	33	28	34	29	20	14	13	11	3	0	1
5	1	2	1	2	13	10	34	21	44	37	37	49	38	34	40	32	24	15	12	10	8	3	2	1

AM Peak 1145 - 1245 (172), AM PHF=0.90 PM Peak 1215 - 1315 (198), PM PHF=0.87

## Traffic Data Service -- Campbell, CA Vehicle Counts

### VehicleCount-1472 -- English (ENU)

**Datasets:**

**Site:** [1] ALMADEN RD N OF ROME DR

**Profile:**

**Included classes:** 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13  
**Speed range:** 0 - 100 mph.  
**Direction:** South (bound)  
**Scheme:** Vehicle classification (Scheme F)  
**Units:** Non metric (ft, mi, ft/s, mph, lb, ton)

**\* Wednesday, May 15, 2013 - Total=948, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
6	1	0	2	2	5	16	29	37	64	35	36	61	52	62	89	91	95	82	70	47	37	19	10	
2	0	0	1	0	1	2	8	12	12	8	7	28	15	16	24	25	25	20	23	15	8	4	1	1
1	0	0	0	2	2	5	6	5	16	10	11	16	12	19	29	23	18	25	15	11	10	3	8	2
3	1	0	1	0	1	6	5	14	20	9	6	6	11	8	15	23	26	18	13	14	7	6	1	0
0	0	0	0	0	1	3	10	6	16	8	12	11	14	19	21	20	26	19	19	7	12	6	0	1

AM Peak 0900 - 1000 (64), AM PHF=0.80 PM Peak 1730 - 1830 (97), PM PHF=0.93

**\* Thursday, May 16, 2013 - Total=865, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
4	2	0	0	0	1	16	23	40	50	41	35	59	52	54	68	66	93	83	69	41	42	21	5	
1	2	0	0	0	0	2	6	17	13	10	8	18	16	18	21	16	27	17	19	10	12	5	1	4
2	0	0	0	0	1	7	5	9	21	7	11	8	10	9	19	11	17	29	21	15	12	7	0	1
0	0	0	0	0	0	6	7	9	10	9	9	11	13	16	12	18	24	17	11	7	9	5	1	1
1	0	0	0	0	0	1	5	5	6	15	7	22	13	11	16	21	25	20	18	9	9	4	3	4

AM Peak 0900 - 1000 (50), AM PHF=0.60 PM Peak 1730 - 1830 (95), PM PHF=0.82

**\* Friday, May 17, 2013 - Total=1042, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
10	5	2	1	0	1	14	27	50	57	65	50	76	48	67	85	81	96	81	78	59	38	30	21	
4	3	0	0	0	0	4	6	10	11	16	13	16	6	22	27	15	24	28	14	16	9	8	2	2
1	0	0	1	0	0	4	6	14	17	18	7	23	10	17	17	23	29	15	32	21	15	9	5	1
1	2	1	0	0	0	5	7	14	16	17	15	13	17	11	18	17	22	17	18	10	10	6	5	5
4	0	1	0	0	1	1	8	12	13	14	15	24	15	17	23	26	21	21	14	12	4	7	9	1

AM Peak 1130 - 1230 (69), AM PHF=0.75 PM Peak 1645 - 1745 (101), PM PHF=0.87

**\* Saturday, May 18, 2013 - Total=1172, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
9	6	4	2	1	3	11	37	53	54	108	81	92	81	85	109	85	75	89	50	46	34	32	25	
2	1	0	0	0	0	1	7	13	10	36	21	14	22	14	30	23	9	23	14	9	3	5	5	4
1	1	3	1	0	1	4	9	11	8	21	21	22	19	31	16	22	18	19	11	14	7	5	6	1
5	1	0	0	1	2	2	13	12	16	18	20	37	18	20	26	14	24	21	11	9	12	11	7	2
1	3	1	1	0	0	4	8	17	20	33	19	19	22	20	37	26	24	26	14	14	12	11	7	2

AM Peak 1000 - 1100 (108), AM PHF=0.75 PM Peak 1500 - 1600 (109), PM PHF=0.74

**\* Sunday, May 19, 2013 - Total=1056, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
9	5	4	2	1	3	13	30	51	69	75	76	98	80	87	86	70	81	70	48	40	26	21	11	
4	3	1	1	0	0	3	4	4	21	18	19	23	18	28	25	23	20	22	14	13	10	4	1	1
1	1	2	0	0	1	2	6	11	18	12	23	19	14	17	20	21	26	13	12	15	8	6	1	4
2	1	0	1	0	2	4	11	20	17	20	17	29	16	19	18	14	15	20	10	3	5	3	5	1
2	0	1	0	1	0	4	9	16	13	25	17	27	32	23	23	12	20	15	12	9	3	8	4	0

AM Peak 1145 - 1245 (88), AM PHF=0.76 PM Peak 1200 - 1300 (98), PM PHF=0.84



## Traffic Data Service -- Campbell, CA Vehicle Counts

### VehicleCount-1471 -- English (ENU)

**Datasets:**

**Site:** [1] ALMADEN RD N OF ROME DR

**Profile:**

**Included classes:** 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13

**Speed range:** 0 - 100 mph.

**Direction:** North (bound)

**Scheme:** Vehicle classification (Scheme F)

**Units:** Non metric (ft, mi, ft/s, mph, lb, ton)

**\* Wednesday, May 15, 2013 - Total=938, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
3	0	1	3	5	22	54	106	73	42	61	55	55	53	74	60	59	66	42	32	41	21	6	4	
1	0	0	0	0	2	7	20	13	9	15	15	13	10	13	14	11	19	12	6	9	6	5	1	0
1	0	0	1	0	6	7	30	21	7	12	11	14	18	13	11	13	14	6	10	12	8	1	2	0
0	0	1	1	3	5	21	26	21	15	17	19	11	16	30	16	19	14	10	8	10	6	0	0	1
1	0	0	1	2	9	19	30	18	11	17	10	17	9	18	19	16	19	14	8	10	1	0	1	0

AM Peak 0700 - 0800 (106), AM PHF=0.88 PM Peak 1415 - 1515 (75), PM PHF=0.63

**\* Thursday, May 16, 2013 - Total=883, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
1	0	1	1	5	23	53	101	66	58	57	52	41	52	59	39	59	57	49	34	31	20	20	4	
0	0	0	0	1	1	8	24	11	16	16	13	8	17	17	11	15	13	11	8	7	5	3	2	1
0	0	0	1	1	4	12	25	19	17	13	12	14	13	13	8	18	16	15	3	9	6	2	2	3
1	0	1	0	1	8	13	23	23	10	13	8	11	11	12	9	14	10	14	13	7	6	1	0	1
0	0	0	0	2	10	20	29	13	15	15	19	8	11	17	11	12	18	9	10	8	3	14	0	1

AM Peak 0700 - 0800 (101), AM PHF=0.87 PM Peak 1400 - 1500 (59), PM PHF=0.87

**\* Friday, May 17, 2013 - Total=1031, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
6	3	0	3	7	20	45	78	77	66	69	70	57	56	84	60	59	59	52	48	42	35	25	10	
1	2	0	0	2	6	6	21	22	14	16	24	11	22	13	20	17	18	18	8	15	8	6	4	2
3	0	0	1	1	4	11	17	20	17	19	9	22	18	33	16	23	17	13	16	7	6	8	2	8
1	1	0	1	2	5	14	24	23	17	14	23	12	9	19	16	12	6	9	13	13	11	5	2	2
1	0	0	1	2	5	14	16	12	18	20	14	12	7	19	8	7	18	12	11	7	10	6	2	1

AM Peak 0730 - 0830 (82), AM PHF=0.85 PM Peak 1415 - 1515 (91), PM PHF=0.69

**\* Saturday, May 18, 2013 - Total=1142, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
13	3	1	0	4	14	13	22	34	78	95	93	81	85	76	87	106	93	52	48	49	37	44	14	
2	0	0	0	2	2	1	7	4	20	20	24	15	26	27	24	23	32	18	9	12	9	11	4	5
8	1	1	0	0	5	5	2	10	18	29	27	21	15	13	24	20	18	7	16	21	6	10	3	0
2	2	0	0	0	3	3	8	12	24	15	16	19	19	20	22	27	26	10	12	7	10	11	3	0
1	0	0	0	2	4	4	5	8	16	31	26	26	25	16	17	36	17	17	11	9	12	12	4	0

AM Peak 1015 - 1115 (99), AM PHF=0.80 PM Peak 1615 - 1715 (115), PM PHF=0.80

**\* Sunday, May 19, 2013 - Total=994, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
5	1	1	4	5	8	12	30	33	83	83	93	82	85	66	80	83	67	44	43	44	26	11	5	
5	0	0	0	0	2	3	9	9	21	22	31	19	26	16	15	21	17	11	13	12	13	2	1	4
0	1	0	0	1	2	3	5	7	19	14	16	22	24	13	23	21	18	10	9	10	6	2	1	0
0	0	0	4	3	3	3	9	9	23	23	23	19	18	19	24	25	13	10	14	9	6	3	3	1
0	0	1	0	1	1	3	7	8	20	24	23	22	17	18	18	16	19	13	7	13	1	4	0	0

AM Peak 1030 - 1130 (94), AM PHF=0.76 PM Peak 1230 - 1330 (91), PM PHF=0.88



## Traffic Data Service -- Campbell, CA Vehicle Counts

### VehicleCount-1471 -- English (ENU)

**Datasets:**

**Site:** [1] ALMADEN RD N OF ROME DR

**Profile:**

**Included classes:** 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13

**Speed range:** 0 - 100 mph.

**Direction:** North (bound)

**Scheme:** Vehicle classification (Scheme F)

**Units:** Non metric (ft, mi, ft/s, mph, lb, ton)

**\* Wednesday, May 15, 2013 - Total=938, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
3	0	1	3	5	22	54	106	73	42	61	55	55	53	74	60	59	66	42	32	41	21	6	4	
1	0	0	0	0	2	7	20	13	9	15	15	13	10	13	14	11	19	12	6	9	6	5	1	0
1	0	0	1	0	6	7	30	21	7	12	11	14	18	13	11	13	14	6	10	12	8	1	2	0
0	0	1	1	3	5	21	26	21	15	17	19	11	16	30	16	19	14	10	8	10	6	0	0	1
1	0	0	1	2	9	19	30	18	11	17	10	17	9	18	19	16	19	14	8	10	1	0	1	0

AM Peak 0700 - 0800 (106), AM PHF=0.88 PM Peak 1415 - 1515 (75), PM PHF=0.63

**\* Thursday, May 16, 2013 - Total=883, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
1	0	1	1	5	23	53	101	66	58	57	52	41	52	59	39	59	57	49	34	31	20	20	4	
0	0	0	0	1	1	8	24	11	16	16	13	8	17	17	11	15	13	11	8	7	5	3	2	1
0	0	0	1	1	4	12	25	19	17	13	12	14	13	13	8	18	16	15	3	9	6	2	2	3
1	0	1	0	1	8	13	23	23	10	13	8	11	11	12	9	14	10	14	13	7	6	1	0	1
0	0	0	0	2	10	20	29	13	15	15	19	8	11	17	11	12	18	9	10	8	3	14	0	1

AM Peak 0700 - 0800 (101), AM PHF=0.87 PM Peak 1400 - 1500 (59), PM PHF=0.87

**\* Friday, May 17, 2013 - Total=1031, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
6	3	0	3	7	20	45	78	77	66	69	70	57	56	84	60	59	59	52	48	42	35	25	10	
1	2	0	0	2	6	6	21	22	14	16	24	11	22	13	20	17	18	18	8	15	8	6	4	2
3	0	0	1	1	4	11	17	20	17	19	9	22	18	33	16	23	17	13	16	7	6	8	2	8
1	1	0	1	2	5	14	24	23	17	14	23	12	9	19	16	12	6	9	13	13	11	5	2	2
1	0	0	1	2	5	14	16	12	18	20	14	12	7	19	8	7	18	12	11	7	10	6	2	1

AM Peak 0730 - 0830 (82), AM PHF=0.85 PM Peak 1415 - 1515 (91), PM PHF=0.69

**\* Saturday, May 18, 2013 - Total=1142, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
13	3	1	0	4	14	13	22	34	78	95	93	81	85	76	87	106	93	52	48	49	37	44	14	
2	0	0	0	2	2	1	7	4	20	20	24	15	26	27	24	23	32	18	9	12	9	11	4	5
8	1	1	0	0	5	5	2	10	18	29	27	21	15	13	24	20	18	7	16	21	6	10	3	0
2	2	0	0	0	3	3	8	12	24	15	16	19	19	20	22	27	26	10	12	7	10	11	3	0
1	0	0	0	2	4	4	5	8	16	31	26	26	25	16	17	36	17	17	11	9	12	12	4	0

AM Peak 1015 - 1115 (99), AM PHF=0.80 PM Peak 1615 - 1715 (115), PM PHF=0.80

**\* Sunday, May 19, 2013 - Total=994, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
5	1	1	4	5	8	12	30	33	83	83	93	82	85	66	80	83	67	44	43	44	26	11	5	
5	0	0	0	0	2	3	9	9	21	22	31	19	26	16	15	21	17	11	13	12	13	2	1	4
0	1	0	0	1	2	3	5	7	19	14	16	22	24	13	23	21	18	10	9	10	6	2	1	0
0	0	0	4	3	3	3	9	9	23	23	23	19	18	19	24	25	13	10	14	9	6	3	3	1
0	0	1	0	1	1	3	7	8	20	24	23	22	17	18	18	16	19	13	7	13	1	4	0	0

AM Peak 1030 - 1130 (94), AM PHF=0.76 PM Peak 1230 - 1330 (91), PM PHF=0.88

## Traffic Data Service -- Campbell, CA Vehicle Counts

### VehicleCount-1472 -- English (ENU)

**Datasets:**

**Site:** [1] ALMADEN RD N OF ROME DR

**Profile:**

**Included classes:** 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13

**Speed range:** 0 - 100 mph.

**Direction:** South (bound)

**Scheme:** Vehicle classification (Scheme F)

**Units:** Non metric (ft, mi, ft/s, mph, lb, ton)

**\* Wednesday, May 15, 2013 - Total=948, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
6	1	0	2	2	5	16	29	37	64	35	36	61	52	62	89	91	95	82	70	47	37	19	10	
2	0	0	1	0	1	2	8	12	12	8	7	28	15	16	24	25	25	20	23	15	8	4	1	1
1	0	0	0	2	2	5	6	5	16	10	11	16	12	19	29	23	18	25	15	11	10	3	8	2
3	1	0	1	0	1	6	5	14	20	9	6	6	11	8	15	23	26	18	13	14	7	6	1	0
0	0	0	0	0	1	3	10	6	16	8	12	11	14	19	21	20	26	19	19	7	12	6	0	1

AM Peak 0900 - 1000 (64), AM PHF=0.80 PM Peak 1730 - 1830 (97), PM PHF=0.93

**\* Thursday, May 16, 2013 - Total=865, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
4	2	0	0	0	1	16	23	40	50	41	35	59	52	54	68	66	93	83	69	41	42	21	5	
1	2	0	0	0	0	2	6	17	13	10	8	18	16	18	21	16	27	17	19	10	12	5	1	4
2	0	0	0	0	1	7	5	9	21	7	11	8	10	9	19	11	17	29	21	15	12	7	0	1
0	0	0	0	0	0	6	7	9	10	9	9	11	13	16	12	18	24	17	11	7	9	5	1	1
1	0	0	0	0	0	1	5	5	6	15	7	22	13	11	16	21	25	20	18	9	9	4	3	4

AM Peak 0900 - 1000 (50), AM PHF=0.60 PM Peak 1730 - 1830 (95), PM PHF=0.82

**\* Friday, May 17, 2013 - Total=1042, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
10	5	2	1	0	1	14	27	50	57	65	50	76	48	67	85	81	96	81	78	59	38	30	21	
4	3	0	0	0	0	4	6	10	11	16	13	16	6	22	27	15	24	28	14	16	9	8	2	2
1	0	0	1	0	0	4	6	14	17	18	7	23	10	17	17	23	29	15	32	21	15	9	5	1
1	2	1	0	0	0	5	7	14	16	17	15	13	17	11	18	17	22	17	18	10	10	6	5	5
4	0	1	0	0	1	1	8	12	13	14	15	24	15	17	23	26	21	21	14	12	4	7	9	1

AM Peak 1130 - 1230 (69), AM PHF=0.75 PM Peak 1645 - 1745 (101), PM PHF=0.87

**\* Saturday, May 18, 2013 - Total=1172, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
9	6	4	2	1	3	11	37	53	54	108	81	92	81	85	109	85	75	89	50	46	34	32	25	
2	1	0	0	0	0	1	7	13	10	36	21	14	22	14	30	23	9	23	14	9	3	5	5	4
1	1	3	1	0	1	4	9	11	8	21	21	22	19	31	16	22	18	19	11	14	7	5	6	1
5	1	0	0	1	2	2	13	12	16	18	20	37	18	20	26	14	24	21	11	9	12	11	7	2
1	3	1	1	0	0	4	8	17	20	33	19	19	22	20	37	26	24	26	14	14	12	11	7	2

AM Peak 1000 - 1100 (108), AM PHF=0.75 PM Peak 1500 - 1600 (109), PM PHF=0.74

**\* Sunday, May 19, 2013 - Total=1056, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
9	5	4	2	1	3	13	30	51	69	75	76	98	80	87	86	70	81	70	48	40	26	21	11	
4	3	1	1	0	0	3	4	4	21	18	19	23	18	28	25	23	20	22	14	13	10	4	1	1
1	1	2	0	0	1	2	6	11	18	12	23	19	14	17	20	21	26	13	12	15	8	6	1	4
2	1	0	1	0	2	4	11	20	17	20	17	29	16	19	18	14	15	20	10	3	5	3	5	1
2	0	1	0	1	0	4	9	16	13	25	17	27	32	23	23	12	20	15	12	9	3	8	4	0

AM Peak 1145 - 1245 (88), AM PHF=0.76 PM Peak 1200 - 1300 (98), PM PHF=0.84

## Traffic Data Service -- Campbell, CA Vehicle Counts

### VehicleCount-1474 -- English (ENU)

**Datasets:**

**Site:** [2] MCKEAN RD E OF FORTINI RD

**Profile:**

**Included classes:** 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13

**Speed range:** 0 - 100 mph.

**Direction:** East (bound)

**Scheme:** Vehicle classification (Scheme F)

**Units:** Non metric (ft, mi, ft/s, mph, lb, ton)

**\* Wednesday, May 15, 2013 - Total=2055, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
6	3	1	2	8	15	54	101	177	166	106	94	108	99	115	174	198	223	148	104	69	48	27	9	
1	2	1	0	1	2	8	20	52	43	28	20	29	20	24	47	43	64	47	20	15	17	10	4	5
2	0	0	0	4	0	9	19	31	42	22	23	29	27	28	42	51	59	35	29	22	14	6	1	4
3	1	0	1	1	5	17	30	46	43	23	23	25	26	39	38	51	57	32	31	16	9	7	3	0
0	0	0	1	2	8	20	32	48	38	33	28	25	26	24	47	53	43	34	24	16	8	4	1	2

AM Peak 0830 - 0930 (179), AM PHF=0.93 PM Peak 1645 - 1745 (233), PM PHF=0.91

**\* Thursday, May 16, 2013 - Total=1977, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
11	2	2	1	8	11	41	106	160	136	100	80	97	94	116	156	209	236	176	82	64	41	33	15	
5	1	0	0	1	1	4	28	45	41	27	21	15	27	19	36	48	51	56	25	19	8	7	1	6
4	1	0	0	2	2	8	21	38	32	29	22	35	26	27	53	43	56	45	23	21	14	15	7	3
0	0	1	0	3	4	16	26	38	34	22	15	29	30	38	35	54	68	42	17	14	10	5	4	4
2	0	1	1	2	4	13	31	39	29	22	22	18	11	32	32	64	61	33	17	10	9	6	3	0

AM Peak 0800 - 0900 (160), AM PHF=0.89 PM Peak 1715 - 1815 (241), PM PHF=0.89

**\* Friday, May 17, 2013 - Total=2219, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
13	4	5	4	8	12	48	91	140	109	151	174	127	109	105	195	227	250	187	89	78	42	29	22	
6	2	1	2	1	1	9	26	38	29	34	44	24	29	28	43	57	76	56	25	25	9	12	9	3
3	1	1	1	2	4	9	18	40	30	33	62	24	29	23	44	43	67	46	26	20	9	3	6	3
4	1	1	1	2	3	14	17	37	20	35	42	35	29	31	60	61	59	47	19	13	13	9	3	2
0	0	2	0	3	4	16	30	25	30	49	26	44	22	23	48	66	48	38	19	20	11	5	4	2

AM Peak 1045 - 1145 (197), AM PHF=0.79 PM Peak 1630 - 1730 (270), PM PHF=0.89

**\* Saturday, May 18, 2013 - Total=2015, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
10	9	6	4	3	10	43	84	125	123	162	162	172	141	175	150	150	120	110	66	63	58	35	34	
3	2	2	0	0	1	5	14	25	29	39	30	51	33	42	38	40	37	30	21	18	11	9	13	5
3	3	0	2	1	1	11	17	40	36	34	32	32	29	37	37	36	31	27	15	14	15	11	8	4
2	4	1	1	1	4	11	23	24	27	39	61	40	38	47	44	35	23	28	13	13	24	9	8	4
2	0	3	1	1	4	16	30	36	31	50	39	49	41	49	31	39	29	25	17	18	8	6	5	5

AM Peak 1115 - 1215 (183), AM PHF=0.75 PM Peak 1400 - 1500 (175), PM PHF=0.89

**\* Sunday, May 19, 2013 - Total=1915, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
18	6	5	2	4	37	44	99	74	129	161	165	184	166	134	143	133	122	87	67	53	49	21	12	
5	2	1	0	2	4	14	18	18	25	44	42	43	57	32	40	39	34	27	24	13	20	9	5	4
4	3	1	1	0	9	10	24	16	21	34	46	44	36	35	35	28	35	25	17	17	10	6	5	3
4	0	1	0	0	11	10	23	19	39	46	40	48	35	33	28	34	29	20	14	13	11	3	0	1
5	1	2	1	2	13	10	34	21	44	37	37	49	38	34	40	32	24	15	12	10	8	3	2	1

AM Peak 1145 - 1245 (172), AM PHF=0.90 PM Peak 1215 - 1315 (198), PM PHF=0.87

## Traffic Data Service -- Campbell, CA Vehicle Counts

### VehicleCount-1473 -- English (ENU)

**Datasets:**

**Site:** [2] MCKEAN RD E OF FORTINI RD

**Profile:**

**Included classes:** 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13

**Speed range:** 0 - 100 mph.

**Direction:** West (bound)

**Scheme:** Vehicle classification (Scheme F)

**Units:** Non metric (ft, mi, ft/s, mph, lb, ton)

**\* Wednesday, May 15, 2013 - Total=2067, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
6	4	0	2	4	23	103	294	178	93	81	94	80	113	131	133	158	162	164	109	69	41	15	10	
3	0	0	1	0	4	16	59	50	17	28	29	24	28	18	37	42	32	55	37	24	12	8	2	2
1	2	0	0	1	5	23	72	63	22	15	22	20	41	28	33	30	48	51	28	21	15	3	2	3
1	1	0	0	0	4	28	99	28	29	20	17	24	23	42	36	44	41	24	22	12	6	3	3	2
1	1	0	1	3	10	36	64	37	25	18	26	12	21	43	27	42	41	34	22	12	8	1	3	0

AM Peak 0700 - 0800 (294), AM PHF=0.74 PM Peak 1730 - 1830 (188), PM PHF=0.85

**\* Thursday, May 16, 2013 - Total=1979, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
7	2	3	2	5	20	92	283	203	93	94	66	84	92	116	121	127	167	144	118	72	44	15	9	
2	0	1	1	1	4	10	59	66	39	20	14	28	23	25	27	40	35	43	41	17	20	2	2	5
3	1	1	0	1	5	16	72	60	21	28	19	19	29	33	28	34	43	40	28	20	8	4	2	2
2	1	1	1	1	4	27	75	38	17	21	18	18	22	29	39	32	44	21	18	21	7	5	5	4
0	0	0	0	2	7	39	77	39	16	25	15	19	18	29	27	21	45	40	31	14	9	4	0	1

AM Peak 0715 - 0815 (290), AM PHF=0.94 PM Peak 1715 - 1815 (175), PM PHF=0.97

**\* Friday, May 17, 2013 - Total=2008, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
12	6	1	2	4	23	73	224	144	84	88	79	91	101	121	199	147	142	128	117	102	58	40	22	
5	3	1	0	0	3	6	45	50	20	24	19	33	20	32	25	32	31	39	33	32	13	8	8	4
2	1	0	0	1	4	12	42	38	22	21	25	21	28	28	75	39	41	34	28	33	17	13	5	3
4	2	0	1	2	7	22	75	27	23	22	14	18	34	32	57	32	31	31	34	21	19	7	4	4
1	0	0	1	1	9	33	62	29	19	21	21	19	19	29	42	44	39	24	22	16	9	12	5	1

AM Peak 0715 - 0815 (229), AM PHF=0.76 PM Peak 1515 - 1615 (206), PM PHF=0.69

**\* Saturday, May 18, 2013 - Total=1996, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
12	9	6	3	5	5	28	69	87	89	139	131	130	134	167	186	164	143	132	130	101	60	43	23	
4	4	4	1	1	0	3	8	19	17	28	27	31	28	39	51	50	35	38	31	26	15	9	10	4
3	3	0	0	0	1	6	16	25	19	29	38	34	38	57	35	37	25	42	27	30	15	10	3	5
4	1	1	2	2	1	9	23	18	24	46	36	30	29	36	50	41	55	30	41	29	12	8	6	2
1	1	1	0	2	3	10	22	25	29	36	30	35	39	35	50	36	28	22	31	16	18	16	4	2

AM Peak 1030 - 1130 (147), AM PHF=0.80 PM Peak 1530 - 1630 (187), PM PHF=0.94

**\* Sunday, May 19, 2013 - Total=1980, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
13	6	4	5	1	5	12	34	71	90	122	171	137	165	186	185	171	185	125	114	92	44	27	15	
4	2	0	3	0	2	2	6	12	18	24	34	33	43	38	47	39	46	40	25	22	17	6	6	3
5	0	2	1	0	0	1	8	20	28	27	43	44	38	41	34	51	43	27	33	28	9	11	2	2
2	2	1	1	0	1	2	11	20	23	33	49	34	43	44	50	47	58	29	28	23	8	6	3	1
2	2	1	0	1	2	7	9	19	21	38	45	26	41	63	54	34	38	29	28	19	10	4	4	1

AM Peak 1100 - 1200 (171), AM PHF=0.87 PM Peak 1415 - 1515 (195), PM PHF=0.77