

DRAFT
Mount Madonna County Park Use Plan
Initial Study/Mitigated Negative Declaration

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Report Date: May 5, 2017

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ACRONYMS AND ABBREVIATIONS

$\mu\text{g}/\text{m}^3$	micrograms per cubic meter
$^{\circ}\text{F}$	degrees Fahrenheit
$^{\circ}\text{C}$	degrees Celsius (Centigrade)
ARB	California Air Resources Board
CEQA	California Environmental Quality Act
mph	miles per hour
VOC	volatile organic compounds

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SECTION 1: INTRODUCTION

1.1 - Purpose

The purpose of this Initial Study/Mitigated Negative Declaration (IS/MND) is to identify any potential environmental impacts from implementation of the Mount Madonna County Park Master Plan (Project). Pursuant to the California Environmental Quality Act (CEQA) Guidelines Section 15367, the County of Santa Clara (County) is the Lead Agency in the preparation of this IS/MND. The intended use of this document is to determine the level of environmental analysis required to adequately prepare the IS/MND comply with CEQA and to provide the basis for input from public agencies, other organizations, and interested members of the public.

This document has been prepared in accordance with CEQA, Public Resources Code section 21000 et seq., and the CEQA Guidelines, California Code of Regulations (CCR), Title 14, section 15000 et seq.

The remainder of this section provides a brief description of the location and the characteristics of the Project Plan. Section 2 includes an environmental checklist giving an overview of the potential impacts that may result from implementation of the Master Plan. Section 3 elaborates on the information contained in the environmental checklist, along with justification for the responses provided in the environmental checklist.

1.2 - Project Plan Location

Mount Madonna County Park (Park) is approximately 4,605-acres and located south of the City of San Jose, between the communities of Gilroy and the City of Watsonville, in Santa Clara County, California (Exhibit 1). The Park is located within the hills of the Santa Cruz Mountain range in an unincorporated area of Santa Clara County, at the southern end of the Santa Clara Valley and adjacent to the Santa Cruz County line.

1.3 - Existing Conditions

The Park is the second oldest park in the Santa Clara County Parks system. It is a highly popular camping destination making up more than one-half of the Department's yearly camping revenue. Other activities supported by the Park's existing facilities include picnicking, hiking, horseback riding, and outdoor education and interpretation. The Park is remote and rural in nature. The landscape varies from redwood forest to oak woodland and from dense chaparral to grassy meadows.

Climate

The Park experiences a Mediterranean climate typical of the Santa Cruz Mountains. High temperatures from November to April are consistently in the high 60s (with lows in the low 40s) and in the mid-70s from May to October (with lows in the mid-50s). The warmest months are August and September, while the coolest months are December and January. Fog influence plays a major role in the types of vegetation present at the park; redwoods are particularly dependent on fog.

December, January, and February experience the highest amounts of rainfall (approximately six inches monthly) while June, July, and August are normally free of precipitation.

Topography

The park is nestled in the Santa Cruz Mountains, with the high point located centrally within the Park boundaries. The landscape generally slopes to the northeast although the terrain is varied with elevations ranging from 400 feet to 1,880 feet. The overall elevation change within the Park is 1,480 feet. Views from the park include vistas of both Monterey Bay and the Santa Clara Valley.

Geology and Soils

The Mount Madonna area has a variety of soils that include sandy loams, silt loams, clay loams, and loams. The central part of the Park consists of Felton series soils (Fa), a well-drained silt loam that is underlain by inter-bedded shale and sandstone at a depth of 20 to 59 inches. There are small patches of serpentine soils in the northern part of the Park, particularly blow Old Mine Trail above Sprig Lake. Due to the area's steep topography and history of logging, which thinned out older, soil stabilizing trees and created gullies from skid trails, landslides are common in the park. In 1998, a large landslide closed the Blackhawk Trail.

Biological Resources

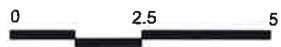
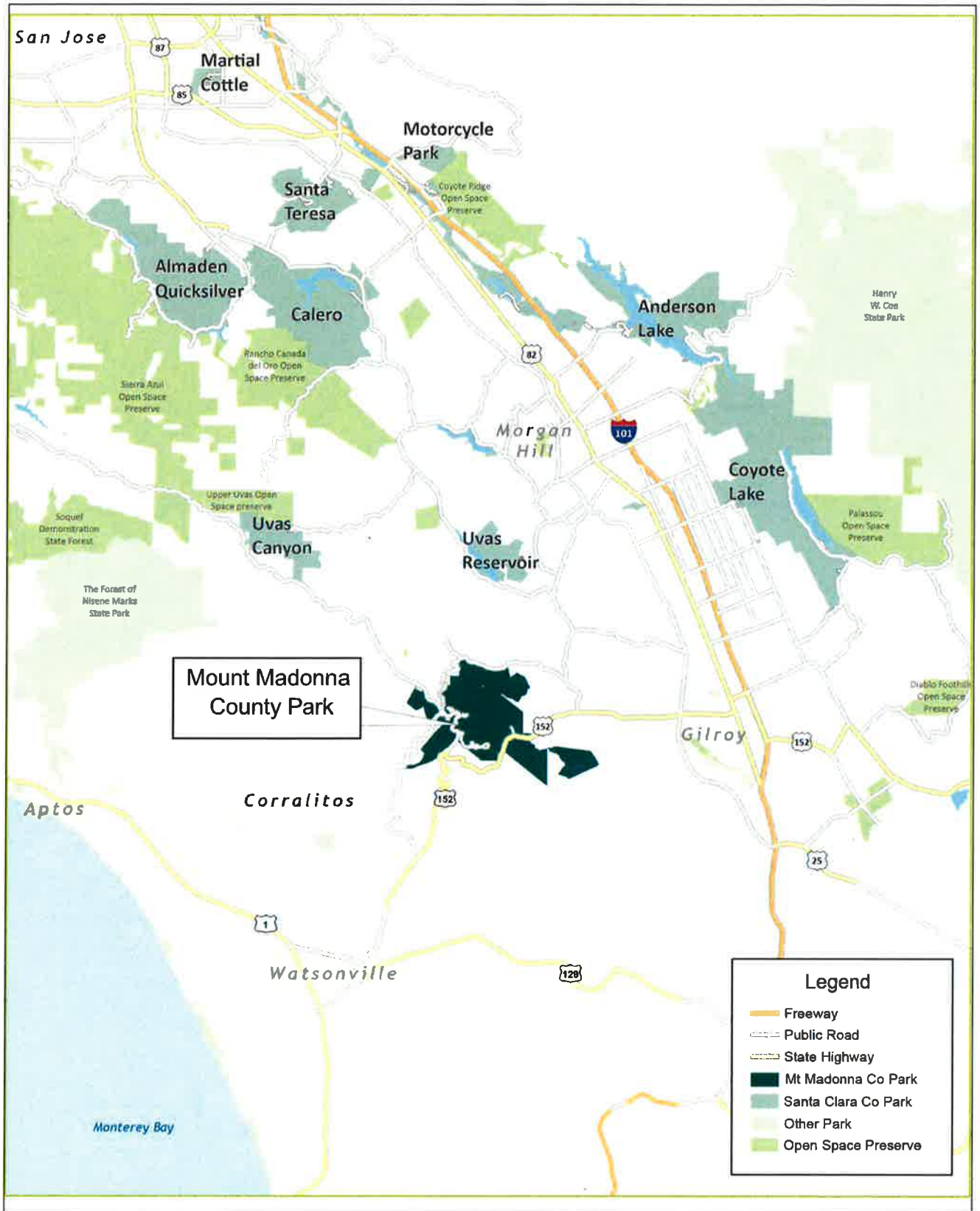
The California Department of Fish and Wildlife (CDFW) and the U.S. Fish and Wildlife Service (USFWS) list species that are or have the potential to be threatened or endangered as special-status species. In addition, the California Natural Diversity Database (CNDDDB) records known occurrences of special-status species in California. Species in the CNDDDB located within the Park are Anderson's Manzanita, California Red-legged Frog, Central Coast Steelhead, Kings Mountain Manzanita, Loma Prieta hoita, Most Beautiful Jewel-Flower, Santa Cruz Mountain Beardtongue, Santa Clara Valley Dudleya, Smooth Lessingia, Western Pond Turtle, and Woodland Woollythreads. The Department's Interim Natural Resource Management Plan (2008) also lists the following three special-status species: Santa Cruz Mountain Manzanita, Foothill Yellow-Legged Frog, and Mountain Lion.

Cultural Resources

Based on the discovery of bedrock mortars, it is believed that Native Americans, such as the Ohlone Indians, visited the area to fish and hunt, as well as harvest vegetables hundreds to thousands of years ago. Any future land disturbance and construction will need to account for the identification and preservation of cultural resources.

Hydrology

Several unnamed tributaries originate from the high points within the Park and flow in all directions into larger creeks at lower elevations. For instance, seasonal tributaries of Bodfish Creek, Uvas, and Pajaro River systems feed Blackhawk Creek in the southern portion of the Park, Bodfish Creek in the east, and Little Arthur Creek to the north.



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Vehicular Access

The roadway used most often to access the Park is California State Highway 152, or the Hecker Pass Highway, connecting Watsonville to Gilroy. Caltrans completed a safety improvement project to this highway in late 2016 that included improving visibility and widening shoulder sections to improve vehicle and bicycle safety on the highway. Other important roads serving the Park are operated by Santa Clara County and Santa Cruz County. Within the Park, Pole Line Road serves as the primary access, yet this road also passes through the park to destinations beyond for non-park users.

The Master Plan primarily focuses on existing developed areas of the Park, also referred to as areas of focus (Exhibit 2). This allows the recommendations in the Master Plan to minimize environmental impacts by limiting the amount of additional development that might encroach into natural areas of the Park, and it concentrates development efficiently both for use and implementation purposes. The three Focus Areas are the High Use Zone, the Valley View Zone, and Summit Zone and are discussed further below.

High Use Zone

The High Use Zone is located in the west-central part of the Park and accessed from either Summit Road or Pole Line Road. Visitor and operational activity at Mount Madonna is centered in the High Use Zone in and around the existing Visitor Center, current Deer Pen, and the Tan Oak picnic areas.

Existing recreational facilities in the High Use Zone include 22 camping tent sites, two group sites, restrooms, three day-use picnic sites, an amphitheater, a deer pen, a maintenance shop, an entrance kiosk, and ranger staff building/visitor center. A network of park trails, an archery range, an equestrian staging area, two youth sites (Bay View Youth Camp and the West Deer Pen Youth Site), a day use picnic area, and the historic Henry Miller site are located within the immediate vicinity.

Valley View Zone

The Valley View Zone is located south of the High Use Zone, in the southeastern portion of the Park. The existing Valley View campgrounds are located in this Zone and constitute the majority of the Park's camping areas. Existing recreational facilities in this focus area include 61 camping tent sites, 29 recreational vehicle (RV) sites, shower facility, two day-use picnic sites, one group site, and a network of trails.

Summit Zone

The Summit Zone is located between Summit Road and Old Mount Madonna Road in the northwest portion of the Park. The area is currently closed to the public, but due to easy access from Summit Road, variations in topography, and scenic views of the Monterey Bay, is an appropriate location for additional expansion of the Park's visitor-serving amenities.

Utility Systems

The water network system within the Park was constructed in the 1960s and improved in the early 1990s and consists of galvanized pipes and groundwater wells. The water system includes a 100,000-gallon water storage tank located along Ridge Road, booster pump station, 4-inch PVC distribution system to campgrounds and restrooms, and several hydrants.

Water is supplied in the Park via two groundwater wells. The two operational wells are located just north and northeast of the Valley View Campground. Well #2 has an estimated capacity to yield about 35 to 40 gallons per minute (gpm) and Well #3 about 40 gpm; however, due to production issues, Well #2 has been reduced to an average yield of 6 gpm and the yield of Well No. 3 provides for 17 gpm. Well #1, an older well within the Park, has been abandoned and is no longer in use.

The Park is served by a septic/leach field system consisting of nine septic tanks and corresponding leach line systems located throughout the Park. These systems were installed between 1957 and 1996, although over time they have become corrupted by tree roots in places or restricted due to the buildup of solids. Overhead power and telecommunication lines routed through the Park provide electricity and phone service. The poles follow the roads through the Park making them accessible for connections to future buildings. Further details of existing utilities systems in the Park are described in Appendix F.

1.4 - Project Description

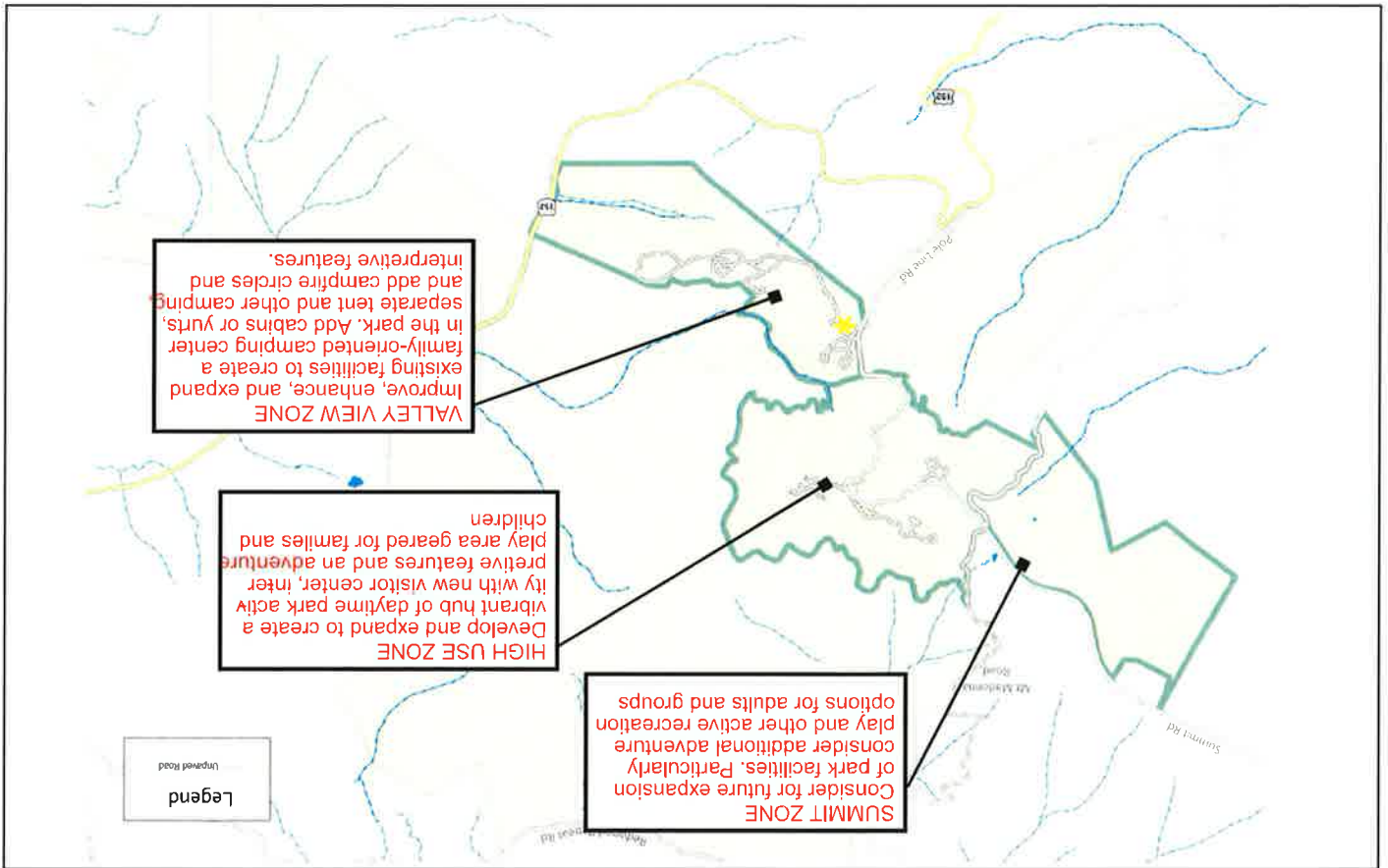
The Project establishes a unified vision and long-term direction for the Park in the context of continued growth in Silicon Valley, where the population is expected to grow to over 2.3 million people by 2030. The purpose of the Project is to guide the expansion of recreational facilities and the infrastructure needed to support them, while protecting natural resources and ensuring the unique natural beauty of the Park remains intact.

Implementation of the Project would involve a range of improvements to be concentrated in three zones, the High Use Zone, Valley View Zone, and the Summit Zone. Additional areas outside of these three areas of focus, would not involve any new physical interventions beyond natural resource management activities and maintenance of the existing amenities.

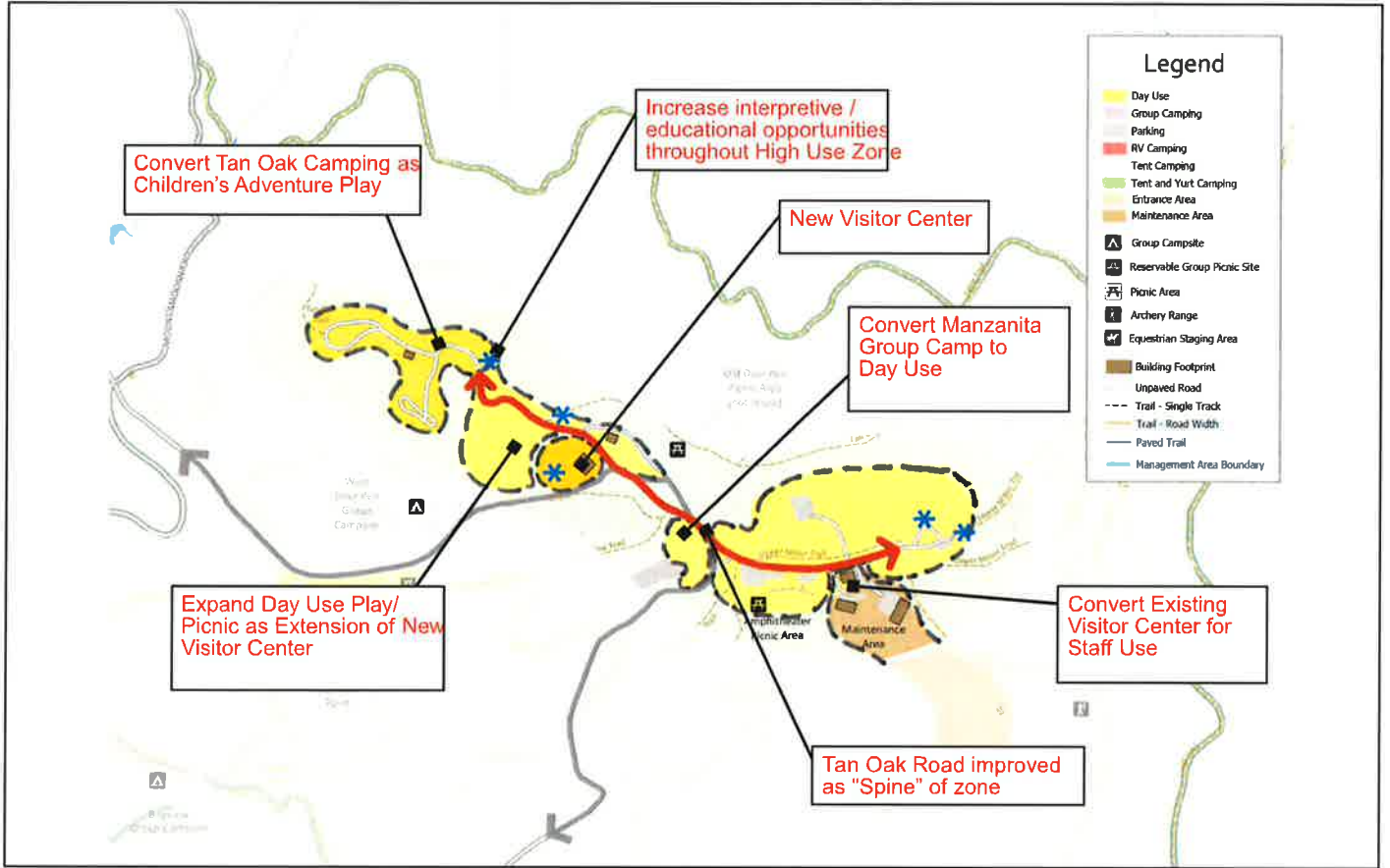
1.4.1 - High Use Zone (HU)

Visitor and operational activity at Mount Madonna is already centered in the High Use Zone in and around the existing visitor center, current deer pen, and the Tan Oak campground. However, from a design standpoint, the area has unrealized potential to be further emphasized as the daytime heart of Mount Madonna County Park and to be improved with a new, more modern visitor center. The opportunity to establish a this zone as a vibrant, buzzing hub of Park activity that is visible and accessible to all park users, and that adds to the park visitor's 'sense of place' is a primary recommendation of the Plan. Existing and proposed improvements in the High Use Zone are shown on Exhibit 3.

Exhibit 2 Three Zones Map - Recommendations



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Recommendations

- **HU1:** Establish the High Use Zone as the primary hub of day-use only activity in the Park with an improved Tan Oak Road connecting through from east to west to serve as a “spine” of this newly revitalized area.
- **HU2:** Locate new facilities, including a new visitor center, and new educational and recreational facilities, so that each use complements existing key features and neighboring uses.
- **HU3:** Convert existing Tan Oak Campground to a Children’s Adventure Play area (day-use) and consider conversion of Manzanita Group Camp to day-use as well.
- **HU4:** Consider existing trail circulation in the design of new use areas.

1.4.2 - Visitor Center (VC)

Currently located at the east end of the High Use Zone, the existing visitor center is difficult for visitors to locate within the Park, has limited space for exhibits, and is underutilized. As such, this Master Plan recommends construction of a new Park visitor center near the former deer pen and the existing Tan Oak Campground. The new visitor center will become the central “hub” of activity within the High Use Zone, with surrounding day-use facilities extending as “spokes” of the wheel. These other nearby facilities will also build off of the visitor center use from an interpretive themes standpoint.

Recommendations

- **VC1:** Physically orient the building and use architectural elements to make the structure harmonious with the natural environment and to connect to surrounding amenities and trails.
- **VC2:** Include space both inside and immediately adjacent to the building for small gatherings and presentations; thematically connect to adjacent recreational areas including the recommended Children’s Adventure Play area.
- **VC3:** Include office space for staff in the building’s design; keeping in mind that a redesign of the original visitor center into staff offices should serve as the Park’s primary staff office.
- **VC4:** Design to LEED certification levels and/or utilize California Green Building Standards Code.²⁶ Ensure the building also meets Americans with Disabilities Act (ADA) standards, including surrounding paved areas and pathways.
- **VC5:** Specific interpretive goals and themes should be fully planned prior to or alongside building design and site planning.
- **VC6:** During preparation of the visitor center site plan, consider existing fences and power lines in the vicinity as well as electrical, water, and wastewater capacities and demands

1.4.3 - Children’s Adventure Play (CAP)

To the northwest of the new Visitor Center, or potentially in place of the Tan Oak Campground, a children’s natural adventure play zone would be an excellent addition to Mount Madonna. Redevelopment of the large, rolling meadows in and around the previous deer pen (west deer pen) as a natural play area for children meets a need expressed by park users in surveys as well as by park staff. More specifically, the adventure play area would be a nature-themed outdoor playground

filled with multi-sensory and exploratory opportunities, and would be constructed with recycled and natural materials such as tree trunks, stumps, rocks, sand, soil and water areas, grass, and more. This type of facility could be an extension of the programs offered at the new visitor center, and would blend well with both existing and new picnic areas.

Recommendations

- **CAP1:** Provide a new children’s adventure play area adjacent to the new visitor center
- **CAP2:** Develop this play area in accordance with Americans with Disabilities Act standards.
- **CAP3:** Specifically design play area to heighten a connection to nature, incorporating site-specific interpretive and educational elements where appropriate.
- **CAP4:** Include both built and natural features such as stumps, logs, trees, and other minimal modifications to landscape that encourage use of the imagination.
- **CAP5:** Refer to the National Learning Initiative’s National Guidelines: Nature Play & Learning Places, Creating and Managing Places where Children Engage with Nature for additional design guidance.

1.4.4 - Day-Use Picnic (DU)

In addition to a new visitor center and children’s adventure play area, additional user-serving amenities in the High Use Zone should primarily be those that support day-use activity and picnicking. Given their central location within the Park and connection to numerous trails and visitor facilities (e.g., restrooms), the existing picnic areas in this portion of the Park are already highly popular. However, expansion and improvement, including the addition of Wi-Fi connectivity and integrated learning opportunities, would benefit these facilities. Additionally, both reservable and first-come first-served picnic sites should be offered as well as additional group picnic sites. Over time, the Manzanita Group Camp area could be redeveloped for day-use only.

Recommendations

- **DU1:** Expand existing day-use picnic areas throughout the High Use Zone.
- **DU2:** Consider additional day-use picnic facilities.
- **DU3:** Incorporate new interpretive features into picnic areas so that learning is integral even to the casual visitor (programmed through future Interpretive Plans).
- **DU4:** Add Wi-Fi connectivity throughout picnic areas and near the new visitor center.

1.4.5 - Valley View Zone

Existing and proposed improvements in the Valley Zone are shown on Exhibit 4. As of 2017, the existing campsites in all areas of Mount Madonna are consistently full or nearly full on summer weekends and camping at Mount Madonna provides significant revenue to the Park and to the Parks Department as a whole. The 2016 Camping and Park Stores Business Analysis commissioned by the Parks Department confirmed that there is expected to be continued demand for RV, tent, and structured (cabins and/or yurts) camping in the future. Demand for small group sites, or “mini family” sites, is also high and likely to grow. Other trends include demand for Wi-Fi, increased electrical capacity in RV sites, and programs and activities for children. As a result of all of the above,

enhancing the park user experience by improving and expanding camping opportunities in the Valley View Zone is a key recommendation of the Plan. The recommendations below also reflect an intention to make managing and serving the campgrounds more efficient from an operations standpoint.

Recommendations

- **CF1:** In Valley View I, replace tent campsites with yurts or cabins (cabins preferable). Consider KOA-style cabins as an alternative to yurts. The addition of 15 cabins is optimal. Ensure that this yurt/cabin camping area uses a distinctive site numbering system.
- **CF2:** Develop a new loop road for the yurts or cabins so users going to or from their campsite will not negatively impact traffic flow along Valley View Road. Consider addition of single loops for volunteers only in the RV camping area.
- **CF3:** Add two “mini family” or small group campsites within Valley View II, III, or new Valley View IV. Each site should include five private camping sites, an undercover common area, fire pit, and grill.
- **CF4:** Add an additional bathroom and shower house in the Valley View Zone to meet expected additional demand.
- **CF5:** Upgrade existing RV sites to premium RV sites with increased electricity 30 amp to 50 amp.
- **CF6:** In key locations within the Valley View, Zone install campfire circles or other gathering points for interpretive programs and events, and to add to the campers’ sense of place. Add amenities such as benches and fire rings to existing camping areas as well as Wi-Fi hot spots.
- **CF7:** Consider improving campground roads for children’s bike safety; consider potential to develop a small off-street bike play area.
- **CF8:** Wherever possible add one full hook-up camp host site in each loop. Sites should accommodate large Class A motorhomes and include 100 Amp electrical service, as well as water and sewer.
- **CF9:** Expand the Huckleberry Group Campground into the area between the existing footprint and the entrance kiosk.

1.4.6 - Camp Store (CS)

The County Parks Department has been pursuing the idea of a camp store at the Park since 1998 when the report: Market and Financial Feasibility for Mount Madonna Camp Store was completed. However, the more modern Camping and Park Stores Business Analysis identified that camp stores are not often revenue generating and should be added only in very specific circumstances where they have potential to be successful. At Mount Madonna it is clear that a camp store would improve customer service to park visitors, particularly campers who may have forgotten necessary items, and could also serve as a platform by which to market the park (sales of branded merchandise) and support increased recreational opportunities (equipment rentals for Adventure Play Areas, etc.). However, inclusion of a camp store should be carefully considered in order that it does not become a tax subsidized element of the park. There are a variety of ways to do this (large corporate contractor, operated by park volunteer/friends group, etc.) that would allow it to generate of a mobile/temporary/pilot camp store either in the High Use Zone or Valley View Zone. Using this kind

of trial program, the Department will have the ability to both test different locations for this amenity and also to discontinue its operation in the event that the store is not successful.

Recommendations

- **CS1:** Allow a pilot camp store to be located in whatever location Park Staff deems most appropriate initially. Potentially try other locations over time.
- **CS2:** As recommended in the Camping and Park Stores Business Analysis, consider limiting inventory to camping items only, such as firewood, ice, and healthy snacks for sale.
- **CS3:** List the camp store's location and hours of operation at various key locations within the Park, including the entrance kiosk and visitor center.
- **CS4:** Explore operating the store via private vendor with this vendor shouldering costs of initial capital improvements including utility infrastructure.

1.4.7 - Summit Zone (SZ)

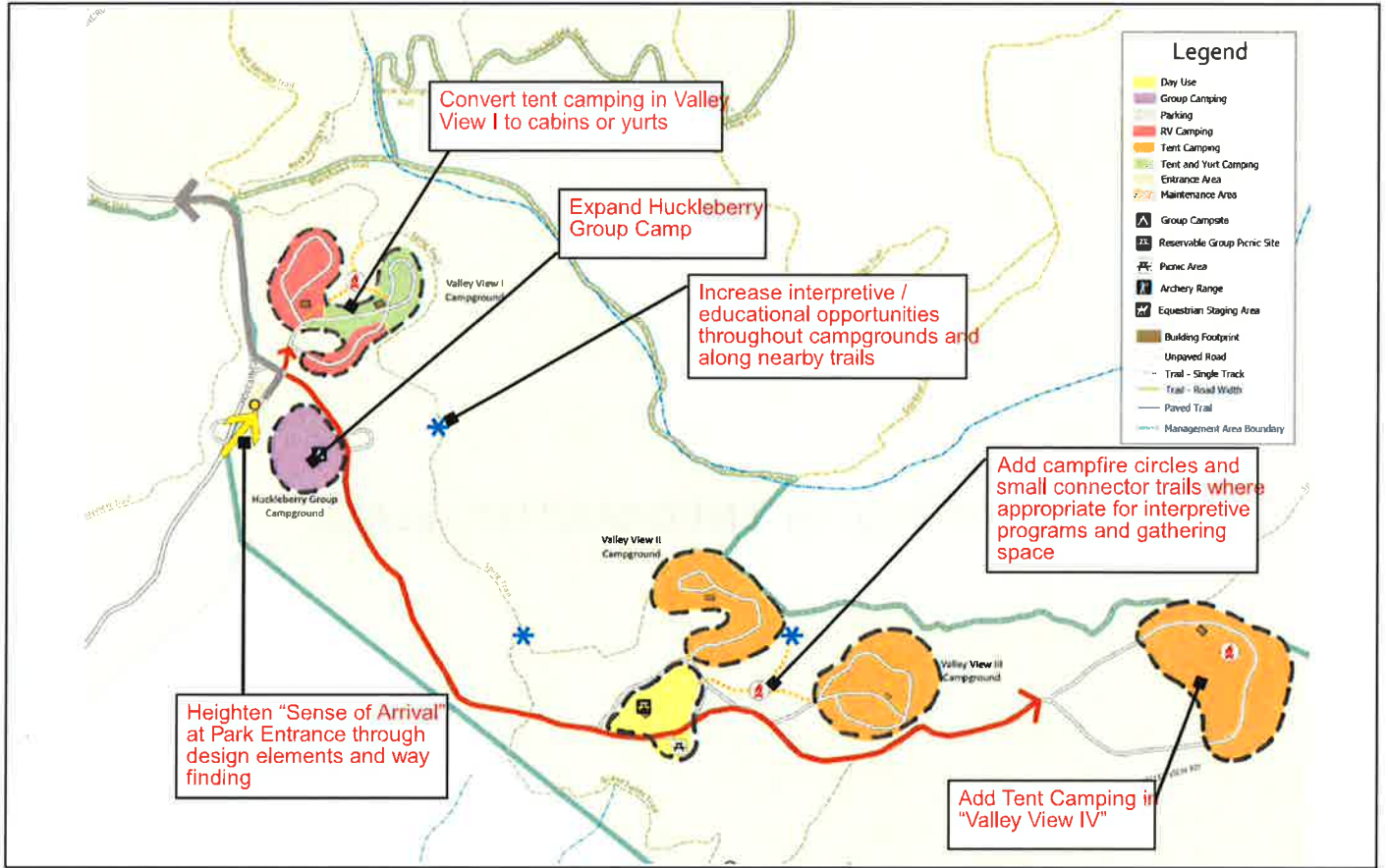
In the far western corner of the park, the Summit Zone is appropriate to consider for future development of additional adventure-play style activities. The area is currently closed to the public, but due to easy access from Summit Road, variations in topography, and scenic views of the Monterey Bay, it is an appropriate location for additional expansion of the Park's visitor-serving amenities.

Recommendations

- **SZ1:** Consider development of trails for use by mountain bikes in a future Mount Madonna Trails Master Plan.
- **SZ2:** Center future design proposals for this zone on active and/or adventure-based recreation, including: zip lines, a physical challenge course, ropes course or other similar facilities.
- **SZ3:** If development for active recreational uses becomes cost, time, or otherwise prohibitive, develop access for more passive uses.

1.5 - Best Management Practices Incorporated Into the Project

Best Management Practices (BMPs) will be incorporated into the design of the Plan to ensure that project-related effects are minimized or avoided. Successful implementation of these BMPs would ensure the minimization of air quality, biological, noise and cultural resource impacts. These will include the County of Santa Clara Parks Department's BMPs for the prevention of plant pathogen introductions on County Park Lands; Construction Site BMPs during construction activities to reduce pollutants in storm water discharges throughout construction; Standard County dust-reduction measures; County of Santa Clara's standards for noise reduction during construction; and the Bay Area Air Quality Management District (BAAQMD) Basic Construction BMPs.



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1.6 - Construction Schedule

Implementation of the proposed improvements is envisioned over a 10+ year period between 2019 and 2029.

1.7 - Required Discretionary Approvals

The following permits and consultation may be appropriate during the implementation of the Plan:

- Comply with San Francisco Regional Water Quality Control Board: National Pollution Discharge Elimination System (NPDES) General Construction permit.
- County Fire Marshal Office (consultation and occupancy permits for structures).

1.8 - Intended Uses of this Document

This IS/MND has been prepared to determine the appropriate scope and level of detail required in completing the environmental analysis for the Project Plan. This document will also serve as a basis for soliciting comments and input from members of the public and public agencies regarding the Project Plan. The Draft IS/MND will be circulated for a minimum of 20 days, during which period comments concerning the analysis contained in the IS/MND should be sent to:

Kimberly Brosseau, Senior Planner
County of Santa Clara
Parks and Recreation Department
298 Garden Hill Drive
Phone: 408.355.2228
Email: Kimberly.Brosseau@prk.sccgov.org

Submittal of written comments via e-mail is encouraged as it greatly facilitates the response process.

The IS/MND is available for review at:

County of Santa Clara
Parks and Recreation Department
298 Garden Hill Drive
Los Gatos, CA 95032-7669

County of Santa Clara
Clerk Records Office
County Government Center
70 West Hedding, E. Wing, 1st Floor
San Jose, CA 95110

Mount Madonna County Park
Park Ranger's Office
7850 Pole Line Road
Watsonville, CA 95076

The IS/MND is also posted on the County of Santa Clara Parks and Recreation Department's website: <http://www.parkhere.org/>.

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INITIAL STUDY

Environmental Evaluation Checklist for Santa Clara County

Project Title: Mount Madonna County Park Master Plan **Date:** May 4, 2017

File Number: N/A **APN(s):** Multiple

500" Map #: N/A **Zoning:** General Plan Designation: Regional Parks and Public Open Space Lands

Project Type: Master Plan **USA (if any):** N/A

Lead Agency Name & Address: County of Santa Clara
298 Garden Hill Drive, Los Gatos, CA 95032-7669

Applicant Name & Address: County of Santa Clara, Parks and Recreation Department
298 Garden Hill Drive, Los Gatos, CA 95032-7669

Owner Name & Address: Same as Above

Telephone: 408-355-2200

Project Location:

Mt. Madonna County Park (Park) is approximately 4,605 acres and located south of the City of San José, between the communities of Gilroy and the City of Watsonville, in Santa Clara County, California. The Park is located within the hills of the Santa Cruz Mountain range in an unincorporated area of Santa Clara County, at the southern end of the Santa Clara Valley and adjacent to the Santa Cruz County line.

Project Description:

The Mount Madonna County Park Master Plan (Plan) establishes a unified vision and long-term direction for the Park in the context of continued growth in Silicon Valley, where the population is expected to grow to over 2.3 million people by 2030. The purpose of the Plan is to guide the expansion of recreational uses and the infrastructure needed to maintain them, while ensuring the unique natural beauty of the park remains intact.

Environmental Setting/Surrounding Land Uses:

The Plan is located in the Santa Cruz Mountains between the cities of Watsonville and Gilroy, in unincorporated Santa Clara County. The Park is the second oldest park in the Santa Clara County Parks system (Exhibit 1). The Park is remote and rural in nature. The Park has regional access via SR-152, also known as the Hecker Pass Highway. Several paved roads maintained by the County of Santa Clara or the County of Santa Cruz also serve the Park, including Pole Line Road, which bisects the park; Summit Road, which extends north from the Park; and Whitehurst Road, which provides access to Clark Canyon to the east of the Park (Exhibit 2).

The Park consists predominately of redwood forest. Other common vegetation communities in the Park include oak woodlands, annual grasslands, and northern coastal scrub and northern mixed chaparral communities. The diversity of plant species in the Park affords a diversity of wildlife, including notable species such as black tail deer and mountain lion, and a variety of residential and migratory bird species.

Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement): The Plan will require coordination or permits from the Santa Clara Valley Habitat Agency (reporting on project impacts under the Santa Clara Valley Habitat Plan), and San Francisco Regional Water Quality Control Board (Construction General Permit and Stormwater Pollution Prevention Plan).

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 type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forestry Resources | <input 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 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 type="checkbox"/> Recreation | <input type="checkbox"/> Transportation/Traffic | <input type="checkbox"/> Mandatory Findings of Significance |

ENVIRONMENTAL CHECKLIST AND DISCUSSION OF IMPACTS

A. AESTHETICS						
WOULD THE PLAN:	IMPACT					SOURCE
	NO	YES				
	No Impact	Less Than Significant Impact	Less Than Significant With Mitigation Incorporated	Potentially Significant Impact	Cumulative	
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, 36
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"/>	2, 3, 37
3. Substantially damage scenic resources, 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"/>	2, 3, 4, 7, 10f, 37
4. Obstruct scenic views from existing residential areas, public lands, public water body or roads?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2, 3
5. Be located on or near a ridgeline visible from the valley floor?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2, 10f, 11c, 37
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
7. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 3

DISCUSSION

1. The Project is not subject to ASA Guidelines. **No impact.**
2. The Project would not likely create an aesthetically offensive site open to public view. **Less than significant impact.**
3. The Santa Clara County General Plan designates a scenic resource as having an ecological, functional, economic, aesthetic, and/or recreational value.¹ The County has established the following goals and policies related to aesthetic and scenic resources that are relevant to the Project:
 - **Policy C-PR 38:** Land use should be controlled along scenic roads so as to relate to the location and functions of these roads and should be subject to design review and conditions to assure the scenic quality of the corridor.

¹ County of Santa Clara General Plan, page O-1. Accessed November 14, 2016.

- **Policy C-PR 43:** New structures should be located where they will not have a negative impact on the scenic quality of the area, and in rural areas they should generally be set back at least 100 feet from scenic roads and highways to minimize their visual impact.

There are no State-designated scenic highways in the vicinity of the park. Therefore, implementation of the Plan would not cause substantial damage to scenic resources within a State scenic highway.

A scenic vista is defined as a viewpoint that provides expansive views of a highly valued landscape for the benefit of the general public. The County General Plan does not designate official scenic vistas. The Plan would have no impact on a scenic vista. **No impact.**

4. The Park is located in a heavily forested landscape west of Gilroy and north of Watsonville in the County of Santa Clara. The Plan would not result in construction of any elements that would obstruct views from other areas of the Park. The Plan would not obstruct scenic views from residential or public facilities. **Less than significant impact.**
5. Although the Plan is located near a ridgeline, the site is heavily forested. The Plan would not be visible from the valley floor. **Less than significant impact.**
6. The Plan would not adversely affect the architectural appearance of an established neighborhood. **No impact.**
7. The Plan proposes structures that would create new sources of light. However, lighting would be designed to comply with Title 24 of the California Code of Regulations and to direct light downward to minimize the effect of day or nighttime views in the area. Proposed structures would be designed to minimize light or glare. Therefore, the Plan would not create a new source of substantial light or glare. **Less than significant impact.**

MITIGATION: None

B. AGRICULTURE AND FOREST RESOURCES						
<p>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.</p>						
WOULD THE PLAN:	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"/>	3,20, 21, 23,24,26
2. Conflict with existing zoning for agricultural use?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9,21
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, 49
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"/>	3,4,26
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"/>	5, 33
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"/>	33

DISCUSSION

1. The Plan involves improvements within three areas of focus. Those areas are within land designated by the County of Santa Clara as a regional park.² As noted above, all parcels of land that make up the Park are designated by the FMMP as Other Land (X). Therefore, the Plan would not convert farmland to non-agricultural use. There are no Prime Farmlands,

² Santa Clara County General Plan, Land Use Map. Website: https://www.sccgov.org/sites/dpd/DocsForms/Documents/landuse_plan_map_2015.pdf. Accessed November 16, 2016.

Unique Farmlands, Farmlands of Statewide importance or Forest or Timberland Production lands on or near the Plan area, as indicated in the 2010 Department of Conservation Farmland Mapping and Monitoring Program map for Santa Clara County (CDC 2010 and 2013). The FMMP has designated the site Other Land,³ which includes low-density rural developments, timber, wetland, and riparian areas not suitable for livestock grazing, strip mines, and water bodies less than forty acres. Additionally, nonagricultural and vacant land surrounded on all sides by urban development and greater than 40 acres is mapped under this designation. **No impact.**

2. The Plan is within an existing County park and not zoned as farmland. The Plan would not affect any farmland or areas zoned for agricultural uses. **No impact.**
3. The Plan site is not zoned for agricultural use and does not contain land under a Williamson Act contract. **No impact.**
4. The Plan would not involve other changes in the existing environment which could result in the conversion of Farmland to non-agricultural use. **No impact.**
5. The Plan would not impact forest resources since the site does not contain any forest land as defined in Public Resources Code Section 12220(g), timberland as defined by Public Resources Code Section 4526, or property zoned for Timberland Production as defined by Government Code Section 51104(g). **No impact.**
6. The Park is designated an existing regional park and as such, the Plan would not convert forest land to non-forest use. **No impact.**

MITIGATION: None

³ Santa Clara County ClIFF Farmland Finder Map. Website: <http://maps.conservation.ca.gov/ciff/ciff.html>. Accessed November 16, 2016.

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 PLAN:	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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5,34
2. Violate any ambient air quality standard, contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,4
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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5,29
4. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4, 28
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"/>	3, 34
6. Alter air movement, moisture, or temperature, or cause any change in climate?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2, 4, 5

DISCUSSION

The analysis in this section is based, in part, on the California Emissions Estimator Model (CalEEMod Version 2016.3.1) analysis completed by FirstCarbon Solutions (FCS). The modeling data is provided in its entirety in Appendix A. Where available, the significance criteria established or recommended by the Bay Area Air Quality Management District (BAAQMD) were used to make the following determinations. The BAAQMD thresholds of significance are shown below in Table 1. In developing thresholds of significance for air pollution, the BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project's construction or operational emissions exceed the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions.

Table 1: Thresholds of Significance

Pollutant	Construction Thresholds Average Daily Emissions (lbs/day)	Operational Thresholds	
		Average Daily Emissions (lbs/day)	Annual Average Emissions (tons/year)
ROG	54	54	10
NO _x	54	54	10
PM ₁₀ (exhaust only)	82	82	15
PM _{2.5} (exhaust only)	54	54	10

Source: BAAQMD 2010.

The Plan is located in Santa Clara County, where air quality is regulated by the BAAQMD. The region is currently designated non-attainment for state and federal ozone and particulate matter with aerodynamic diameter less than 2.5 microns (PM_{2.5}) standards, and the state particulate matter with aerodynamic diameter less than 10 microns (PM₁₀) standard. The region is attainment or unclassified for all other ambient air quality standards. BAAQMD prepares air quality plans that include projected emissions inventories and account for emission reduction strategies in order to demonstrate how the region will achieve the ambient air quality standards by the given deadlines. BAAQMD recommends that projects consider three criteria to determine if a project would conflict with or obstruct implementation of an applicable air quality plan.⁴

- Does the project support the primary goals of the AQP?**
 As shown in Table 2 and Table 3, the Plan’s construction- and operational-related emissions would not exceed the BAAQMD’s thresholds of significance on an average daily or annual basis. Therefore, the Plan would not result in a significant impact and would be consistent with the goals of the applicable AQP.
- Does the project include applicable control measures from the AQP?**
 Regardless of significance, all projects within B AAQMD’s jurisdiction are required to implement the BAAQMD Basic Construction Best Management Practices. As discussed in Impact C.2, the Plan would implement all Basic Construction Best Management Practices, which would be consistent with the assumptions in the AQP. Furthermore, the Plan would comply with all applicable BAAQMD rules and regulations.
- Does the project disrupt or hinder implementation of AQP control measures?**
 The Plan would comply with all required control measures and rules and regulations required by BAAQMD during construction and operation. The Plan would not include any special features that would disrupt or hinder implementation of the AQP control measures.

⁴ Bay Area Air Quality Management District (BAAQMD). 2011. CEQA Air Quality Guidelines. Website: http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/baaqmd-ceqa-guidelines_final_may-2012.pdf?la=en. Accessed November 9, 2016.

1. Considering the information above, the Plan would not conflict with or obstruct implementation of the applicable air quality plan. **Less than significant impact.**
2. Projects that would generate construction or operational emissions that exceed BAAQMD's thresholds of significance could violate or contribute substantially to an existing or projected air quality violation. BAAQMD's thresholds of significance represent the allowable amount of emissions for each project in order for the region to achieve and maintain ambient air quality standards. This analysis evaluates the Plan's emissions against BAAQMD's regional thresholds of significance and finds the Plan would not violate any air quality standard. **Less than significant impact.**

Construction emissions result from on-site and off-site activities. On-site emissions principally consist of exhaust emissions from the heavy-duty off-road construction equipment, on-site motor vehicle operation, and fugitive dust (mainly PM₁₀) from disturbed soil. Off-site emissions are caused by motor vehicle exhaust from delivery and haul truck vehicles, worker traffic, and road dust (PM₁₀ and PM_{2.5}). The majority of this fugitive dust would remain localized and would be deposited near the Plan site. However, the potential for impacts from fugitive dust exists unless control measures are implemented to reduce the emissions from this source.

The CalEEMod Version 2016.3.1 land use emission model was used to estimate the Plan's construction emissions. The CalEEMod model provides a consistent platform for estimating construction and operational emissions from a wide variety of land use projects and is the model recommended by the BAAQMD for estimating project emissions. Modeling for construction emissions used the default assumptions (e.g., construction schedule, construction equipment mix) contained in CalEEMod for the specific type of proposed land uses.

The Plan is anticipated to be completed over an approximate 4-year period from 2019 to 2023. However, for the purposes of a conservative analysis, Plan construction was assumed to start in January 2019 and be completed by June 2019. The assumed construction duration for the Plan was obtained from CalEEMod's default assumptions based on the amount of site disturbance for the entire Plan. By using the shortest construction duration, this analysis estimates the maximum daily intensity of construction emissions that could occur over the lifetime of the Plan. Therefore, emissions shown below in Table 3 represent the maximum average daily and annual emissions that could occur during construction of the Plan. The proposed construction schedule along with default construction parameters are provided in Appendix A.

Table 2 shows the Plan's annual and average daily construction emissions compared against the BAAQMD significance thresholds.

Table 2: Plan Annual and Average Daily Construction Emissions

Category	Pollutants (tons/year) ¹			
	ROG	NO _x	PM ₁₀ (Exhaust)	PM _{2.5} (Exhaust)
2019 Off-site Cabin Delivery Emissions	3.58E-04	2.29E-03	5.46E-05	2.13E-05
2019 Construction Emissions from CalEEMod	0.11	0.56	0.03	0.03
2019 Total Construction Emissions	0.11	0.56	0.03	0.03
Average Daily Emissions (lbs/day) ²	1.97	9.95	0.59	0.53
Significance Thresholds (lbs/day)	54	54	82	54
Exceeds Significance Threshold?	No	No	No	No

Notes:
 ROG = reactive organic gases; NO_x = oxides of nitrogen; PM₁₀ = particulate matter with aerodynamic diameter less than 10 microns; PM_{2.5} = particulate matter with aerodynamic diameter less than 2.5 microns; lbs = pounds
¹ All emissions are shown in tons per year unless noted otherwise.
² Calculated by dividing the total pounds of emissions by the total construction workdays (i.e., 113 workdays).
 Calculations use unrounded totals.
 Source: CalEEMod and FirstCarbon Solutions, see Appendix A.

As shown in Table 2, both annual and average daily construction emissions are well below the recommended thresholds of significance. The application of BAAQMD recommended Basic Construction Best Management Practices identified below would minimize fugitive PM dust generated during construction.

For all proposed projects, BAAQMD recommends the implementation of all Basic Construction Best Management Practices listed below regardless of if construction-related emissions exceed applicable thresholds of significance. These BMPs are in accordance with BAAQMD's Basic Construction Measures Recommended for All Proposed Projects.

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
3. 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.
4. All vehicle speeds on unpaved roads shall be limited to 15 mph.
5. 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.
6. 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.
7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer’s specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
 8. 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.

With implementation of BAAQMD’s Basic Construction Best Management Practices, the Plan’s construction-related emissions would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. The Plan’s construction-related impacts are therefore less than significant.

As previously discussed, the pollutants of concern include ROG, NO_x, PM₁₀, and PM_{2.5}. Operational emissions would be generated by area, energy, and mobile sources. Area sources would include activities such as landscape maintenance and occasional architectural coatings. Energy sources would include electricity and natural gas combustion for space and water heating in the proposed buildings. Mobile sources would include vehicle trips associated with visitors, employees, and delivery trucks. The Plan operational emissions generated from area source and energy source for the respective pollutants were calculated using the CalEEMod.2016.3.1. The emissions generated from mobile sources were estimated using the latest California Air Resources Board’s on-road emissions factor model, EMFAC 2014. Similar to construction emissions, the Plan’s annual and daily operational emissions were compared against BAAQMD’s significance thresholds. Table 3 shows the annual and average daily operational emissions.

Table 3: Annual and Average Daily Operational Emissions—Unmitigated

Emissions Source ²	Pollutants (tons/year) ¹			
	ROG	NO _x	PM ₁₀	PM _{2.5}
Area	0.04	0.00	0.00	0.00
Energy	0.00	0.01	0.00	0.00
Mobile	0.01	0.05	0.03	0.01
<i>Total</i>	0.06	0.06	0.03	0.01
Thresholds of Significance	10	10	15	10
Exceeds annual threshold?	No	No	No	No
Average Daily Emissions (lbs/day)	0.31	0.34	0.18	0.08
Thresholds of Significance (lbs/day)	54	54	82	54

Table 3 (cont.): Annual and Average Daily Operational Emissions—Unmitigated

Emissions Source ²	Pollutants (tons/year) ¹			
	ROG	NO _x	PM ₁₀	PM _{2.5}
Exceeds daily Threshold?	No	No	No	No
Notes: lbs = pounds ROG = reactive organic gases NO _x = oxides of nitrogen PM ₁₀ = particulate matter with aerodynamic diameter less than 10 microns PM _{2.5} = particulate matter with aerodynamic diameter less than 2.5 microns ¹ All emissions are shown in units of tons per year unless noted otherwise. Source: CalEEMod and FirstCarbon Solutions, see Appendix A.				

As shown in Table 3, the unmitigated annual and average daily operational emissions would be below the thresholds of significance. Therefore, the operational-related emissions would result in less than significant impact.

3. The Plan’s construction and operational emissions are below BAAQMD’s project-level thresholds of significance. The thresholds of significance represent the allowable amount of emissions each project can generate without generating a cumulatively considerable contribution to regional air quality impacts. As discussed above, the region is non-attainment for the federal and state ozone standards, the state PM₁₀ standards, and the federal and state PM_{2.5} standards. Therefore, a project that would not exceed the BAAQMD thresholds of significance on a project level would also not be considered to result in a cumulatively considerable contribution to these regional air quality impacts. Considering this information, the Plan’s construction and operational emissions would not be considered a cumulatively considerable contribution to the existing regional air quality impacts. Implementation of the County’s construction BMPs would reduce potential impacts to less than significant. **Less than significant impact.**
4. Toxic air contaminants (TACs) are air pollutants in miniscule amounts in the air that, if a person is exposed to them, could increase the chances of experiencing health problems. Exposures to TAC emissions can have both chronic long-term (over a year or longer) and acute short-term (over a period of hours) health impacts. Construction-period TAC emissions could contribute to increased health risks to nearby residents or sensitive receptors. The Plan site is located in naturally forested a portion of the County. The closest sensitive receptors are 3,400 feet southwest to the Plan site, adjacent to Mount Madonna Road. The Plan’s short-term construction would be minor and would not involve emission-intensive activities such as earthmoving or mass site grading. In addition, the Plan’s construction activities would occur for less than 6 months. Given the relatively low intensity and short-term nature of the proposed construction activities, and that the sensitive receptors are far from the proposed site, it is not anticipated that the Plan’s construction-related TAC emissions would expose sensitive receptors to substantial pollutant concentrations. This impact with respect to construction-related TACs would be

less than significant. Therefore, the Plan's construction activities would not result in a significant health risks impact on sensitive receptors. **Less than significant impact.**

The carbon monoxide (CO) emissions from traffic generated by the Plan are a concern at the local level. Congested intersections can result in high, localized concentrations of CO.

The BAAQMD recommends the following screening analysis to determine if a Plan has the potential to contribute to a CO hotspot. The screening criteria identify when site-specific CO dispersion modeling is necessary. The Plan would result in a less than significant impact to air quality for local CO if the following screening criteria are met:

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

According to the Traffic Impact Study for the Plan, the traffic study report estimated that the new improvements to the Park would generate 252 trips. In addition, 90 percent of the new trips generated by the proposed master plan improvements were assumed to use SR-152. As determined in the traffic study, SR-152 would experience the highest peak-hour traffic volumes under cumulative plus Plan conditions with 6,327 vehicles per hour, which is substantially less than the BAAQMD screening threshold.⁵ Therefore, the proposed Plan's contribution to cumulative future traffic volumes would not exceed the CO screening criteria. The Plan would have a less than significant impact related to CO.

5. As stated in the BAAQMD 2010 Air Quality Guidelines, odors are generally regarded as an annoyance rather than a health hazard. The ability to detect odors varies considerably among the population. The BAAQMD does not have a recommended odor threshold for construction activities. However, BAAQMD recommends screening criteria that are based on distance between types of sources known to generate odor and the receptor.

Diesel exhaust and volatile organic compounds (VOCs) would be emitted during construction of the Plan resulting from heavy-duty construction equipment and asphalt paving activities, both of which could be objectionable odors to some populations. However, emissions would disperse rapidly from the site and construction activities would be relatively low in intensity and short-term. Therefore, it is not anticipated that construction-related activities would create objectionable odors affecting a substantial number of people.

⁵ Mt. Madonna County Park Master Plan Traffic Study. Hexagon Transportation Consultants, Inc. Feb, 1st 2017.

Land uses typically considered associated with odors include wastewater treatment facilities, waste-disposal facilities, or agricultural operations. The Plan does not involve land uses typically associated with the emission of objectionable odors. The proposed land uses and park improvements would not result in any recreational activities that generate substantial odors. During operation of the Plan, minimal odors could also be emitted from vehicles travelling to the site; however, these occurrences would not produce a significant amount of odors. Therefore, operational odor impacts would be less than significant. **Less than significant impact.**

6. The Plan would not alter air movement moisture or temperature. **Less than significant impact.**

MITIGATION: None

D. BIOLOGICAL RESOURCES						
WOULD THE PLAN:	IMPACT					SOURCE
	NO	YES				
	No Impact	Less Than Significant Impact	Less Than Significant With Mitigation Incorporated	Potentially Significant Impact	Cumulative	
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"/>	1, 7, 1, 17,
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 Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3, 7, 8a, 17, 33
3. 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"/>	3, 7, 17, 32
4. 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"/>	1, 3, 30, 31
5. 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"/>	1, 7, 17
6. 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"/>	3, 4
7. 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"/>	1, 2, 3, 10b, 11d, e
8. 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, 3, 12b, 39, 45, 46
9. Adversely impact unique or heritage trees or a large number of trees over 12" in diameter?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 2, 3, 25
10. Conflict with any local policies or						

D. BIOLOGICAL RESOURCES						
WOULD THE PLAN:	IMPACT					SOURCE
	NO	YES				
	No Impact	Less Than Significant Impact	Less Than Significant With Mitigation Incorporated	Potentially Significant Impact	Cumulative	
ordinances protecting biological resources:						
i) Tree Preservation Ordinance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 3, 31, 49
ii) Wetland Habitat?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3, 5, 8a
iii) Riparian Habitat?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3, 5, 8a,

DISCUSSION

This section evaluates potential effects on biological resources that may result from the Plan. Descriptions and analysis in this section are based on results from the California Department of Fish and Wildlife’s (CDFW’s) California Natural Diversity Database (CNDDDB) and the United States Fish and Wildlife Service (USFWS) database searches, as well as a biological resources analysis completed by an FCS biologist, which included a reconnaissance field survey. The biological assessment was completed to evaluate existing biological conditions and analyze potential impacts to biological resources including potential presence of any special habitat features, such as waters of the U.S. or state, including wetlands; and identifying any linkages within the Plan alignment to important adjacent wildlife habitats. Habitat types were evaluated for their potential to support special-status plant and wildlife species and any other sensitive biological resources.

The Park consists predominately of redwood forest (*Sequoia sempervirens*). Other common vegetation communities in the Park include oak woodlands of coast live oak (*Quercus agrifolia*), blue oak (*Quercus douglasii*), and valley oak (*Quercus lobata*); California annual grasslands; and northern coastal scrub and northern mixed chaparral communities. The diversity of plant species in the Plan Area affords a diversity of wildlife, including notable species such as black tail deer (*Odocoileus hemionus columbianus*) and mountain lion (*Puma concolor*), and a variety of residential and migratory bird species. The terrain varies, with elevations ranging from 400 feet to 1,880 feet. The Park has a variety of soils including sandy loams, silt loams, and clay loams.

Located in the Santa Cruz Mountains, the Park contains steep topography. Improvements to the Park are to be concentrated in three specific zones which have been previously disturbed and the Plan would involve minimal new physical disturbance outside of the three zones.

Located in the Santa Cruz Mountains between Watsonville and Gilroy, the Park provides habitat for an abundance of local wildlife species and also has the potential to support special-status plant and wildlife species. Special-status plant and wildlife species typically occur in undeveloped areas. Although it is less likely, it is also possible for them to occur within developed areas. The three zones have in part been previously disturbed for the prior installation of camping and day use amenities and contain areas of disturbed soils as well as invasive and non-native grass and weed species. The

vegetation within the Focus Areas where future improvements would be concentrated consists of non-native landscaped grass surrounded by a variety of mature native trees. The dominant species observed during the survey include coast redwood (*Sequoia sempervirens*) and scattered Douglas fir with an understory of California bay laurel, tan oak, and common Manzanita (*Arctostaphylos manzanita* ssp. *manzanita*). Scattered stands of blue oak (*Quercus douglasii*), black oak (*Quercus kelloggii*), and big-leaf maple (*Acer macrophyllum*) are also present.

A plant species' potential to occur in the Park was evaluated based on the presence of suitable habitats, soil types, and occurrences recorded by the USFWS, California Native Plant Society (CNPS), or CNDDDB in the region, previous biological documents and observations made during the site survey. Similarly, potential habitat suitability was determined for special-status plant species known to occur in the region. The results of this analysis indicate the following special-status plant species have potential to occur within the three zones designated for improvements: Anderson's manzanita (*Arctostaphylos andersonii*), and woodland woollythreads, (*Monolopia gracilens*). Special-status plant species that were determined unlikely to occur within the focus areas are included in Table 4 which includes habitat specifications for these species. Furthermore, disturbances such as foot traffic and the presence of non-native plants minimize the likelihood of these species occurring on-site.

Suitable habitat for raptors and other birds protected by the Migratory Bird Treaty Act (MBTA) occurs within and adjacent to the property. Most native, breeding birds are protected under Section 3503 of the FGC, and raptors specifically are protected under Section 3503.5 of the FGC. Additionally, both Section 3513 of the FGC and the federal MBTA prohibit the killing, possession, or trading of migratory birds. Section 3800 of the FGC prohibits the taking of nongame birds and state Fully Protected species. Most raptors nest in mature, large coniferous or deciduous trees and use twigs and branches as nesting material. Smaller raptors may nest in cavities in anthropogenic structures and trees. The nesting period for raptors generally occurs between February 15 and August 31.

Potential impacts could occur to resident and migratory species during construction of the proposed improvements, which would render the improvement areas temporarily unsuitable for birds because of the noise, vibrations, and increased activity levels associated with various construction activities. These activities could potentially subject birds to risk of death or injury, and they are likely to avoid using the area until such construction activities have dissipated or ceased. Relocation, in turn, could cause hunger or stress among individual birds by displacing them into adjacent territories belonging to other individuals. Removal of vegetation could also directly destroy nests, eggs, and immature birds, if present. Adverse impacts to nesting bird habitat and nesting birds are potentially significant impacts.

During the survey, wildlife species observed in the Park and vicinity included ground squirrels, American crow (*Corvus brachyrhynchos*), Cooper's hawk (*Accipiter cooperii*), and turkey vulture (*Cathartes aura*).

The Park is located within designated Habitat Plan Permit Area of the Santa Clara Valley Habitat Plan (SCVHP). The SCVHP aims to protect and promote the recovery of numerous wildlife and plant

species found throughout the 4,605-acre area. The Park is located within the SCVHP area and as such there is potential for SCHVP relevant plant and wildlife species to occur within the park.

The Plan is within the boundaries of the SCVHP. The 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 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,” consisting of 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 to ensure that conservation actions, which include the creation, management, and monitoring of a 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.

1. Based upon the types of habitat that each special-status wildlife species occupies, and on observations made during the site survey, each wildlife species was evaluated for its potential to occur within the Park’s three zones, also included in Table 4. No special-status wildlife species are expected to be found utilizing the areas of focus to be expanded or improved; however, these areas may be used as a corridor to other habitats within the Park. Mitigation Measures BIO-1 and BIO-2, described below, would be implemented to reduce potential impacts on special-status animal and plant species to a less than significant level. Mitigation Measure BIO-3 would reduce impacts to migratory and nesting raptors protected under the MBTA to a less than significant level. **Less than significant with mitigation.**
2. Existing conditions in the vicinity of proposed improvements generally consist of non-native landscaped grass surrounded by mature native trees. Proposed improvements would generally be of a low impact nature involving the installation of additional camping sites and day use amenities. Additionally, most improvements would take place in already disturbed areas. Therefore, the Plan would not have a substantial effect on a sensitive natural community identified in local or regional plans, policies, or regulation by the CDFW or USFWS. As such, impacts would be less than significant. **Less than significant impact.**
3. There are no wetlands or jurisdictional waters in or near the proposed improvement areas. Therefore, the Plan would not remove, fill, or hydrologically interrupt federally protected wetlands. **No impact.**

4. As noted above, park improvements would be low impact in nature and be concentrated in areas which have been previously disturbed. The Plan would not result in the conversion of oak woodlands and would not conflict with Oak Woodlands Conservation Law. **Less than significant impact.**
5. The Plan would not substantially interfere with the movement of any native resident migratory fish or wildlife. **Less than significant impact.**
6. The Plan is located with the SCVHP area and wildlife species protected under the SCVHP have the potential to occur within the Plan Area. Implementation of MM BIO-4, described below, would reduce impacts to a less than significant level. **Less than significant with mitigation incorporated.**
7. The Plan Area is located in the Santa Cruz Mountains, far removed from fresh water marsh or salt water tide land. While there is oak woodland present throughout the Plan Area, park improvements would be low impact in nature, concentrated in previously disturbed areas and would not result in the conversion of oak woodland habitat. Additionally, implementation of BMPs for the prevention of plant pathogen introductions and BMPs during construction activities to reduce pollutants in storm water discharges throughout construction would further minimize the potential for adverse impacts to oak forest. **Less than significant impact.**
8. As described above, no wetlands or jurisdictional waters are within the vicinity of the Plan Area. Park improvements would be concentrated in areas that have been previously disturbed and are not close to a watercourse. As such, the Plan would not have a substantial effect on a watercourse. **Less than significant.**
9. Park improvements would be low impact in nature and concentrated in previously disturbed areas. Compliance with the County Tree Preservation Ordinance would be required in the event of tree removal or disturbance. As such, the Plan would not adversely impact unique or heritage trees. **Less than Significant.**
10. The Plan would be consistent with all local policies and regulations that protect biological resources. In the event that any trees are proposed for removal, they would be subject to the requirements of the County Tree Preservation Ordinance. **Less than significant impact.**

MITIGATION

- BIO-1.** To avoid impacts to special-status plants, for the impact area of each Plan phase, focused botanical surveys shall 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 California Department of Fish and Wildlife (CDFW) and California Native Plant Society (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, timing, etc.,

and will be confirmed by the monitoring of known reference populations for as many target species in the Plan's vicinity as possible. The final field positioning of each Plan's component will avoid all observed special-status plant species occurrences.

BIO-2. To avoid/minimize impacts to special-status animals, for each Plan 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 location survey. 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.

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 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 Plan 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 Plan activities, then activities can proceed as scheduled. However, if an active nest is detected during the survey within 500 feet of Plan 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 Plan activities is recommended in order to monitor nesting activities and to prevent nest failure or abandonment.

BIO-4. To minimize/avoid impacts to covered species listed on Table 1-2 of the Santa Clara Valley Habitat Plan, all applicable conditions outlined in "Chapter 6: Conditions on Covered Species" of the SCVHP shall be implemented during each phase of the Plan.

Table 4: Special-Status Plant and Wildlife Species Previously Documented with CNDDB within 5 Miles of Mt. Madonna Park

Common Name	Scientific Name	Federal Listing ¹	State Listing ²	CNPS Listing ³	Habitat in which the species is found	Potential to Occur and Rationale
tricolored blackbird	<i>Agelaius tricolor</i>	None	SE	NA	Freshwater marsh	Unlikely to Occur: no suitable habitat is present within the focus areas.
California tiger salamander	<i>Ambystoma californiense</i>	FT	ST	NA	Cismontane woodland, Meadow & seep, Riparian woodland, Valley & foothill grassland, Vernal pool, Wetland	Unlikely to Occur: no suitable habitat is present within the focus areas.
Santa Cruz long-toed salamander	<i>Ambystoma macrodactylum croceum</i>	FE	SE/CFP	NA	Freshwater marsh	Unlikely to Occur: no suitable habitat is present within the focus areas.
black legless lizard	<i>Anniella pulchra nigra</i>	None	SSC	NA	Chaparral, Coastal dunes, Coastal scrub	Unlikely to Occur: no suitable habitat is present within the focus areas.
Anderson's manzanita	<i>Arctostaphylos andersonii</i>	None	None	1B.2	Broadleaved upland forest, Chaparral, North coast coniferous forest	Potential to Occur: suitable habitat may be present within and adjacent to focus areas.
Hooker's manzanita	<i>Arctostaphylos hookeri</i> ssp. <i>hookeri</i>	None	None	1B.2	Chaparral, coastal scrub, closed-cone coniferous forest, cismontane woodland. Micro habitat: Sandy soils, sandy shales, sandstone outcrops	Unlikely to Occur: no suitable habitat is present within the focus areas.
Pajaro manzanita	<i>Arctostaphylos pajaroensis</i>	None	None	1B.1	Chaparral	Unlikely to Occur: no suitable habitat is present within the focus areas.

Table 4 (cont.): Special-Status Plant and Wildlife Species Previously Documented with CNDDB within 5 Miles of Mt. Madonna Park

Common Name	Scientific Name	Federal Listing ¹	State Listing ²	CNPS Listing ³	Habitat in which the species is found	Potential to Occur and Rationale
burrowing owl	<i>Athene cunicularia</i>	None	SSC	NA	Coastal prairie, Coastal scrub, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Sonoran desert scrub, Valley & foothill grassland	Unlikely to Occur: no suitable habitat is present within the focus areas.
Santa Cruz Mountains pussypaws	<i>Calyptridium parryi</i> var. <i>hesseae</i>	None	None	1B.1	Chaparral, Cismontane woodland	Unlikely to Occur: no suitable habitat is present within the focus areas.
Coyote ceanothus	<i>Ceanothus ferrisiae</i>	FE	None	1B.1	Chaparral, Coastal scrub, Valley & foothill grassland	Unlikely to Occur: no suitable habitat is present within the focus areas
Congdon's tarplant	<i>Centromadia parryi</i> ssp. <i>congdonii</i>	None	None	1B.1	Valley & foothill grassland	Unlikely to Occur: no suitable habitat is present within the focus areas
western snowy plover	<i>Charadrius alexandrinus nivosus</i>	FT	SSC	NA	Sand shore, Wetland	Unlikely to Occur: no suitable habitat is present within the focus areas
Monterey spineflower	<i>Chorizanthe pungens</i> var. <i>pungens</i>	FT	None	1B.2	Chaparral, Cismontane woodland, Coastal dunes, Coastal scrub	Unlikely to Occur: no suitable habitat is present within the focus areas
robust spineflower	<i>Chorizanthe robusta</i> var. <i>robusta</i>	FE	None	1B.1	Cismontane woodland Coastal bluff scrub Coastal dunes	Unlikely to Occur: no suitable habitat is present within the focus areas
Santa Cruz kangaroo rat	<i>Dipodomys venustus venustus</i>	None	None	NA	Chaparral	Unlikely to Occur: no suitable habitat is present within the focus areas

Table 4 (cont.): Special-Status Plant and Wildlife Species Previously Documented with CNDDB within 5 Miles of Mt. Madonna Park

Common Name	Scientific Name	Federal Listing ¹	State Listing ²	CNPS Listing ³	Habitat in which the species is found	Potential to Occur and Rationale
Santa Clara Valley dudleya	<i>Dudleya abramsii</i> ssp. <i>setchellii</i>	FE	None	1B.1	Cismontane woodland, Valley & foothill grassland	Unlikely to Occur: no suitable habitat is present within the focus areas
western pond turtle	<i>Emys marmorata</i>	None	SSC	NA	Artificial flowing waters, Wetland	Unlikely to Occur: no suitable habitat is present within the focus areas
Hoover's button-celery	<i>Eryngium aristulatum</i> var. <i>hooveri</i>	None	None	1B.1	Vernal pool, Wetland	Unlikely to Occur: no suitable habitat is present within the focus areas
sand-loving wallflower	<i>Erysimum ammophilum</i>	None	None	1B.2	Chaparral, Coastal dunes, Coastal scrub	Unlikely to Occur: no suitable habitat is present within the focus areas
Bay checkerspot butterfly	<i>Euphydryas editha bayensis</i>	FT	None	NA	Coastal dunes, Valley & foothill grassland	Unlikely to Occur: no suitable habitat is present within the focus areas
Monterey gilia	<i>Gilia tenuiflora</i> ssp. <i>arenaria</i>	FE	ST	1B.2	Chaparral, Cismontane woodland, Coastal dunes, Coastal scrub	Unlikely to Occur: no suitable habitat is present within the focus areas
Loma Prieta hoita	<i>Hoita strobilina</i>	None	None	1B.1	Chaparral, Cismontane woodland, Riparian woodland	Unlikely to Occur: no suitable habitat is present within the focus areas
Santa Cruz tarplant	<i>Holocarpha macradenia</i>	FT	SE	1B.1	Coastal prairie, Coastal scrub, Valley & foothill grassland	Unlikely to Occur: no suitable habitat is present within the focus areas
Kellogg's horkelia	<i>Horkelia cuneata</i> var. <i>sericea</i>	None	None	1B.1	Chaparral, Closed-cone coniferous forest, Coastal dunes, Coastal scrub	Unlikely to Occur: no suitable habitat is present within the focus areas

Table 4 (cont.): Special-Status Plant and Wildlife Species Previously Documented with CNDDB within 5 Miles of Mt. Madonna Park

Common Name	Scientific Name	Federal Listing ¹	State Listing ²	CNPS Listing ³	Habitat in which the species is found	Potential to Occur and Rationale
smooth lessingia	<i>Lessingia micradenia</i> var. <i>glabrata</i>	None	None	1B.2	Chaparral, Cismontane woodland. Serpentine; often on roadsides.	Unlikely to Occur: no suitable habitat is present within the focus areas
arcuate bush-mallow	<i>Malacothamnus arcuatus</i>	None	None	1B.2	Chaparral, Cismontane woodland	Unlikely to Occur: no suitable habitat is present within the focus areas
Hall's bush-mallow	<i>Malacothamnus hallii</i>	None	None	1B.2	Chaparral, Ultramafic	Unlikely to Occur: no suitable habitat is present within the focus areas
woodland woollythreads	<i>Monolopia gracilens</i>	None	None	1B.2	Broadleaved upland forest, Chaparral, Cismontane woodland, North coast coniferous forest, Valley & foothill grassland	Potential to Occur: suitable habitat may be present within and adjacent to focus areas
steelhead—central California coast DPS	<i>Oncorhynchus mykiss irideus</i>	FT	None	NA	Sacramento/San Joaquin flowing waters	Unlikely to Occur: no suitable habitat is present within the focus areas
steelhead—south/central California coast DPS	<i>Oncorhynchus mykiss irideus</i>	FT	SSC	NA	Sacramento/San Joaquin flowing waters	Unlikely to Occur: no suitable habitat is present within the focus areas
Santa Clara Valley dudleya	<i>Dudleya abramsii</i> ssp. <i>setchellii</i>	None	Rare	1B.1	Valley and foothill grassland, cismontane woodland.	Unlikely to Occur: no suitable habitat is present within the focus areas
Santa Cruz Mountains beardtongue	<i>Penstemon rattanii</i> var. <i>kleei</i>	None	None	1B.2	Chaparral, Lower montane coniferous forest, North coast coniferous forest	Unlikely to Occur: no suitable habitat is present within the focus areas

Table 4 (cont.): Special-Status Plant and Wildlife Species Previously Documented with CNDDB within 5 Miles of Mt. Madonna Park

Common Name	Scientific Name	Federal Listing ¹	State Listing ²	CNPS Listing ³	Habitat in which the species is found	Potential to Occur and Rationale
Choris' popcornflower	<i>Plagiobothrys chorisianus</i> var. <i>chorisianus</i>	None	None	1B.2	Chaparral, Coastal prairie, Coastal scrub	Unlikely to Occur: no suitable habitat is present within the focus areas
foothill yellow-legged frog	<i>Rana boylei</i>	None	SSC	NA	Aquatic, Chaparral, Cismontane woodland, Coastal scrub, Riparian forest, Riparian woodland	Unlikely to Occur: no suitable habitat is present within the focus areas
California red-legged frog	<i>Rana draytonii</i>	FT	SSC	NA	Aquatic, Artificial flowing waters, Artificial standing waters, Freshwater marsh, Riparian forest, Riparian scrub, Riparian woodland	Unlikely to Occur: no suitable habitat is present within the focus areas
bank swallow	<i>Riparia riparia</i>	None	ST	NA	Riparian scrub, Riparian woodland	Unlikely to Occur: no suitable habitat is present within the focus areas
most beautiful jewelflower	<i>Streptanthus albidus</i> ssp. <i>peramoenus</i>	None	None	1B.2	Chaparral, Cismontane woodland, Valley & foothill grassland	Unlikely to Occur: no suitable habitat is present within the focus areas
American badger	<i>Taxidea taxus</i>	None	SSC	NA	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils.	Unlikely to Occur: no suitable habitat is present within the focus areas
Santa Cruz clover	<i>Trifolium buckwestiorum</i>	None	None	1B.1	Broadleaved upland forest, Cismontane woodland, Coastal prairie. Moist grassland. Gravelly margins	Unlikely to Occur: no suitable habitat is present within the focus areas

Table 4 (cont.): Special-Status Plant and Wildlife Species Previously Documented with CNDDDB within 5 Miles of Mt. Madonna Park

Common Name	Scientific Name	Federal Listing ¹	State Listing ²	CNPS Listing ³	Habitat in which the species is found	Potential to Occur and Rationale
Federal Status¹: 2017 USFWS Listing		State Status²: 2017 CDFW Listing			CNPS³: 2017 CNPS Listing	
FE = Listed as endangered under the Endangered Species Act	SE = Listed as endangered under the California Endangered Species Act	ST = Listed as threatened under the California Endangered Species Act			1A =	Plants species that presumed extinct in California.
FT = Listed as threatened under the Endangered Species Act	ST = Listed as threatened under the California Endangered Species Act	SSC = Species of Special Concern as identified by CDFW			1B =	Plant species that are rare, threatened, or endangered in California and elsewhere.
FC = Candidate for listing (threatened or endangered) under Endangered Species Act	CFP = Listed as fully protected under FGC	CR = Species identified as rare by CDFW			List 2 =	Plant species that are rare, threatened, or endangered in California, but more common elsewhere.
FD = Delisted in accordance with the Endangered Species Act	---	--- = Not state listed			Blooming period:	Months in parentheses are uncommon.
--- = Not federally listed						
Habitat description⁴: Habitat description adapted from CNDDDB (CDFW 2017a) and CNPS online inventory (CNPS 2017)						

E. CULTURAL/HISTORICAL/ARCHAEOLOGICAL RESOURCES						
WOULD THE PLAN	IMPACT					SOURCE
	NO	YES				
	No Impact	Less Than Significant Impact	Less Than Significant With Mitigation Incorporated	Potentially Significant Impact	Cumulative	
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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3, 16, 19, 40, 41, 49
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"/>	3, 19, 40, 41,
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, 40,41
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"/>	7, 10a
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"/>	3, 25, 42
6. Disturb potential archaeological resources?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3, 10d, 41, 42
7. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,3,4,40,41

DISCUSSION

This section describes the existing cultural resources setting and potential effects from Plan implementation on the Plan site and its surrounding area. Descriptions and analysis in this section are based on information provided by the California Native American Heritage Commission (NAHC), Northwest Information Center (NWIC), National Register of Historic Places (NR), California Register of Historical Resources (CR), California Historical Landmarks (CHL) list, California Points of Historical Interest (CPHI) list, California State Historic Resources Inventory (HRI), UCMP Paleontological Database, and a pedestrian survey of the site conducted by FCS.

The cultural resource evaluation was carried out to determine the presence or absence of any significant cultural resources. The report is exempt from the Public Records Act.

Northwest Information Center

On March 13, 2015, FCS Archaeologist Dana DePietro, PhD conducted the records search at the NWIC, located in Rohnert Park. The record search focused on the Summit Zone, High Use Zone, and Valley View Zone and an approximately 0.50-mile radius outside the each zone. To identify any historic properties on or near the Plan area, current inventories of the NR, the CHL, and the CPHI were examined. The HRI for Santa Clara County was also reviewed to determine if any nearby resources have been previously evaluated for historic significance.

Native American Heritage Commission

On December 11, 2016, FCS sent a request to the NAHC to review its sacred lands file search and to provide a list of Native American Representatives who may be interested in providing additional information on potential Tribal Cultural Resources (TCRs) within the Plan area. On December 21, 2016, a response was received from the NAHC indicating that no sacred sites were listed as present in the Plan area. The letter included a list of five Native American representatives. Letters including a map and Plan details were sent to all representatives for informational purposes on December 22, 2016. As of this date, no additional correspondence has been received. Correspondence with the NAHC and Native American representatives may be found in Appendix C-1.

Pedestrian Cultural Resources Survey

FCS Senior Archaeologist Dana DePietro, PhD surveyed the Plan area for cultural resources on January 9, 2016. The Plan site consists of three primary areas located within the Mt. Madonna and Watsonville East quadrangles (1994 USGS 7.5-series topographic maps). From northwest to southeast, the locations have been designated the Summit Zone, the High Use Zone (Park Core), and the Valley View Zone. Each area encompasses approximately 30 acres, and proposed improvements at all three locations include the expansion of existing campgrounds, picnic areas, and the construction of other amenities. The Plan sites are relatively undeveloped, and covered with tall grasses, boulders and redwood trees. Several buildings related to existing camping amenities (bathrooms, picnic shelters) are present at the site and would remain unaffected by the proposed improvements.

The survey began in the Summit Zone area of the Plan site and moved southeast to the High Use Zone, and finally to the Valley View Zone. Plans provided by RRM identified the boundaries of all proposed improvements in each area, and all areas were surveyed for cultural resources using north-south transects at 15-meter intervals whenever possible. Soil visibility was very poor in all three locations because of foliage and ground cover, ranging from 5 to 15 percent across the site. Soils in sections of poor visibility were intermittently inspected using a hand trowel. Observed soils were largely composed of medium-brown silt interspersed with small (5 to 10 centimeters) schist stones and pieces of decomposed granite.

UCMP Paleontological Records Search

On December 10, 2016, consulting paleontologist Kenneth Finger, PhD, performed a records search on the University of California Museum of Paleontology (UCMP) database for the Mount Madonna

Plan site in Santa Cruz and Santa Clara counties. The Plan site is located on the Mt. Madonna and Watsonville East quadrangles (2005 USGS 7.5-series topographic maps). Google Earth imagery show this is mostly heavily vegetated mountainous terrain.

The Plan site is plotted on the combined parts of the geologic maps of Dibblee and Minch (2005, 2006). Although there are 12 geologic units recognized in the area, all seven parts of the site are within an area mapped as unnamed Eocene marine sandstone (Tss) that is restricted to the southwestern Santa Cruz Mountains. The older units mapped in the vicinity (i.e., Tsh and Kp) likely to be in the subsurface of the site are likely to be too deep to be impacted by Plan-related excavations. Dr. Finger performed a records search of the University of California Museum of Paleontology (UCMP) database on December 10, 2016. The database lists 122 Early Tertiary (Paleocene–Oligocene) and no Cretaceous localities in Santa Cruz or Santa Clara counties, but none yielded vertebrates or plants and none are in the vicinity of the Plan site.

1. The Plan would not cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5 of the CEQA Guidelines, or the County's Historic Preservation Ordinance (i.e. relocation, alterations or demolition of historic resources). No such resources are known to exist within the Plan site. **Less than significant impact.**
2. The Plan would not cause a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5 of the CEQA Guidelines. The extensive survey data and limited extent of proposed ground disturbance indicates the likelihood of encountering archaeological resources during Plan construction is low. However, without additional cultural resource evaluations, ground-disturbing activities have the potential to disturb known and unknown archaeological resources at the Park. Therefore, mitigation measure CR-1. **Less than significant with mitigation incorporated.**
3. The Plan would not disturb any human remains, including those interred outside of formal cemeteries. Dr. Finger's report concluded that there are no potentially fossiliferous sedimentary deposits on or adjacent to the Plan site. The Tss sandstone is characterized by a very low paleontological potential and is poorly exposed. However, in the event of the discovery of human remains, mitigation measure CR-2 listed below will be required. **Less than significant with mitigation incorporated.**
4. The Plan is not located in a Historic District (e.g., New Almaden Historic District). **No impact.**
5. The Plan would not disturb a historic resource or cause a physical change which would affect unique ethnic, cultural values. **No impact.**
6. The Plan would not disturb potential archaeological resources with implementation of mitigation measure CR-1. **Less than significant with mitigation incorporated.**
7. The Plan would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature with implementation of mitigation measure CR-1. **Less than significant with mitigation incorporated.**

MITIGATION

CR-1. 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.

CR-2. 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.

F. ENERGY						
WOULD THE PLAN	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"/>	1, 3, 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

DISCUSSION

1. The Plan would not use non-renewable resources in large quantities or a wasteful manner. **No impact.**
2. The Plan would not include the removal of vegetation capable of providing summer shade to a building or significantly alter solar access to adjacent property. **No impact.**

MITIGATION: None

G. GEOLOGY AND SOILS						
WOULD THE PLAN:	IMPACT					SOURCE
	NO	YES				
	No Impact	Less Than Significant Impact	Less Than Significant With Mitigation Incorporated	Potentially Significant Impact	Cumulative	
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"/>	6, 17, 43
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6, 17, 18b
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6, 17, 18b
iv) Landslides?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6, 17, 118b
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"/>	6, 2, 3
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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2, 3, 17, 23, 24, 42
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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	14, 20, 21, 23, 24, 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3, 6, 23, 24,
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"/>	3, 6
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"/>	2, 3, 6, 42
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"/>	9b, 10c, 11a, 12a, 17, 18
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"/>	9c, 10c, 11a
10. Be located in a Geologic Study Zone?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9c, 11a
11. Involve construction of a building, road or	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9b, 10c,

G. GEOLOGY AND SOILS						
WOULD THE PLAN:	IMPACT					SOURCE
	NO	YES				
	No Impact	Less Than Significant Impact	Less Than Significant With Mitigation Incorporated	Potentially Significant Impact	Cumulative	
septic system on a slope of:						11a, 12a, 17, 18
a. 30 percent or greater?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 3, 10j, 11c
b. 20 percent to 30 percent?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 3, 10j, 11c
c. 10 percent to 20 percent?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 3, 10j, 11c

DISCUSSION

The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 as a means to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The State Geologist is required to establish regulatory zones known as earthquake fault zones and to issue corresponding maps. Santa Clara County is located within the seismically active San Francisco Bay Area, and although the Park is not located within an Alquist-Priolo Hazard Zone, there are two faults within 1 mile of the Park: the Sargent Fault and the San Andreas Fault.⁶ The Santa Clara County's General Plan outlines policies and regulations regarding the design, location, and regulation of development to withstand geologic and seismic hazards.⁷

The severity of ground shaking depends on numerous variables such as the magnitude, epicenter proximity, local geology (including the properties of unconsolidated sediments), groundwater conditions, and topographic setting. Shaking severity is rated on the Modified Mercalli Intensity scale between 1 and 10, where 1 represents shaking not felt and 10 represents extreme shaking.⁸ The San Andreas Fault is rated as 10, which corresponds to "very violent" shaking severity. The California Building Code (CBC) includes standards and construction practices designed to reduce the risk of damage and loss of life associated with earthquake hazards, including severe groundshaking. Santa Clara County has adopted the 2013 California Building Code, incorporating into Title C, Division C15, Chapter One of the County Code for Geologic Hazard Abatement.⁹

Liquefaction refers to the sudden, temporary transformation of loose, saturated, granular sediments from a solid state to a liquefied state as a consequence of seismic ground shaking. Liquefaction related occurrences include seismically induced settlement, lateral spreading, and flow failure. Pursuant to the Seismic Hazards Mapping Act, the State identifies and maps areas that are prone to

⁶ California Department of Conservation, Fault Activity Map. Website: <http://maps.conservation.ca.gov/cgs/fam/>. Accessed November 16, 2016

⁷ Santa Clara County General Plan, page P-21. Accessed November 18, 2016

⁸ Association of Bay Area Governments Resilience Program, Shaking Scenario Map. Website: <http://gis.abag.ca.gov/website/Hazards/?hlyr=northSanAndreas&co=6081>. Accessed November 17, 2016

⁹ Santa Clara County Code of Ordinances. Accessed November 17, 2016

liquefaction, amplified ground shaking, and earthquake-induced landslides. The Association of Bay Area Governments (ABAG) liquefaction susceptibility map designates the Park as “very low susceptibility” to liquefaction.¹⁰

Landslides are gravity-driven movements of earth materials that may include unconsolidated sediment, rock, soil, or a combination of such materials. Various factors influence the probability of a landslide and its relative level of risk, including:

- Steep terrain within the Park is vulnerable to landslides. This is documented by the California Department of Conservation Division of Mines and Geology in the report “Preliminary Map and Landslide Features and Coseismic Fissures in the Summit Road Area of the Santa Cruz Mountains Triggered by the Loma Prieta Earthquake of October 17, 1989.”¹¹
- Expansive soils can change dramatically in volume depending on moisture content. When wet, these soils can expand; conversely, when dry they can contract or shrink. Sources of moisture that can trigger this shrink-swell phenomenon can include rainfall, utility leakage, landscape irrigation, and/or perched groundwater. Expansive soils can exhibit wide cracks in the dry season, and changes in soil volume have the potential to damage foundations, concrete slabs, and pavement. Soils in the Plan Area are composed of 86 percent Felton silt loam, 3 percent Madonna loam, and 11 percent Maymen rocky and sandy loam. These soils have a plasticity rating¹² of 16, 10–15, and 5 percent, respectively.¹³ All three soil types are classified as being well drained; however, because of the mountain slope topography of the site, runoff potential is designated as being very high.

1. The Plan Area is not located within an Alquist-Priolo Fault-Rupture Hazard Zone established by the State geologist. As such, implementation of the Plan would not expose substantial numbers of people or structures to significant risk of loss, injury, or death due to rupture of a known fault. There are two faults within 1 mile of the Park: the Sargent Fault and the San Andreas Fault. As a result, the Park could experience seismic ground shaking. The Plan includes the construction of a new visiting center, minor construction activity to renovate an existing Park building, development of new day use and camping sites, the installation of prefabricated cabins and supplemental camping facilities, and other recreational resources. All construction work would be done in compliance with the provisions of the CBC and local regulations, as applicable, in order to minimize the risks associated with seismic ground shaking to the maximum extent practicable. The CBC includes standards and construction practices designed to reduce the risk of damage and loss of life associated with earthquake hazards, including severe ground shaking. The ABAG liquefaction susceptibility map designates the Plan Area to have “very low susceptibility” to liquefaction. Furthermore,

¹⁰ Association of Bay Area Governments Resilience Program, Liquefaction Susceptibility Map. Accessed November 17, 2016

¹¹ California Department of Conservation Division of Mines and Geology in the report. 1989. Preliminary Map and Landslide Features and Coseismic Fissures in the Summit Road Area of the Santa Cruz Mountains Triggered by the Loma Prieta Earthquake of October 17, 1989. Website: <http://maps.conservation.ca.gov/cgs/lsl/>. Accessed December 21, 2016.

¹² Utilized to determine potential of expansive soil, with the higher the percent of the rating representing a greater potential for soil contraction and shrinkage.

¹³ US Department of Agriculture Natural Resource Conservation Service Soil Survey. Website: <http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>. Accessed December 22, 2016.

implementation of the Plan components would be implemented in compliance with standards established in the CBC and the County Code, thereby further reducing the risks associated with liquefaction. Because of the Park's steep topography and history of logging (which thinned out older, soil stabilizing trees and created gullies from skid trails), landslides are common in the Park. This is an existing condition that would not be exacerbated by the Plan. There is no permanent housing within the Plan site, and the Plan would not introduce new permanent dwellings that would expose a significant number of park visitors to landslide risk. None of the Plan improvements would be placed immediately adjacent to steep slopes. Furthermore, the County has the ability to close Mount Madonna Park and its overnight camping areas to visitors in the event of weather conditions or seismic events that create an increased risk of landslides. **Less than significant impact.**

2. The Park is subject to erosion by periodical and seasonal heavy rain, winds, or other storm events. With implementation of the Plan, most of the erosion potential or loss of top soil would occur during grading and excavation (up to 1,000 square feet of excavation associated with recreational improvements and approximately 2,200 linear feet associated with the new water pipeline within the High Use Zone). Grading and ground disturbance increases the potential for accelerated erosion by removing protective vegetation or cover and changing natural drainage patterns. Grading would be necessary for the new visitor center and expansion of the existing parking lot, and, to some extent, for campsites, cabins, and related facilities discussed in more detail in Section 1.4: Plan Description. Excavation for the new water pipeline would be expected to follow or be located alongside the existing water pipeline route. To reduce the potential construction impacts to the loss of soil, the Plan would implement County-specific erosion control measures, consistent with CBC and UBC regulations, in addition to compliance with the NPDES Storm Water Pollution Prevention Plan (SWPPP). These measures would help contain soil and filter runoff from distributed areas with the use of vegetated filters, silt fencing, straw wattles, plastic sheeting, catch basins, or other means necessary to prevent the escape of sediment from the disturbed areas. These measures would also 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; avoid construction on unstable slopes and other areas subject to soil erosion where possible; require management techniques that minimize soil loss and erosion; manage grading to maximize the capture and retention of water runoff through ditches, trenches, siltation ponds, or similar measures; and minimize erosion through adopted protocols and standards in the industry. The Department and/or its contractors would further be required to implement a monitoring program to verify effectiveness of the BMPs implemented as part of the SWPPP. The monitoring program would begin at the outset of construction activities and continue in perpetuity as long as the Plan remains current. Furthermore, the Park would be required to submit an Erosion Control Plan consistent with the California Storm Water Quality Association Standards for the new visitor center and expansion to the existing visitor center parking lot. With implementation of these minimization measures, impacts from the Plan to soil erosion and loss of topsoil would be less than significant. **Less than significant impact.**

3. There is a very low risk for potential liquefaction within the Park, and the Plan would not exacerbate the existing risk of landslides. The soils in the Park, as well as the geologic conditions on- and off-site, would not result in the potential for increased landslide, lateral spreading, subsidence, liquefaction, or collapse. As discussed above, the Plan would not introduce any permanent new habitable structures, and the County retains the authority to close or restrict access to any part of Mount Madonna Park to visitors in the event of weather or seismic activity that could result in increased landslide or subsidence risks. Compliance with applicable regulations including the CBC would further reduce potential risks. Associated impacts would be less than significant. **Less than significant impact.**
4. The soils in the Park consist of 86 percent Felton silt loam, 3 percent Madonna loam, and 11 percent Maymen rocky and sandy loam. As previously discussed, these soils have a plasticity rating of 16, 10–15, and 5 percent, respectively. The expansion potential for this range is considered “low.”¹⁴ Furthermore, construction practices utilized to implement the Plan would occur in accordance with all applicable state and local building and construction codes and ordinances. Therefore, the potential for substantial risks to life or property as a result of expansive soils and associated impacts as a result of the Plan would be less than significant. **Less than significant impact.**
5. The Park is located within unincorporated County and therefore relies on septic systems. The Plan would include replacing two existing septic tanks and rehabilitating four leach fields in the High Use Zone and Valley View Zone. These new septic systems would be required to adhere to the regulations set forth in the Santa Clara County On-site Wastewater System Ordinance (adopted December 2013).¹⁵ The Santa Clara County Department of Environmental Health subsequently published a manual to ensure compliance with the policies and procedures of the ordinance.¹⁶ As stipulated in the ordinance, the County would be required to consult with the County Geologist to determine the suitability of soils prior to the construction of any new septic systems. By complying with the ordinance, and utilizing the manual as appropriate for all new septic systems, impacts to soils from new septic systems would be less than significant. **Less than significant impact.**
6. The Plan would not cause substantial compaction of soil. **Less than significant impact.**
7. The Plan would not cause a substantial change in topography. **Less than significant impact.**
8. The Plan is located in a seismically active area. However, as noted above, work would be done in compliance with the provisions of the CBC and local regulations, as applicable, in order to minimize the risks associated with seismic ground shaking to the maximum extent practicable. **Less than significant impact.**

¹⁴ Missouri University of Science and Technology. 2004. Correlations Between Soil Plasticity and Strength Parameters. Website: http://web.mst.edu/~rogersda/expansive_soils/Various%20Aspects%20of%20Expansive%20Soils.pdf. Accessed December 22, 2016.

¹⁵ Santa Clara County. 2016. Code of Ordinances. Website: https://www.municode.com/library/ca/santa_clara_county/codes/code_of_ordinances?nodeId=TITBRE_DIVB11ENHE_CHIVONWAT. Accessed December 22, 2016.

¹⁶ County of Santa Clara Department of Environmental Health. 2014. On-site Systems Manual.

9. As noted above, the Plan is located on or adjacent to a known earthquake fault. All construction work would be done in compliance with the provisions of the CBC and local regulations, as applicable, in order to minimize the risks associated with seismic ground shaking to the maximum extent practicable. **Less than significant impact.**
10. The Plan is not located in a Geologic Study Zone. **No impact.**
11. The Plan would occur in areas with percent slope from 0 to 30 percent. Implementation of BMPs would reduce potential erosion from steeper slopes. **Less than significant impact.**

MITIGATION: None

H. GREENHOUSE GAS EMISSIONS						
WOULD THE PLAN	IMPACT					SOURCE
	NO	YES				
	No Impact	Less Than Significant Impact	Less Than Significant With Mitigation Incorporated	Potentially Significant Impact	Cumulative	
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"/>	1, 3, 5
2. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2, 3
3. Would the project increase greenhouse gas emissions that hinder or delay the State's ability to meet the reduction target (25 percent reduction by 2020) contained in CA Global Warming Solutions Act of 2006 (AB 32)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2, 3, 4

DISCUSSION

The Plan is located within Santa Clara County, which is regulated by BAAQMD. For construction-related greenhouse gas (GHG) emissions, BAAQMD has not developed a specific construction GHG threshold; however, some agencies including the Sacramento Metropolitan Air Quality Management District (SMAQMD) have adopted 1,100 metric tons of carbon dioxide equivalent (MT CO₂e) per year as a threshold for construction-related GHG emissions.¹⁷ Therefore, for the purpose of this analysis, the SMAQMD construction threshold is used to evaluate the Plan's construction emissions. For operational-related GHG emissions, the BAAQMD operational threshold is used. BAAQMD's project-level significance thresholds for operational GHG generation are used when determining a project's potential GHG impacts. The thresholds suggested by BAAQMD for project-level operational GHG generation are as follows:

- Compliance with a qualified Greenhouse Gas Reduction Strategy, or
- 1,100 MT CO₂e/year, or
- 4.6 metric tons of CO₂ equivalent per service population (employees plus residents).

Because the service population threshold was developed to evaluate mixed-used projects with both residential and commercial components, it is not suitable to evaluate the proposed Plan, which includes no residential or commercial uses. Therefore, the bright line threshold of 1,100 MT CO₂e per year to determine significance for this criterion.

¹⁷ Sacramento Metropolitan Air Quality Management District (SMAQMD). 2015. SMAQMD Thresholds of Significance Table. Website: <http://www.airquality.org/LandUseTransportation/Documents/CH2ThresholdsTable5-2015.pdf>. Accessed November 2, 2016.

The Plan would generate GHG emissions during construction activities such as site preparation, grading, building construction, paving, and architectural coating from on-site heavy-duty construction vehicle use, vehicles hauling materials to and from the Plan site, and construction worker trips. These emissions are considered temporary or short-term.

The BAAQMD recommends that lead agencies quantify and disclose construction-related GHG emissions. CalEEMod Version 2016.3.1 was used to estimate the Plan’s construction-related GHG emissions using assumptions similar to those in the Air Quality section. As described in the Air Quality section, construction emissions were modeled assuming the shortest duration needed to complete the Plan. Therefore, the emissions shown in Table 5 represent the maximum annual emissions that could occur over the lifetime of the Plan. Where Plan-specific information was unknown, CalEEMod defaults were used, which typically results in conservative assumptions and emissions estimates. Detailed construction assumptions and parameters are provided in Appendix A. Table 5 presents the Plan’s projected construction emissions.

Table 5: Plan Construction-Related GHG Emissions

Construction Phase	MT CO ₂ e/year
Site Preparation	<1
Grading	1
Building Construction	63
Paving	3
Architectural Coating	1
Cabin Delivery	2
Total Construction Emissions	70
Construction Thresholds¹	1,100
Exceeds Threshold?	No
Notes: MT CO ₂ e = metric tons of carbon dioxide equivalent Total calculated using unrounded numbers. ¹ Construction-related threshold was obtained from SMAQMD’s CEQA Guidelines. Source: CalEEMod, EMFAC 2014 and FirstCarbon Solutions; see Appendix A, SMAQMD 2015.	

The Plan is expected to emit approximately 70 MT CO₂e per year during construction, which is well below the threshold of significance.

Plan Operations

Operational or long-term emissions occur over the life of the Plan. Sources for operational emissions include:

- **Motor Vehicles:** These emissions refer to GHG emissions contained in the exhaust from the cars and trucks that would travel to and from the Plan site.
- **Indirect Electricity:** These emissions refer to those generated by off-site power plants to supply electricity required for the Plan.
- **Water Transport:** These emissions refer to those generated by the electricity required to transport and treat the water to be used on the Plan site.
- **Waste:** These emissions refer to the GHG emissions produced by decomposing waste generated by the Plan.

Operational GHG emissions by source are shown in Table 6.

Table 6: Operational Greenhouse Gas Emissions

Emission Source	MT CO ₂ e per year
Area	<1
Energy	42
Mobile (Vehicles)	580
Total Emissions	622
BAAQMD Threshold	1,100
Exceeds Threshold?	No
Notes: MT CO ₂ e = metric tons of carbon dioxide equivalent. Unrounded results used to calculate totals. Source: CalEEMod, EMFAC 2014 and FirstCarbon Solutions; see Appendix A.	

As shown in Table 6, the Plan’s long-term operational emissions would not exceed the BAAQMD’s threshold of significance.

As provided by BAAQMD’s 2010 Air Quality Guidelines:

BAAQMD’s approach to developing a Threshold of Significance for GHG emissions is to identify the emissions level for which a project would not be expected to substantially conflict with existing California legislation adopted to reduce statewide GHG emissions needed to move us towards climate stabilization. If a project would generate GHG emissions above the threshold level, it would be considered to contribute substantially to a cumulative impact, and would be considered significant.

Construction emissions are generally considered separately from operational emissions because construction emissions are a short-term or single-time event, while operational emissions would be continuous over the life of the Plan. The 2010 Air Quality Guidelines do not contain a threshold for construction GHGs, but it recommends quantification and disclosure of these emissions. The Plan’s

construction emissions were estimated at 70 MT CO₂e, which is less than SMAQMD's 1,100-MT CO₂e threshold for operational emissions and, thus, would not conflict with California legislation (Assembly Bill [AB] 32) adopted to reduce statewide GHG emissions needed to move us towards climate stabilization.

Additionally, as previously addressed, BAAQMD recommends the use of preliminary screening to indicate whether a project's operational GHGs could potentially exceed BAAQMD's thresholds of significance of 1,100 MT CO₂e. Based on BAAQMD screening criteria, the operation of a city park use would result in a less than significant impact if the project size is less than 600 acres. The Plan would be less than the screening level of 600 acres. Furthermore, as shown in Table 6, the modeled annual operational emissions would be less than BAAQMD's threshold of significance. In addition, the Plan is not a typical land use development project but rather a recreational project to provide residents with additional amenities while visiting the park. Although the park improvements would result in a net increase of park visitors, this type of vehicle miles traveled is infrequent and not the focus of GHG emission reductions plans.

1. The Plan would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. The Plan's emissions would be far below the BAAQMD's threshold of significance for GHGs and therefore would not substantially conflict with the existing California legislation adopted to reduce statewide GHG emissions. **Less than significant impact.**
2. The Plan will result in a net change in emissions levels below applicable thresholds, and given the recreational nature of the Plan, operational emissions would not conflict with implementation of applicable GHG reduction plans. **Less than significant impact.**
3. The Plan would not increase greenhouse gas emissions that hinder or delay the State's ability to meet the reduction target contained in AB 32 (California Global Warming Solutions Act of 2006). Emissions during construction from dust and operation of construction equipment would be short term and temporary. **Less than significant impact.**

MITIGATION: None

I. HAZARDS & HAZARDOUS MATERIALS						
WOULD THE PLAN	IMPACT					SOURCE
	NO	YES				
	No Impact	Less Than Significant Impact	Less Than Significant With Mitigation Incorporated	Potentially Significant Impact	Cumulative	
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"/>	1, 3, 4, 5
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"/>	1, 3, 4
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, 5, 9d
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"/>	2, 4, 5
5. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2, 3
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, 10g
7. Involve risk of explosion or release of hazardous substances (including pesticides, herbicides, toxic substances, oil, chemicals or radioactive materials)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 3, 4, 5
8. Provide breeding grounds for vectors?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 3, 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"/>	3
10. Involve construction of a building, road or septic system on a slope of 30 percent or greater?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 3, 17
11. Involve construction of a roadway greater than 20 percent slope for a distance of 300' or more?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 3, 17
12. Be located within 200' of a 230KV or above electrical transmission line	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2,4

I. HAZARDS & HAZARDOUS MATERIALS						
WOULD THE PLAN	IMPACT					SOURCE
	NO	YES				
	No Impact	Less Than Significant Impact	Less Than Significant With Mitigation Incorporated	Potentially Significant Impact	Cumulative	
13. Create any health hazard?	<input checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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"/>	31
16. Increase fire hazard in an area already involving extreme fire hazard?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10g
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"/>	1, 3, 4, 32, 33
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"/>	1, 3, 5

DISCUSSION

The United States Environmental Protection Agency (EPA) has defined a hazardous substance as one which because of its quantity, concentration, or physicochemical or infectious properties, may either increase mortality or produce irreversible or incapacitating illness, or pose a substantial present or potential hazards to human health or the environment when improperly treated, stored, transported, or disposed of or otherwise managed. Major users of hazardous materials in the County of Santa Clara are agricultural, industrial, and households. Specific examples include cleaning products, paints, solvents, used electronics, and building maintenance products such as pesticides and fertilizers.

Locally, all cities in Santa Clara County have joined the County in developing the County Hazardous Waste Management Plan (CHWMP). The goal of the CHWMP is to promote the evaluation of local hazards waste management issues and to create policy and program recommendations to better protect public health and safety while also maintaining the environment and economic viability.

The United States Department of Transportation regulates the transportation of hazardous materials through the National Hazardous Materials Route Registry (NHMRR), which designates routes for the safe transportation of hazardous materials. There are two designated NHMRR routes in the County of Santa Clara but none close to the site. SR-85 from Interstate 280 (Cupertino) to US 101 (Mountain View) lies approximately 30 miles north of the Park, and SR-237 from Interstate 680 (Milpitas) to US 101 (Sunnyvale) lies approximately 32 miles north of the Park.

The State of California uses databases such as the State Water Resources Control Board's (SWRCB's) GeoTracker and the Department of Toxic Substances Control's EnviroStor to track cleanup, permitting, enforcement and investigation efforts at hazardous waste facilities and sites. Database queries found one cleanup site located within one mile of the Park, Mount Madonna Park, which involved potential impacts to groundwater due to a release of gasoline. This site was remediated and the case was closed in July, 2005.¹⁸

Mount Madonna School, located at 445 Summit Road, is the nearest school to the Park. The school is approximately 3 miles to the north of the Park.

The Santa Clara County Emergency Operations Plan (EOP) describes the County's emergency operations organization, compliance with relevant legal statutes, other guidelines, and critical components of the emergency response system. The EOP outlines mutual aid agreements and assistance may be provided by the following authorities:

- California Master Mutual Aid Agreement
- California Fire and Rescue Emergency Plan
- California Law Enforcement Mutual Aid Plan
- California Emergency Managers Mutual Aid
- Robert T. Stafford Disaster Relief and Emergency Assistance Act
- Emergency Managers Mutual Aid¹⁹

There are two airports located within 10 miles of the Park. San Martin Airport, a public regional airport is located approximately 8.5 miles to the east. Watsonville Municipal Airport, a public airport provides general aviation services and is located approximately 6 miles to the southwest. The nearest international airport is San José International Airport, located approximately 27 miles to the north.

CalFire designates the Plan area as having both very-high and high wildlife hazard potential.²⁰ Moreover, much of the mountainous areas throughout the County of Santa Clara are considered high or extreme fire hazard areas, due to climatic factors, the amount of naturally occurring fuel for fires, slope steepness, and lack of available water supplies.²¹

1. As part of the Plan components, hazardous materials such as gasoline, diesel fuels, lubricants, and other materials associated with operation and maintenance of heavy machinery would be used on-site. The amount of materials utilized for Plan components would not be significant enough to pose health or safety problems to the general public or the environment. The use, disposal, and transportation of hazardous materials would occur only during the construction period and may be stored on the site in limited quantities. Any

¹⁸ State Water Resources Control Board GeoTracker. Website: https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0608501944. Accessed November 17, 2016.

¹⁹ Santa Clara County Operational Area Emergency Operations Plan, page 46.

²⁰ CalFire Fire Hazard Severity Map. Website: http://frap.fire.ca.gov/webdata/maps/santa_clara/fhszs_map.43.pdf. Accessed December 22, 2016.

²¹ Santa Clara County General Plan, page P-16. November 17, 2016.

- removal and disposal of hazardous materials from the site during construction would be conducted by a permitted and licensed service provider. Moreover, the transportation, use, or disposal would comply with all applicable federal, state, and local agencies and regulations, including the EPA, Resource Conservation and Recovery Act, Caltrans, and the Santa Clara CHWMP. As such, impacts from construction associated with routine transport, use, or disposal of hazardous materials would be minimal. **Less than significant impact.**
2. Hazardous materials such as gasoline, diesel fuels, lubricants, and other materials associated with operation and maintenance of heavy machinery would be used on-site during the construction period. These limited quantities of hazardous materials would not be enough to create a significant hazard to the general public or the environment. Transportation, use, or disposal of hazardous materials would comply with applicable federal, state, and local regulations, minimizing the potential for accidental or upset to the maximum extent practical. **Less than significant impact.**
 3. Mount Madonna School, located at 445 Summit Road, is the nearest school to the Park. The school is approximately 3 miles to the north of the Park. The Plan would not involve the use of acutely hazardous materials and would not emit hazardous emissions within 0.25 mile of a school. **No impact.**
 4. As noted above, queries found one hazardous waste cleanup site located within the vicinity of the Park, Mount Madonna Park, which involved potential impacts to groundwater from a release of gasoline. This site was remediated and the case was closed as of July 2005. The Park is not included on any lists of hazardous materials sites compiled pursuant to Government Code Section 65962.5. **No impact.**
 5. Both US 101 and SR-152 are identified as priority transportation routes by the County as part of the Mass Transportation Evacuation Plan. However, the Plan components are concentrated within a small portion of the park that has already been disturbed through past construction activities and would not impede or interfere with emergency response planning. **Less than significant impact.**
 6. As noted above, CalFire designates the Park area as having both very-high and high wildfire hazard potential, due to its remote location in a forest setting. However, compliance with state and local regulations, including the California Fire Code, Local Hazard Mitigation Plan, and County fire standards and practices, would reduce risks to the maximum extent practical. Moreover, the Park is not located near or adjacent to urbanized areas or where residences would be intermixed with wildlands, and the Plan does not propose the addition of any permanent dwellings. The County retains the authority to evacuate and close Mt. Madonna Park to visitors in the event of wildfire. **Less than significant impact.**
 7. The Plan would not involve risk of explosion or release of hazardous substances. **No impact.**
 8. The Plan would not provide breeding grounds for vectors. **No impact.**
 9. The Plan would not result in a safety hazard. **No impact.**

10. The Plan would not involve construction on a slope greater than 30 percent. **No impact.**
11. The Plan would not involve construction on roadway greater than 20 percent slope for a distance of 300' or more. **No impact.**
12. The Plan is not located above or within 200 feet of an electrical transmission line. **No impact.**
13. The Plan would not create a health hazard. **No impact.**
14. The Plan would not expose people to existing sources of potential health hazards. **No impact.**
15. The San Martin Airport and the Watsonville Municipal Airport are located approximately 8.5 miles and 6 miles, respectively, from the site. Moreover, the Park is not located within 2 miles of a public airport or located within an airport land use zone. **No impact.**
16. The Plan will not increase a fire hazard in an area already involving an extreme fire hazard. **No impact.**
17. The Plan would not be located on a cul-de-sac. **No impact.**
18. The Plan would not employ technology which could adversely affect safety in the cause of a breakdown. **No impact.**

MITIGATION: None

J. HYDROLOGY AND WATER QUALITY						
WOULD THE PLAN:	IMPACT					SOURCE
	NO	YES				
	No Impact	Less Than Significant Impact	Less Than Significant With Mitigation Incorporated	Potentially Significant Impact	Cumulative	
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"/>	34, 36
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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3, 4
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"/>	2, 3, 10e
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"/>	3
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"/>	1, 3, 5, 36, 21
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"/>	1, 3, 11b, 21, 46
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"/>	3, 18b, 18
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"/>	3, 18b, 18
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, 4
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, 10e

J. HYDROLOGY AND WATER QUALITY						
WOULD THE PLAN:	IMPACT					SOURCE
	NO	YES				
	No Impact	Less Than Significant Impact	Less Than Significant With Mitigation Incorporated	Potentially Significant Impact	Cumulative	
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"/>	4, 6a,
12. Result in use of well water previously contaminated by nitrates, mercury, asbestos, etc. existing in the groundwater supply?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10e, 23
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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10e, 11b, 12d, 20, 21, 22, 24
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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2,3,4
15. Conflict with Water Resources Protection Collaborative Guidelines and Standards for Land Uses near Streams?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	22, 51
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"/>	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"/>	3, 46
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"/>	46,47
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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	46,47
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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,3,46
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"/>	3, 10e, 11b
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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 3, 11c, 28, 45
23. Inundation by seiche, tsunami, or mudflow.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3, 5, 12c

DISCUSSION

The Park sits upon the Uvas-Llagas watershed, and approximately 10 miles inland from Monterey Bay. The Uvas-Llagas watershed covers a 104-square-mile area that originates from the Santa Cruz Mountains and the Diablo Range and empties to Monterey Bay. Since the Plan is a part of a larger existing regional park located in a redwood forest topography of the site includes both flat and mountainous slopes interspersed with redwood trees. Major surface water features in the vicinity of the site include the Monterey Bay to the west and the Uvas Reservoir to the north.

The Santa Clara Valley Water District (SCVWD) manages water resources and flood control for the County of Santa Clara. SCVWD manages 10 dams and surface water reservoirs, three water treatment plants, and approximately 400 acres of groundwater recharge ponds. Both local groundwater and surface water make up approximately 40 percent of the County's water supply, 5 percent comes from recycled water, and the remaining 55 percent is brought in from the Sierra Nevada mountain range and the Sacramento-San Joaquin River Delta. Imported water is transported to the County via the Hetch Hetchy system.²² The Plan Area is within the jurisdiction of the SCVWD.

At the federal level, the Clean Water Act (CWA) is the primary law governing water quality control. Section 303 of the CWA requires states to adopt water quality standards for all surface waters of the United States. The CWA established the NPDES permit program to regulate municipal and industrial discharge, including from municipal and storm sewer systems.

At the state level, the Porter-Cologne Water Quality Control Act governs water quality control in California. The Act establishes the SWRCB and the nine regional offices, each having jurisdiction to regulate and protect waters in each region. The Central Coast Regional Water Quality Control Board (CCRWQCB) is the regional board that serves Santa Clara County, south of Morgan Hill.²³

The Federal Emergency Management Agency (FEMA) issues Flood Insurance Rate Maps (FIRM) that classifies land areas that are subject to flooding. FEMA's minimum level of flood protection for new development is the 100-year flood event, a flood that statistically has a one percent probability of occurring in any given year. The site is not located within the designated FEMA 100-year floodplain; however, the site and its immediate surroundings have been classified as Zone D, "areas where there are possible but undetermined flood hazards, as no analysis of flood hazards has been conducted."²⁴

1. The Plan involves various park improvements in a small area of the park where disturbances have previously occurred. The site lies approximately 10 miles east from Monterey Bay and 4.5 miles south of the Uvas Reservoir. Wastewater generated from park improvements would be required to comply with the Municipal Regional Stormwater NPDES Permit (MRP) (NPDES Permit No. CAS612008), which mandates that permittees use their planning and development review authority to require that stormwater management measures be

²² Santa Clara Valley Water District. Website: <http://www.valleywater.org/about.aspx>. Accessed November 18, 2016.

²³ California Water Resources Control Board Website: http://www.waterboards.ca.gov/publications_forms/publications/factsheets/docs/region_brds.pdf. Accessed November 18, 2016.

²⁴ FEMA National Flood Hazard Map. Website: <http://fema.maps.arcgis.com/home/webmap/viewer.html?webmap=cbe088e7c8704464aa0fc34eb99e7f30&extent=-121.75285541348447,37.000159329537915,-121.66977130703927,37.02277657074848>. Accessed November 18, 2016

included in new and redevelopment projects to minimize and properly treat stormwater runoff. Furthermore, the Plan would include the replacement of existing septic tanks and the rehabilitation of existing leach field systems within the High Use Zone and Valley View Zone. Replacement of the tanks and rehabilitation of the leach field systems would be required to adhere to the regulations set forth in the Santa Clara County On-site Wastewater System Ordinance (adopted December 2013), which requires that on-site septic systems don't degrade water quality. Compliance with applicable regulations would therefore reduce potential impacts to water quality to the maximum practicable extent. **Less than significant impact.**

2. As noted above, 40 percent of the County's water supply originates from both groundwater and surface water, 5 percent comes from recycled water, and the remaining 55 percent emanates from the Sierra Nevada mountain range and the Sacramento-San Joaquin River Delta. Domestic water used in the Park is well water sourced from groundwater. An Infrastructure Study prepared by LPA and Luhdorff & Scalmanini Consulting Engineers (Appendix F) estimated a maximum-day domestic water demand of approximately 18,000 gallons per day at buildout of the proposed Plan and concluded that, in consideration of peak season and fire flow requirements, demand would be satisfied with the existing system. Overall, Plan components would not require substantial amounts of water and would not substantially deplete groundwater supplies or interfere with groundwater recharge, as groundwater pumped for the Park constitutes a negligible amount of the County water supply. **Less than significant impact.**
- 3, 4. The greater vicinity of the Park does include tertiary streams; however, plan components would not necessitate substantially altering the existing drainage pattern of the area or alter the course of a stream or river. Compliance with the County's grading and drainage plan would reduce erosion or siltation to the maximum practicable extent. **Less than significant impact.**
5. The Plan components include the construction of camping spots, a visitor center, and a parking lot, resulting in an increase in impervious surfaces in the Park. Implementation of BMPs through the Construction General Permit (CGP) Order 2009-0009-DWQ and compliance with NPDES permit conditions to reduce the volume and rate of surface runoff from the site to the maximum practicable extent. Compliance with the County's two regional NPDES permits, Phase II NPDES Permit and the MRP, would allow stormwater runoff to be managed to protect local waterways during and after construction activities. **Less than significant impact.**
6. The Plan would not otherwise substantially degrade water quality. The Plan would involve improvements in a small portion on a previously developed site within the greater context of the park. As described above, the Plan would be required to comply with applicable water quality laws and regulations, including the Clean Water Act, the Porter-Cologne Water Quality Control Act, Santa Clara County On-site Wastewater System Ordinance, and the MRP. **Less than significant impact.**

- 7, 8. The Park is not located within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map. No structures would be located within a flood hazard. **No impact.**
9. The Park is not located in the vicinity of the levee or dam. The closest levee or dam is 4.5 miles north of the Park. The Plan would not expose people or structures to a significant risk of flooding. **Less than significant impact.**
10. The Plan would not result in an increase in pollutant discharges to receiving waters. **Less than significant impact.**
11. The Plan is not located in an area of special water quality concern. **No impact.**
12. The Plan would not result in the use of well water previously contaminated. **Less than significant impact.**
13. The Plan would not result in a septic field being constructed on soil with severe septic drain limitations. **Less than significant impact.**
14. The Plan would not result in a septic field being located within 50 feet of a drainage swale, 100 feet of any well or water course or 200 feet of a reservoir at capacity. **Less than significant impact.**
15. The Plan is not located near a stream which precludes it from conformance to Water Resources Protection Collaborative Guidelines and Standards for Land Uses near Streams. As noted above, improvements shall be made in areas which have already been previously disturbed without the presence of wetlands or jurisdictional waters. As such, the Plan would not conflict with Water Resources Protection Collaborative Guidelines and Standards for Land Uses near Streams. **Less than significant impact.**
16. The Park is not connected to sewer lines. The Plan would not result in extensions of sewer trunk lines. **No impact.**
17. For all development projects in the County of Santa Clara, the NPDES requires that stormwater runoff be managed to protect local waterbodies during and after construction. Specifically, stormwater discharge within the County is regulated by the regional Phase II NPDES Permit pursuant to the CCRWQCB. Furthermore, the County is required to operate under the Municipal Regional Stormwater NPDES Permit (MRP) to regulate stormwater discharge throughout the County. The MRP (NPDES Permit No. CAS612008) mandates that permittees use their planning and development review authority to require that stormwater management measures be included in new and redevelopment projects to minimize and properly treat stormwater runoff. The MRP requires that stormwater treatment measures are correctly installed, operated, and maintained. Projects that disturb one or more acres of soil are required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity, Construction General Permit (CGP) Order 2009-0009-DWQ. CGP requirements include the installation and preservation of BMPs to protect water quality until the site is stabilized. **Less than significant impact.**

18. The Plan would not result in significant changes to receiving waters. **Less than significant impact.**
19. The Plan is not a tributary to an already impaired water body. **Less than significant impact.**
20. The Plan would not substantially change the direction, rate of flow, or quantity or quality of ground waters. **No impact.**
21. The Plan would not interfere with groundwater recharge or public groundwater supplies. **No impact.**
22. The Plan would not alter the amount location course of flow of waters. **No impact.**
23. A tsunami is an earthquake-induced wave that has the potential to reach tens of feet along shorelines. The Park is approximately 10 miles from the Pacific Ocean and therefore is not susceptible to tsunamis. Seiches are oscillatory waves that occur in a closed body of water and are due to seismic activity, sufficient seismic activity could potentially cause a seiche in one of the County reservoirs. However, as noted above, the Park is not located within an inundation area of a County reservoir and therefore not susceptible to a seiche. Mudflow potential is high in unstable hillsides with slopes greater than 15 percent, such as in portions of the Santa Cruz Mountains, the Diablo Range, and most unincorporated areas of the County. As noted above, portions of the Plan Area are vulnerable to landslides because of the natural terrain. However, the Plan would not exacerbate the existing risk of mudflow or landslides. None of the Plan features would be constructed immediately adjacent to steep slopes, and the Plan does not propose the addition of any new permanent dwellings. In addition, the County retains the authority to close Mount Madonna Park and its overnight camping areas to visitors in the event of weather or seismic events that could cause an increased risk of landslide or mudflow. **Less than significant impact.**

MITIGATION: None

K. LAND USE AND PLANNING						
WOULD THE PLAN:	IMPACT					SOURCE
	NO	YES				
	No Impact	Less Than Significant Impact	Less Than Significant With Mitigation Incorporated	Potentially Significant Impact	Cumulative	
1. Physically divide an established community?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2, 4
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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,3,5
3. Conflict with general plan designation or zoning?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5, 7, 9a, 10a, 46
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"/>	6, 10a, 44, 45
b. Los Gatos Specific Plan or Lexington Watershed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6, 10a, 13, 14
c. East Foothills Policy Area	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6, 10a
d. New Almaden Historic Area/Guadalupe Watershed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6, 7, 10a
e. Stanford	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6, 15, 16
f. San Jose	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8, 10a
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, 12b

DISCUSSION

Santa Clara County encompasses an area of 1,300 square miles at the southern area of the San Francisco Bay Area. The County defines Resource Conservation Areas (RCAs) as lands outside urban service zones not clearly established in Rural Residential use. RCA designations include open space reserves, agriculture, and regional and public parks. The Plan is located inside Mount Madonna County Park, within 10 miles of both the communities of Gilroy and Watsonville. Existing land uses in the surrounding area include Public Open Lands, Open Space Reserves, and Rural Residential Areas. The General Plan Land Use Map designates the Plan Area as an RCA, and more specifically, an existing regional park.

1. The physical division of an established community typically refers to the construction of a linear feature, such as an interstate highway or railroad tracks, or removal of a means of access, such as a local bridge that would impact mobility within an existing community of between a community and outlying area. The Plan does not involve any such features, and

would not remove any means of access, nor would it impact mobility. The Plan would not divide an established community. **No impact.**

2. The Park is designated by the Santa Clara General Plan Map as an existing regional park within an RCA. The Plan components described in the Plan Description would be consistent with the existing regional park designation for the Park and applicable Santa Clara County General Plan policies discussed in Book B under the subheading "Regional Parks and Public Open Space Lands." The Park is located within designated Habitat Plan Permit Area of the SCVHP and must adhere to the regulations and restrictions identified in the SCVHP. The Habitat Plan was adopted in 2013 by all local participating agencies and permits were issued from the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife. The Park is located within a designated Habitat Plan Permit Area of the SCVHP. The Plan would be consistent with the Santa Clara County General Plan, and is considered a covered activity under the SCVHP. **Less than significant impact.**
3. The Plan would not conflict with any applicable general plan designation or zoning. **Less than significant impact.**
4. The Plan would not occur in an area with special policies or designations. **No impact.**
5. The Plan would not be incompatible with existing land uses. **Less than significant impact.**

MITIGATION: None

L. MINERAL RESOURCES						
WOULD THE PLAN:	IMPACTS					SOURCE
	NO	YES				
	No Impact	Less Than Significant Impact	Less Than Significant With Mitigation Incorporated	Potentially Significant Impact	Cumulative	
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"/>	1, 2, 3, 19
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"/>	1, 2, 3, 6, 8
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

DISCUSSION

The Surface Mining and Reclamation Act (SMARA) of 1975 is the principal state law regarding mineral resources. Given the economic value of mineral resources, SMARA limits development in areas that contain mineral resources with significant economic value. Furthermore, SMARA mandates State Geologists in accordance with the State Mining and Geology Board to designate land into Mineral Resource Zones (MRZ), classified into categories based on both geological and economic data. Major mineral resources found in the County include copper, limestone, sand and gravel, and magnesite.²⁵

There are four mineral recovery sites within a 10-mile radius of the Park, two of which are closed, one of which is active, and one of which is idle. The Cabrillo Sand and Gravel Mine is approximately 8 miles to the west of the site and is currently closed with no intent to resume. The A.R Wilson Quarry is an open pit mine approximately 9 miles southwest of site and is currently active; the Freeman Quarry is an open pit mine approximately 9.5 miles southeast of the site and is currently idle. The Polak Pit Quarry is an open pit mine approximately 10 miles to the north of the Park that has been closed.²⁶

1. The Plan is located in a County-owned park. As discussed above, no mineral resources have been identified within the Park. Furthermore, active mining operations within the Park would conflict with the current use of the Park, and do not occur. Therefore, the Plan would not result in the loss of availability of a known mineral resource or a locally important mineral resource recovery site and there would be no associated impact. **No impact.**

²⁵ California Department of Conservation, Office of Mine Reclamation Map. Website: <http://maps.conservation.ca.gov/mol/mol-app.html>. Accessed December 23, 2016.

²⁶ California Department of Conservation, Office of Mine Reclamation Map. Website: <http://maps.conservation.ca.gov/mol/mol-app.html>. Accessed December 23, 2016.

2. The County General Plan DEIR does not identify any mineral resource recovery sites within the Park.²⁷ No impact would occur. **No impact.**
3. The Plan would not result in substantial depletion of any non-renewable natural resource. **No impact.**

MITIGATION: None

²⁷ Santa Clara County. 1994. Draft EIR. Website: <https://www.sccgov.org/sites/dpd/PlansOrdinances/GP/Pages/GP.aspx>. Accessed December 23, 2016.

M. NOISE						
WOULD THE PLAN:	IMPACTS					SOURCE
	NO	YES				
	No Impact	Less Than Significant Impact	Less Than Significant With Mitigation Incorporated	Potentially Significant Impact	Cumulative	
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, 3, 5, 6
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"/>	2, 3, 37
3. Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 2, 4, 3, 5, 31
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, 5
5. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2, 3, 31
6. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3, 5, 31

DISCUSSION

Descriptions and analysis in this section are based on ambient noise measurements and noise analysis performed by FCS.

Characteristics of Noise

Noise is defined as unwanted sound. Sound levels are usually measured and expressed in decibels (dB), with 0 dB corresponding roughly to the threshold of hearing. Most of the sounds that we hear in the environment do not consist of a single frequency but rather are a broad band of frequencies in which each frequency differs in sound level. The intensities of each frequency add together to generate a sound. Noise is typically generated by transportation, specific land uses, and ongoing human activity.

The standard unit of measurement of the loudness of sound is the decibel (dB). The 0 point on the dB scale is based on the lowest sound level that the healthy, unimpaired human ear can detect.

Changes of 3 dB or less are only perceptible in laboratory environments. A change of 3 dB is the lowest change that can be perceptible to the human ear in outdoor environments. While a change of 5 dBA is considered the minimum readily perceptible change to the human ear in outdoor environments.

Since the human ear is not equally sensitive to sound at all frequencies, the A-weighted decibel scale (dBA) was derived to relate noise to the sensitivity of humans, it gives greater weight to the frequencies of sound to which the human ear is most sensitive. The A-weighted sound level is the basis for a number of various sound level metrics, including the day/night sound level (L_{dn}) and the Community Noise Equivalent Level (CNEL), both of which represent how humans are more sensitive to sound at night. In addition, the equivalent continuous sound level (L_{eq}) is the average sound energy of time-varying noise over a sample period and the L_{max} is the maximum instantaneous noise level occurring over a sample period.

Regulatory Framework

The Santa Clara County General Plan states that the satisfactory noise compatibility level for most land uses is noise environments of less than 55 dBA L_{dn} . Satisfactory noise levels are those that pose no serious threat to the land use. The main strategy of the Santa Clara County General Plan Safety and Noise Element is to prevent or minimize noise conflicts. To achieve this strategy, the County's General Plan and Code of Ordinances contain noise standards that are applicable to the proposed Plan.

The Santa Clara County General Plan Safety and Noise Element defines the satisfactory noise compatibility level for park and residential uses as up to 55 dBA L_{dn} ; environments with ambient noise levels above 55 dBA L_{dn} and up to 80 dBA L_{dn} are considered cautionary for new park or open space land use development. Cautionary noise levels are those which could potentially pose a threat to the proposed land use, and a project-specific analysis may be required to determine the compatibility of the proposed land use.

The Santa Clara County Noise Ordinance (Chapter VIII of the Code of Ordinances) sets exterior noise limits for receiving land uses generated from operational, stationary and construction/demolition noise sources. The maximum permissible exterior noise level for residential uses exposed to daytime (7:00 a.m. to 10:00 p.m.) hourly noise levels from operational noise is 55 dBA L_{eq} . For construction and demolition activities the maximum permissible exterior noise level at residential uses is 75 dBA L_{eq} from 7:00 p.m. to 7:00 a.m., Monday through Saturday, or any time on Sundays and holidays. According to Chapter VIII of the Santa Clara County Code of Ordinances, Section B11-156 "Special provisions," noise from construction activities that occur during daytime hours are from the County's exterior noise standards.

Short-term Construction Impacts

Two types of short-term noise impacts could occur during the construction of the proposed Plan. First, construction crew commutes and the transport of construction equipment and materials to the Plan site would incrementally increase noise levels on access roads leading to the Plan site (vehicle

engine noise, the sound of vehicle doors shutting, etc.). Although there would be a relatively high single-event noise exposure potential causing intermittent noise nuisance, the effect on longer-term (hourly or daily) ambient noise levels would be small. Therefore, short-term construction-related impacts associated with worker commute and equipment transport to the Plan site would be less than significant.

The second type of short-term noise impact is related to noise generated during construction on the Plan site. Construction is completed in discrete steps, each of which has its own mix of equipment and, consequently, its own noise characteristics. These various sequential phases would change the character of the noise generated on the site and, therefore, the noise levels surrounding the site as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction related noise ranges to be categorized by work phase.

Proposed improvements in the High Use Zone would include the expansion of existing day use and camping facilities, and the addition of new group, youth, equestrian, and RV camping facilities in adjacent areas (Exhibit 3) as well as a shower building. The existing visitor center would be renovated and converted to offices. A new visitor center would be constructed with a parking lot providing approximately 25 vehicle spaces and an adventure course. Proposed Valley View Zone improvements would include additional campsites and day use picnic amenities, a shower and restroom facility, up to ten pre-manufactured cabins, and a mobile store.

Table 7 lists typical construction equipment noise levels, based on a distance of 50 feet between the equipment and a noise receptor. Because the noisiest construction equipment is earthmoving equipment, the site preparation phase is expected to be the loudest phase of construction.

The site preparation construction phase is expected to require the use of front-end loaders, compactors, hydraulic backhoes, and haul trucks. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full-power operation followed by 3 or 4 minutes at lower power settings. Impact equipment such as pile drivers are not expected to be used during construction of this Plan.

Table 7: Typical Construction Equipment Maximum Noise Levels, L_{max}

Type of Equipment	Impact Device? (Yes/No)	Specification Maximum Sound Levels for Analysis (dBA at 50 feet)
Pickup Truck	No	55
Pumps	No	77
Air Compressors	No	80
Backhoe	No	80
Front-End Loaders	No	80
Portable Generators	No	82

Table 7 (cont.): Typical Construction Equipment Maximum Noise Levels, L_{max}

Type of Equipment	Impact Device? (Yes/No)	Specification Maximum Sound Levels for Analysis (dBA at 50 feet)
Dump Truck	No	84
Tractors	No	84
Auger Drill Rig	No	85
Concrete Mixer Truck	No	85
Cranes	No	85
Dozers	No	85
Excavators	No	85
Graders	No	85
Jackhammers	Yes	85
Man Lift	No	85
Paver	No	85
Pneumatic Tools	No	85
Rollers	No	85
Scrapers	No	85
Concrete/Industrial Saws	No	90
Impact Pile Driver	Yes	95
Vibratory Pile Driver	No	95

Source: FHWA, 2006.

Some of the loudest equipment that construction of the proposed Plan is expected to require includes graders, bulldozers, pavers, concrete mixer trucks, roller compactors, backhoes, and front loaders. A characteristic of noise is that each doubling of the sound sources with equal strength increases the noise level by 3 dBA. Assuming that each piece of construction equipment operates at some distance from the other equipment, the worst-case combined noise level during this phase of construction would be 90 dBA L_{max} at a distance of 50 feet from an active construction area. Accounting for usage factors of individual pieces of equipment and ground absorption effects when propagated, proposed construction activities are expected to result in hourly average noise levels of 86 dBA L_{eq} at 50 feet from an active construction area.

The nearest off-site noise-sensitive land use to the Plan's construction footprint are the rural residential land uses north of the Summit Zone, the closest of which is located approximately 800 feet from the proposed areas where heavy construction equipment could operate during construction of improvements. At this distance, and assuming a direct line of sight, worst-case construction noise levels during the loudest phase of construction would be approximately 62 dBA

L_{eq} , if multiple pieces of heavy construction equipment operated simultaneously at the nearest construction footprint area.

Construction and demolition maximum permissible exterior noise level at residential uses is 75 dBA L_{eq} from 7:00 p.m. to 7:00 a.m., Monday through Saturday, or any time on Sundays and holidays. Based on the analysis performed, proposed construction activities are not expected to exceed the County's maximum permissible exterior noise limit for construction at the nearest noise-sensitive residential use. There would be potential for single-event noise exposure causing intermittent noise nuisances from Plan construction activity, the effect on longer-term (hourly or daily) ambient noise levels would be small. In addition, Chapter VIII of the Santa Clara County Code of Ordinances Section B11-156 "Special provisions" also contains an exemption for construction activities from exterior noise standards, provided such activities occur during daytime hours. Therefore, Plan-related construction activity would not expose people to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

Long-term Operational Impacts

The primary sources of operational noise would be generated by Plan-related traffic and park visitors using the parking areas, campsites, and recreational facilities of the Plan site. A significant impact would occur if the Plan would be exposed to noise levels in excess of the County's maximum permissible noise limit of 55 dB L_{dn} for new park land use development. A significant impact would also occur if the Plan would result in an exceedance of the County's exterior noise limit standard of 55 dBA L_{eq} as measured at a receiving residential property line.

1. Traffic Noise Impacts

The existing traffic noise environment conditions were modeled based on the traffic report prepared for the Plan (Hexagon 2017) and the Federal Highway Administration traffic noise modeling methodology (FHWA RD-77-108). Plan roadways modeled include SR-152, Summit Road, Mt. Madonna Road/Old Mount Madonna Road, and Pole Line Road. SR-152 provides access to the main entrance; however, Summit Road mainly serves rural residential uses, but does provide park access as well. Mount Madonna Road/Old Mount Madonna Road and Pole Line Road are considered on-site roadways.

Modeling results show that studied Plan roadways produce traffic noise levels of up to 65 dBA L_{dn} along SR-152, and 44 dBA to 48 dBA L_{dn} attributable to the other roadways, as measured at 50 feet from the centerline. Implementation of the proposed Plan would increase existing traffic noise levels by approximately 1 dBA when accounting for the additional 252 trips that would result from the development of new park outdoor recreation areas. Therefore, ambient noise levels on the Plan site are considered acceptable for the proposed land use development, and traffic noise impacts due to an increase of daily traffic volumes on the existing roadway network would be less than significant.

2. Stationary-Source Noise Impacts

Development of the Plan would result in new stationary noise sources including noise from park visitors using the parking areas, campsites, and recreational facilities on the Plan site.

Proposed Plan improvements would be primarily the expansion of existing camping facilities, including expansion of existing and new RV camping facilities in the High Use Zone and Valley View Zone, improvements of day use areas, and renovation of some structures.

Of the on-site stationary noise sources, noise generated by RV camping activity could generate the highest maximum noise levels. The dominant noise source attributable to RV camping activities, generator operation, would typically generate noise levels of approximately 60 dBA L_{eq} at 50 feet and would attenuate to 54 dBA L_{eq} at 200 feet. The nearest rural residential land is located over 1,000 feet from proposed new and expanded RV camping facilities. Therefore, Plan-related RV camping activities would not result in exposure of persons to noise levels in excess of existing standards or result in a substantial permanent increase in ambient noise levels compared with existing noise levels.

1. Development of the Plan would also result in the expansion of existing recreational uses on the Plan site. However, the proposed uses are not substantial noise generators and park activities must comply with the permissible hours of operation. These stationary noise sources are similar to existing operations and therefore would not result in an exceedance of the existing ambient noise levels at any sensitive receptor in the Plan vicinity. The proposed Plan's construction activities would not occur during the County's stated restricted hours of operation, and implementation of BMPs from the County of Santa Clara's standards for noise reduction during construction incorporated into the project description would further reduce adverse noise effects and ensure a less than significant impact. **Less than significant impact.**
2. Groundborne vibrations consist of rapidly fluctuating motions within the ground that have an average motion of zero. Vibrating objects in contact with the ground radiate vibration waves through various soil and rock strata to the foundations of nearby buildings. When assessing annoyance from groundborne noise, vibration is typically expressed as root mean square (rms) velocity in units of decibels of 1 micro-inch per second. To distinguish vibration levels from noise levels, the unit is written as "VdB." Human perception to vibration starts at levels as low as 67 VdB and sometimes lower. Annoyance due to vibration in residential settings starts at approximately 70 VdB. Common sources of groundborne vibration include construction activities such as blasting, pile driving and operating heavy earthmoving equipment. Construction vibration impacts on building structures are generally assessed in terms of peak particle velocity (PPV). Typical vibration source levels from construction equipment are shown in Table 8.

Table 8: Vibration Levels of Construction Equipment

Construction Equipment	PPV at 25 Feet (inches/second)	RMS Velocity in Decibels (VdB) at 25 Feet
Water Trucks	0.001	57
Scraper	0.002	58
Bulldozer—small	0.003	58
Jackhammer	0.035	79

Table 8 (cont.): Vibration Levels of Construction Equipment

Construction Equipment	PPV at 25 Feet (inches/second)	RMS Velocity in Decibels (VdB) at 25 Feet
Concrete Mixer	0.046	81
Concrete Pump	0.046	81
Paver	0.046	81
Pickup Truck	0.046	81
Auger Drill Rig	0.051	82
Backhoe	0.051	82
Crane (Mobile)	0.051	82
Excavator	0.051	82
Grader	0.051	82
Loader	0.051	82
Loaded Trucks	0.076	86
Bulldozer—Large	0.089	87
Caisson drilling	0.089	87
Vibratory Roller (small)	0.101	88
Compactor	0.138	90
Clam shovel drop	0.202	94
Vibratory Roller (large)	0.210	94
Pile Driver (impact-typical)	0.644	104
Pile Driver (impact-upper range)	1.518	112

Source: Compilation of scientific and academic literature, generated by FTA and FHWA.

Propagation of vibration through soil can be calculated using the vibration reference equation of:

$$PPV = PPV_{ref} * (25/D)^n \text{ (in/sec)}$$

Where:

- PPV = reference measurement at 25 feet from vibration source
- D = distance from equipment to property line
- N = vibration attenuation rate through ground

According to Chapter 12 of the Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment manual (2006), an “n” value of 1.5 is recommended to calculate vibration propagation through typical soil conditions.

The FTA has established industry accepted standards for vibration impact criteria and impact assessment. These guidelines are published in its Transit Noise and Vibration Impact Assessment document (FTA 2006). The FTA guidelines include thresholds for construction vibration impacts for various structural categories as shown in Table 9.

Table 9: Federal Transit Administration Construction Vibration Impact Criteria

Building Category	PPV (in/sec)	Approximate VdB
I. Reinforced—Concrete, Steel or Timber (no plaster)	0.5	102
II. Engineered Concrete and Masonry (no plaster)	0.3	98
III. Non Engineer Timber and Masonry Buildings	0.2	94
IV. Buildings Extremely Susceptible to Vibration Damage	0.12	90

Source: FTA 2006.

As noted previously, the nearest off-site noise-sensitive land use to the Plan’s construction footprint are the rural residential land uses north of the Summit Zone, the closest of which is located approximately 800 feet from the proposed areas where heavy construction equipment could operate during construction of improvements.

Of the variety of equipment that is expected to be used during construction, the small vibratory rollers that could be used in the site preparation phase of construction would produce the greatest groundborne vibration levels. Small vibratory rollers produce groundborne vibration levels ranging up to 0.101 inch per second (in/sec) PPV at 25 feet from the operating equipment and attenuate to 0.013 PPV at 100 feet. These levels would attenuate below the industry standard vibration damage criteria of 0.2 PPV for structures of non-engineered timber or masonry construction, and would be completely imperceptible at the nearest off-site residential receptor. Therefore, construction-related groundborne vibration impacts on existing off-site land uses would be considered less than significant.

Upon completion of construction, the Plan would not include any permanent sources of groundborne vibrations. As such, implementation of the Plan would not expose persons within the Plan vicinity to excessive groundborne vibration levels. **Less than significant impact.**

3. Significant noise impacts to off-site receptors would occur if the Plan would result in a substantial increase in ambient noise levels compared with noise levels existing without the Plan. The County does not define what constitutes a substantial permanent

increase in ambient noise levels in either the General Plan or Noise Ordinance. Therefore, for purposes of this analysis, a substantial permanent increase in ambient noise levels is defined as (1) a noise level increase of 5 dBA or greater if resulting ambient noise levels are less than 55 dBA L_{dn} ; or (2) a noise level increase of 3 dBA or greater if resulting ambient noise levels are 55 dBA L_{dn} or greater. A characteristic of sound is that a doubling of acoustical energy would be necessary for existing noise levels to increase by 3 dBA, and a tripling of acoustical energy would be necessary for existing noise levels to increase by 5 dBA.

Implementation of the Plan would not result in a doubling of traffic volumes along any roadway segment in the Plan vicinity (based on the traffic study prepared for the Plan). Therefore, Plan-related traffic would not result in a perceptible permanent increase in existing ambient noise levels along any roadway segment in the Plan vicinity, and Plan-related traffic noise impacts on off-site sensitive land uses would be less than significant.

4. Development of the Plan would result in new stationary noise sources, including noise from park visitors using the RV camping facilities, parking areas, campsites, and recreational facilities on the Plan site. However, as addressed in Impact M.1, the resulting noise levels would not result in a perceptible increase in the daily average ambient noise levels existing at any sensitive receptor land use in the Plan vicinity. Therefore, Plan operational noise would not result in a substantial permanent increase in ambient noise levels compared with conditions existing without the Plan. As addressed in Impact M.1, Plan-related construction activities could result in noise levels of up to 62 dBA L_{eq} at the closest off-site receptor if multiple pieces of heavy construction equipment operated simultaneously at the nearest construction footprint area. Although there could be a relatively high single-event noise exposure potential causing intermittent noise nuisance, the effect on longer-term (hourly or daily) ambient noise levels would be small. The following BMPs from the County of Santa Clara's standards for noise reduction during construction incorporated into the project description will be followed during construction, which will reduce short-term construction impacts to a less than significant level.
 - The construction contractor shall ensure that all construction equipment have appropriate sound muffling devices, which are properly maintained and used at all times such equipment is in operation.
 - The construction contractor shall ensure that all internal combustion-engine-driven equipment is equipped with mufflers that are in good operating condition and appropriate for the equipment.
 - The construction contractor shall ensure that "quiet" models of air compressors and other stationary construction equipment are utilized where such technology exists.
 - The construction contractor shall, to the maximum extent practical, locate on-site equipment staging areas so as to maximize the distance between construction-related noise sources and noise-sensitive receptors nearest the Plan site during all Plan construction.

- The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the Plan site.
- The construction contractor shall prohibit unnecessary idling of internal combustion engines (i.e., in excess of 5 minutes).
- The construction contractor shall limit all noise producing construction activity to the hours of 7:00 a.m. to 7:00 p.m. Monday through Saturday.

With respect to operational noise and the potential for a substantial temporary or periodic increase in ambient noise levels in the Plan vicinity above levels existing without the Plan, as addressed in Impact M.1, Plan generated noise levels would not result in a perceptible increase in the daily average ambient noise levels existing at any sensitive receptor land use in the Plan vicinity. Therefore, Plan operational noise would not result in a substantial temporary or periodic increase in ambient noise levels above existing conditions without the Plan. Construction activities may increase noise levels in the park, however they would not exceed allowable levels and would be intermittent and temporary. **Less than significant impact.**

5. There are no public airports located in the Plan vicinity. Implementation of the Plan would not expose people residing or working in the Plan area to excessive noise levels from airport activity. Therefore, no impacts associated with public airport noise would occur. **No impact.**
6. There are no private airstrips located in the Plan vicinity. Therefore, no impacts associated with private airstrip noise would occur. **No impact.**

MITIGATION: None

N. POPULATION AND HOUSING						
WOULD THE PLAN:	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
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
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

DISCUSSION

The Santa Clara County population was estimated to be approximately 1,781,642 in 2010, and the population in unincorporated areas of the County was approximately 103,100, for the same year. ABAG estimated that total population in the County for 2010 would be approximately 2,310,800, with a population of approximately 120,100 in the unincorporated areas of the County. The number of housing units increased from 579,329 in 2000 to 629,508 in 2010, a 9-percent increase in total housing units.²⁸

The County's primary role in housing development is to provide assistance to create more affordable, below-market rate housing, and special housing needs through the Regional Housing Needs Allocation (RHNA). The County's RHNA is based on projections about future growth in housing needs determined by ABAG.²⁹

1. The Plan would include the construction of a new visitor center, additional camping sites and cabins (transient occupancy only), and other recreational facilities and amenities. The Plan does not include any new permanent dwelling units that would induce population growth. During the construction phase of the Plan, workers would be drawn from the local labor pool and would not be expected to relocate to the Plan vicinity for any Plan-related short-term construction jobs. Once the Plan components have been constructed, the Plan would allow for an increased visitation for day use and also would provide for additional overnight camping from implementation of additional campsites and cabins. However, any increase to the existing Park and concessionaire staff would be minimal. While the Plan could attract some new employees to the nearby communities, implementation of the Plan

²⁸ ABAG, Association of Bay Area Governments.

²⁹ Santa Clara Housing Element Update, page 9. Accessed November 18, 2016.

would not induce either substantial direct or indirect population growth. **Less than significant impact.**

2. The Plan consists of an existing County-owned park. The Park provides for transient overnight stay through its campgrounds, cabins, and yurts. No permanent housing is located within the Park. Therefore, implementation of the Plan would not displace any existing housing. **No impact.**
3. The Plan consists of an existing County-owned park and provides for transient overnight stay through its campgrounds, cabins, and yurts. No permanent housing is located within the Park. Therefore, implementation of the Plan would not directly or indirectly displace any people, and there would be no associated impacts. **No impact.**

MITIGATION: None

O. PUBLIC SERVICES						
WOULD THE PLAN:	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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 3, 5
ii) Police Protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 3, 5
iii) School facilities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 3, 5
iv) Parks?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 3, 5
v) Other public facilities?	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 3, 5
b. Local or regional water treatment or distribution facilities	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 3, 5
c. Local or regional water supplies	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 3, 5
f. Solid waste or litter	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 3, 5

DISCUSSION

Fire services in the County are provided by the Santa Clara County Fire Department (SCCFD). The SCCFD services the communities of Campbell, Cupertino, Los Altos Hills, Los Gatos, Monte Sereno, and Saratoga. The department also provides services for the unincorporated areas adjacent to the cities mentioned above. The SCCFD includes 15 fire stations, one maintenance facility, five support facilities, and an administrative headquarters to cover approximately 128 miles and a population of 226,700. The SCCFD employs over 288 fire prevention, suppression, investigation, administration, and maintenance personnel; a crew of 66 employees oversee daily emergency response calls. SCCFD headquarters is located at 14700 South Winchester Blvd. in the City of Los Gatos. The closest fire station to the Park, Redwood Fire Station, is located approximately 18 miles northwest of the site.³⁰ The County has established a goal of maintaining an 8-minute response time, 90 percent of the time, for both emergency medical service (EMS) and structure fire calls. The County reported that fire officials arrived in 7 minutes and 28 seconds or faster for EMS calls and 8 minutes and 28 seconds or

³⁰ Santa Clara County Fire Department. Website: <http://www.sccfd.org/about-sccfd/sccfd-overview>. Accessed November 21, 2016.

faster for structure fire calls. Lastly, SCCFD has a goal of maintaining a 95 percent or higher customer service rate and reported a customer service rate of 98 percent.³¹

Police services in the County are provided by the Santa Clara County Sheriff's Department (SCCSD). The SCCSD area of coverage includes the communities of Cupertino, Los Altos Hills, Saratoga and the unincorporated areas of Santa Clara County. Moreover, the SCCSD maintains a contract with the Santa Clara County Parks Department, which oversees the management of Mount Madonna County Park. Currently, the SCCSD command staff includes four major divisions: administrative services, enforcement, custody, and support services. The Department has 1,728 employees, with 1,302 sworn law enforcement officers. SCCSD headquarters is the closest police station to the Park and is located approximately 26 miles north of the site at 55 West Younger Avenue in the City of San José.³²

The Santa Clara County Office of Education is responsible for educational services throughout the County. The County has outlined seven areas of responsibility based on geographic boundaries. These areas include 79 high schools, 80 middle schools, and 256 elementary schools. The Park is serviced by the Morgan Hill Unified School District.³³

The County provides and maintains developed parkland and open spaces to serve its residents. The County's Parks Department is responsible for the operation and maintenance of all County park facilities. The Parks Department includes 28 regional parks, which encompass over 52,000 acres of land throughout the County. The Plan is located within one of the County's regional parks, Mount Madonna County Park.³⁴ The Quimby Act of 1975 authorizes California cities and counties to pass ordinances requiring developers to set aside land, donate conservation easements or pay fees for park improvements. Other public facilities within the County of Santa Clara include eight libraries, one mobile library, and one sports park. The closest library to the Park is the Morgan Hill Library, located approximately 8 miles to the northeast.

1. The closest fire station to the site is 18 miles to the northwest. The Plan calls for improvements in a small portion of the park and is anticipated to generate a small increase in service for the Park. Moreover, construction of the visitor center would comply with all applicable fire safety building requirements. Given the use and size of the proposed improvements, the Plan would not exceed the ability of fire and emergency medical responders to serve the site to such an extent that new or expanded facilities would be needed. The SCCSD maintains a contract with the Santa Clara County Parks Department, which oversees the management of Mount Madonna County Park. SCCSD headquarters is the closest police station to the Park and is located approximately 26 miles north of the site. Plan improvements do not propose to increase the residential population of the County. Furthermore, the Park is not a land use type typically associated with call for police service, as compared to residential or retail land uses. As such, new or expanded facilities would

³¹ Santa Clara County Fire Department 2015 Annual Report. Accessed December 23, 2016.

³² Santa Clara County Sheriff's Department. Website: <https://www.sccgov.org/sites/sheriff/Pages/sheriff.aspx>. Accessed November 21, 2016.

³³ Santa Clara County Office of Education Trustee Area Map. Website: http://www.sccoe.org/countyboard/Pages/Adopted_Plan_9a.pdf. Accessed November 21, 2016.

³⁴ Santa Clara County Parks Department. Website: <https://www.sccgov.org/sites/parks/AboutUs/Pages/About-the-County-Regional-Parks.aspx>. Accessed November 21, 2016.

not be needed. The closest school to the Park is Solorsano Middle School, located approximately 10 miles to the east at 7121 Grenache Way. As mentioned above, the Plan does not propose an increase in the County's population. As there would not be an increase in population as a result of the Plan. The County's Park Department includes 28 regional parks composing over 52,000 acres. The Plan is located within Mt. Madonna County Park, a Santa Clara County Regional Park. As the Plan does not propose to increase the County's population or decrease the amount of park space for its residents, impacts related to park land would be less than significant. Other public facilities found within the County include eight libraries, one mobile library, and one sports park. The Plan does not propose an increase in population. As such, the Plan would not increase the use of the existing public facilities with the County. Therefore, impacts would be less than significant. The Plan would not result in substantial adverse physical impacts of any public services listed above. **Less than significant impact.**

2. The Plan would not induce substantial growth or concentration of population. **No impact.**
3. The Plan would not employ equipment which could interfere with existing communications systems. **No impact.**
4. The Plan would not increase the need for new systems or supplies or cause substantial alternations to utilities. **No impact.**

MITIGATION: None

P. RECREATION						
WOULD THE PLAN:	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, 50
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, 50
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"/>	2, 4, 9d, 10h, 50
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"/>	38

DISCUSSION

The County provides and maintains developed parkland and open spaces to serve its residents. The County's Parks Department is responsible for the operation and maintenance of all County park facilities. The Parks Department includes 28 regional parks, which encompass over 52,000 acres of land throughout the County. Recreational amenities offered among the 28 regional parks include horseback riding, bicycling, camping, and wildlife viewing.³⁵

1. Implementation of the Plan would result in improvements to existing recreational facilities within the Park. The Plan would include a new visitor center, additional camping sites, new day use areas, and additional amenities for the campground (e.g., shower facilities and additional restrooms). While the Plan would encourage increased visitation and provide for additional camping opportunities than currently offered, the Plan would also include several new recreational facilities that would help ameliorate the impacts to existing Park facilities with increased visitation at the Park. **Less than significant impact.**
2. Implementation of the Plan includes the construction of a new visiting center and related parking lot expansion, minor construction activity to renovate an existing Park building for staffing, development of new day use and camping sites, the installation of prefabricated cabins and supplemental camping facilities, and other recreational amenities. The impacts

³⁵ Santa Clara County Parks. 2016. About County Parks. Website: <https://www.sccgov.org/sites/parks/AboutUs/Pages/About-the-County-Regional-Parks.aspx>. Accessed December 22, 2016.

on the environment from the implementation of the Plan are discussed throughout this document, and all impacts would be reduced to less than significant with the implementation of Mitigation Measures BIO-1, BIO-2, CUL-1, CUL-2, and Noise- related BMPs. **Less than significant impact with mitigation incorporated.**

3. The Plan is located within a public park. The Plan will enhance the recreational opportunities within the existing Park. **Less than significant impact.**
4. The Plan would not result in a loss of open space rates as high priority for acquisition. **No impact.**

MITIGATION: None

Q. TRANSPORTATION/TRAFFIC						
WOULD THE PLAN:	IMPACT					SOURCE
	NO	YES				
	No Impact	Less Than Significant Impact	Less Than Significant With Mitigation Incorporated	Potentially Significant Impact	Cumulative	
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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4, 6a, 26, 27, 28, 29, 43
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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6, 49, 50, 53
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"/>	5, 6, 7, 53
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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3, 5, 6, 7, 53
5. Result in inadequate emergency access?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 3, 5, 48, 53
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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8a, 21a
7. Not provide safe access, obstruct access to nearby uses or fail to provide for future street right of way?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 3, 30
8. Increase traffic hazards to pedestrians, bicyclists and vehicles?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3, 4
9. Cause increases in demand for existing on or off-street parking because of inadequate project parking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 3, 30

DISCUSSION

The Park is located between Gilroy and Watsonville in the Santa Cruz Mountains. Principal roadways in the vicinity of the Park include the following:

- US 101 (Bayshore Freeway) is a major north-south regional freeway in the San Francisco Peninsula, providing Santa Clara County access to Monterey County to the South and San Mateo County to the north.
- SR-152 (Hecker Pass Highway) is a two-lane, east-west major arterial south of the Plan site. SR-152 provides a connection between US 101 in Gilroy and Highway 1 in Watsonville. SR-152 provides access the Plan site via Pole Line Road. SR-152 is a relatively high-capacity road that connects to urban areas and regional highways at both ends. A large majority of the Park traffic is assumed to access the Park via this roadway, due to the narrow and winding nature of the other roads providing access.
- Summit Road is a two-lane, north-south roadway that extends north from the Plan site through the Santa Cruz Mountains until turning into Loma Prieta Way near Uvas Canyon County Park. This roadway provides access to the northern entrance to the Parksite at its intersection with Mount Madonna Road-Old Mount Madonna Road/Pole Line Road.
- Mount Madonna Road/Old Mount Madonna Road is a semi-paved rural road that runs through the northern area of the Park. This roadway extends west from Redwood Retreat Road as Mount Madonna Road, until transitioning into Old Mount Madonna Road at its intersection with Summit Road-Pole Line Road, until its terminus at Casserly Road in Watsonville. This road provides access to the Park via its intersection with Summit Road-Pole Line Road, and it provides direct access to the Summit Zone.
- Pole Line Road is a two-lane roadway that extends through the Park, providing access to the various campsites and activities centers within the Park. This roadway extends north from SR-152 until becoming Summit Road following its intersection with Mount Madonna Road-Old Mount Madonna Road.

Pursuant to California Statute, Government Code 65088, Santa Clara County has established a Congestion Management Program (CMP). The intended legislation of the CMP is to develop a comprehensive transportation improvement program among local jurisdictions that will reduce traffic congestion and improve land use decision making. Valley Transit Authority serves as the Congestion Management Agency (CMA) for Santa Clara County and maintains the County's CMP. The nearest CMP roadways are the full lengths of SR-152 (2.5 miles south) and US 101 (9 miles east) that are within the County. These CMP roadways are major freeways that run thru the southern Santa Clara County.

The nearest airport to the Park is San Martin Airport, operated by Santa Clara County and located approximately 8 miles east of the site.

The nearest airport to the Park is San Martin Airport, operated by Santa Clara County and located approximately eight miles east of the site. An Airport Comprehensive Land Use Plan (ACLUP) has been adopted for San Martin Airport to safeguard the general welfare of local residents and ensure that new surrounding uses do not affect continued safe airport operation. No portion of the Park is within the San Martin Airport Traffic Pattern Zone, which lies approximately 6.75 miles east of the Park.

The analysis below is based on a traffic study for the proposed Mount Madonna County Park Master Plan completed by Hexagon Transportation Consultants, which is included as Appendix E of this document.

Based on Park usage data and input from County Parks staff, Hexagon developed a trip generation estimate for the Park, taking into account existing and proposed uses, facilities and amenities. Existing and future trip generation for the Park is shown on Table 10. For the purpose of providing a conservative analysis, it was assumed that the existing facilities are fully utilized, even though full utilization does not occur every day. Full details of the methodology for estimating trip generation are included in Appendix E.

As shown on Table 10, the Plan is projected to generate 252 net new average daily trips once fully constructed. Given the steep, winding roads that provide access from the north and the lack of connections to urban areas via these routes, the vast majority of trips to the Park travel on SR-152. Therefore, for the purpose of this analysis, it was assumed that 90 percent or 227 of the total 252 net new average daily trips would travel on SR-152.

Table 10: Plan Trip Generation Rates

Land Use ¹	Size/Wkly Users	Trip Assumption	Daily Trips ³	Size/Usage	Daily Trips ³
Standard Tent Camping	84 sites	1.0 veh. per site	168	20 percent	202
Yurts	5 yurts	1.0 veh. per yurt	10	15 yurts	30
Cabins	0 cabins	1.0 veh. per cabin	0	15 cabins	30
RV Sites	29 sites	1.0 veh. per site	58	20 percent	70
Glamping	0 sites	1.0 veh. per site	0	15 sites	30
Multi-Family Camping	0 sites	2.0 veh. per site	0	10 sites	40
Premium Camping	0 sites	1.0 veh. per site	0	10 sites	20
Group Camps	5 sites	2.0 veh. per site	20	—	0
Picnic Areas	10 picnic areas	5.0 veh. per area	100	20 percent	120
Equestrian Staging	2 areas	6.0 veh. per area	24	—	0
Hiking Trails	224 daily hikers	2.0 persons per veh.	224	20 percent	268
Arata-Garcia Site ²	—	1.5 persons per veh.	—	35 daily users	46
Total			604	—	856

Table 10 (cont.): Plan Trip Generation Rates

Land Use ¹	Size/Wkly Users	Trip Assumption	Daily Trips ³	Size/Usage	Daily Trips ³
New Trips					252
Notes:					
¹ Other camping amenities such as parking spaces/lots, Park stores, visitor center, and showers are not expected to generate trips on their own as they are accessory to the other Park uses.					
² It is assumed for this analysis that the future development would attract up to 35 people daily.					
³ Daily Trips estimated by multiplying the use by the trip assumption. This is then doubled to generated daily trips representing one inbound and one outbound trip.					

Data obtained from the 2014 Volumes on California State Highways report, produced by the State of California Department of Transportation (Caltrans), indicates that the average annual daily traffic (AADT) volume on SR-152 was 6,100 vehicles at the Santa Cruz/Santa Clara County Line, the traffic count location nearest the Park entrance. The typical capacity of a two-lane road is 15,000 vehicles. Therefore, the road is currently operating well below capacity.

1. Based on the trip generation and distribution described above, it is estimated that the new development in the Park would generate 227 net new average daily trips on SR-152, and, as such, SR-152 would continue to operate well below capacity. Further, as shown in Table 10, the Plan would only increase the calculated volume-to-capacity ratio by 1.5 percent. Therefore, this minor increase in vehicle trips on SR-152 would not create a noticeable change in traffic volumes and impacts on the performance of the circulation system from the Plan would be minimal. Furthermore, trips from SR-152 would come from US 101. The AADT at US 101 at the Gilroy Junction headed towards SR-152 was 95,000 vehicles. The total new trips generated by the Plan represent an insignificant increase to daily traffic volume. **Less than significant impact.**

Table 11: SR-152 Capacity Analysis

Roadway	Daily Capacity (veh/hr)	Existing		Existing Plus Plan			
		Volume (veh/hr)	V/C Ratio	Project Trips	Volume (veh/hr)	V/C Ratio	Change in V/C
SR-152 at Santa Cruz/Santa Clara County Line	15,000	6,100	0.41	227	6,327	0.42	0.015
Note:							
¹ Existing peak hour and daily volumes from 2014 Volumes on California State Highways, produced by Caltrans.							

2. The proposed Plan would not affect any regional CMP roadways or diminish level of service standards. The nearest CMP roadways to the Park include the full lengths of US-101 and SR-152 within Santa Clara County. As described above, SR-152 would continue to operate below the capacity with the buildout of the Mount Madonna Master Plan. While Plan

traffic would increase the calculated volume-to-capacity ratio by 1.5 percent at the Santa Cruz/Santa Clara County Line (traffic count location closest to the Park entrance), traffic would not create a noticeable change in the performance of the CMP network. **Less than significant impact.**

3. San Martin Airport is approximately 8 miles east of the Park and is not located within its Traffic Pattern Zone. The Plan involves the installation of additional campsites and picnic amenities in previously disturbed areas of the Park, as well as the construction of a new visitor center and associated parking and utilities. None of the proposed improvements would affect air traffic patterns. **No impact.**
4. The Plan involves the installation of additional campsites and picnic amenities in previously disturbed areas of the Park, as well as the construction of a new visitor center and associated parking and utilities. The Plan would not involve modifications to existing roads in the Park or the surrounding area, nor would it introduce incompatible uses. Therefore, there would be no impact with respect to roadway hazards. **Less than significant impact.**
5. The Plan would not result in inadequate emergency access. **Less than significant impact.**
6. The Plan would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. **Less than significant impact.**
7. The Plan would not involve modifications to existing roads in the Park or the surrounding area. Design of the proposed visitor center and other improvements would be subject to review by the Santa Clara County Fire Department and the Santa Clara County Sheriff's Department to ensure compliance with applicable standards and regulations. **Less than significant impact.**
8. There is currently no transit service to the Park; however, hikers, cyclists and equestrians can access the Park via existing roadways and use the trail system. The proposed improvements would not conflict with the continued use of existing facilities by these users. While the improvements are anticipated to generate an increase in vehicle trips as noted above, the addition of 252 net new average daily trips to the Park would not result in substantial deterioration in either the performance or the safety of existing facilities for hikers, cyclists and equestrians. **Less than significant impact.**
9. The Plan would not cause an increase in demand for existing on or off street parking. The Plan will provide new parking facilities consisting of 20 to 30 vehicle spaces. **Less than significant impact.**

MITIGATION: None

R. TRIBAL CULTURAL RESOURCES						
WOULD THE PLAN:	IMPACT					SOURCE
	NO	YES				
Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074, as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	No Impact	Less Than Significant Impact	Less Than Significant With Mitigation Incorporated	Potentially Significant Impact	Cumulative	
1. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 2, 41, 42
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 2, 41, 42

DISCUSSION

The Mount Madonna Hills in the Santa Cruz Mountains have been associated with the Ohlone peoples for more than 3,000 years. Until the arrival of the Spanish in the late 18th Century, a large population of Native Americans lived in the vicinity of the Plan Area, taking advantage of the clean, clear water and plentiful hunting grounds. To this day, Ohlone descendants gather in the Park each summer solstice to celebrate the memory of their ancestors and pay respect to the spirits associated with the area.

As described above in section E, on December 11, 2016, FCS sent a request to the NAHC to conduct a sacred lands file search and to provide a list of Native American Representatives who could provide additional information on potential Tribal Cultural Resources (TCRs) within the Plan area. On December 21, 2016, a response was received from the NAHC indicating that no sacred sites were listed as present in the Plan area. The letter included a list of five Native American representatives. Letters including a map and Plan details were sent to all representatives for informational purposes on December 22, 2016. As of this date, no additional correspondence has been received. Correspondence with the NAHC and Native American representatives may be found in Appendix C-1.

1. As described above, no TCRs were identified as part of the NAHC Sacred Lands File search or through subsequent outreach and correspondence with Native American

representatives. Further, the results of the NWIC records search show that there are no registered or eligible historic resources located within or close to the Park itself. **No impact.**

2. No TCRs were identified as part of the NAHC Sacred Lands File search or through subsequent outreach and correspondence with Native American representatives. While the Plan area is traditionally associated with Native American peoples, park improvements would be low impact in nature and concentrated in previously disturbed areas. **Less than significant impact.**

MITIGATION: None

S. UTILITIES AND SERVICE SYSTEMS						
WOULD THE PLAN:	IMPACT					SOURCE
	NO	YES				
	No Impact	Less Than Significant Impact	Less Than Significant With Mitigation Incorporated	Potentially Significant Impact	Cumulative	
1. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 3, 5,
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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 3, 5, 21, 38
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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 3, 5
4. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 3, 5, 21,
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"/>	1, 3, 5
6. Not be able to be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 3, 5
7. Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5, 6

DISCUSSION

The Santa Clara Valley Water District (SCVWD) provides water supply, groundwater management, flood protection, and stream stewardship for the entire County of Santa Clara.³⁶ The Park relies exclusively on water wells located just north and northeast of the Valley View Park Area, including Well No. 2 with a maximum estimated yield of 35 to 40 gpm, and Well No. 3 with a maximum estimated yield of about 40 gpm. However, because of issues with each well, Well No. 2 has been reduced its average yield to 6 gpm and the yield of Well No. 3 provides for 17 gpm.

³⁶ Santa Clara Valley Water District, 2015 Urban Water Management Plan, page 4-4, 6-11, and 7-2.

Provision C.3 of the MRP lays out requirements for low impact design (LID) based post-construction stormwater control measures into new development and redevelopment.³⁷ Plans that create or replace 10,000 square feet or more of impervious surface are required to incorporate stormwater treatment measures such as bioretention areas, rainwater harvesting and permeable paving in order to facilitate groundwater recharge and minimize the flow of runoff off the Plan. The Park is located in a rural, forested part of Santa Clara County and all wastewater is treated on-site with existing septic systems.

Recology Silicon Valley and The Green Team provide trash services for the unincorporated area of Santa Clara County. Residual solid waste not recycled is taken to landfill sites, which include Guadalupe Sanitary Landfill (43-AN-0015) at 15999 Guadalupe Mines Road, approximately 17 miles to the north of the Park. Guadalupe Sanitary Landfill is a 411-acre landfill and a permitted capacity of up to 3,650 tons of waste per day. It accepts about 1,000 tons daily and has a reported remaining capacity of 11,055,000 cubic yards.³⁸ The facility is expected to operate until 2048 under its existing size and rate of disposal.

The analysis below is based on an Infrastructure Study for the proposed Mount Madonna County Park Master Plan completed by LPA and Lohdorff & Scalmanini Consulting Engineers. The Infrastructure Study is included as Appendix F of this document.

1. The Plan would comply with discharge permits and regulations, as applicable and would not exceed wastewater treatment requirements of the Regional Water Quality Control Board.
Less than significant impact.
2. The Plan would include the replacement of existing septic tanks and the rehabilitation of existing leach field systems within the High Use Zone and Valley View Zone to address existing deficiencies and accommodate increased use as envisioned in the Plan. Replacement of the tanks and rehabilitation of the septic/leach field systems would be required to adhere to the stipulations set forth in the Santa Clara County Onsite Wastewater System Ordinance (adopted December 2013).³⁹ Wastewater from the septic systems would be required to comply with State Water Resource Control Board Resolution No. 2012-0032, and subsequent policy found under "Water Quality Control Policy for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems (July 2012)."⁴⁰ **Less than significant impact.**
3. The Plan would include the construction of a new visitor center and associated parking and various recreational facilities and amenities that would increase the amount of impervious surfaces within the Park. Construction of the Plan components would be required to

³⁷ Santa Clara Valley Urban Runoff Pollution Prevention Program, Provision C.3 Handbook, April 2012.

³⁸ CalRecycle, Guadalupe Sanitary Landfill Website: <http://www.calrecycle.ca.gov/SWFacilities/Directory/43-AN-0015/Detail>. Accessed November 22, 2016.

³⁹ Santa Clara County. 2016. Code of Ordinances. https://www.municode.com/library/ca/santa_clara_county/codes/code_of_ordinances?nodeId=TITBRE_DIVB11ENHE_CHIVONWAT. Accessed December 22, 2016.

⁴⁰ State Water Resources Control Board. 2013. Water Quality Control Policy for Siting, Design, Operation and Maintenance of Onsite Wastewater Treatment Systems (OWTS) Policy. http://www.waterboards.ca.gov/water_issues/programs/owts/board_adopted_policy.shtml. Accessed December 22, 2016

incorporate LID stormwater treatment from Provision C.3 of the MRP; such as bioretention areas, rainwater harvesting and permeable paving in order to facilitate groundwater recharge and minimize the flow of runoff off the Plan. Implementation of LIDs would ensure that stormwater volumes generated by the Plan would not require the construction of stormwater drainage facilities. **Less than significant impact.**

4. Domestic water used in the Park is well water sourced from groundwater. An Infrastructure Study prepared by LPA and Luhdorff & Scalmanini Consulting Engineers (Appendix F) estimated a maximum-day domestic water demand of approximately 18,000 gallons per day at buildout of the proposed Plan and concluded that, in consideration of peak season and fire flow requirements, demand would be satisfied with the existing system. While well maintenance or rehabilitation would likely be needed to address leaks and lower well yields, there would nonetheless be sufficient water supply to serve the Park at full buildout of the Plan. **Less than significant impact.**
5. The Park relies on septic/leach field systems. No wastewater treatment provider would be affected by the implementation of the Plan. **No impact.**
6. Implementation of the Plan would expand the capacity of the Park for camping opportunities, and would include a visitor center and expanded day use areas and other recreational amenities that could increase the amount of solid waste generated by the Park. As discussed above, solid waste generated within the Park is disposed at the Guadalupe Sanitary Landfill. The landfill has adequate capacity for another 32 years at the current rates of disposal. The Plan would not substantially increase the amount of solid waste generated within the Park. **Less than significant impact.**
7. Solid waste disposal services must follow federal, state, and local statutes and regulations related to the collection of solid waste. The implementation of the Plan includes a new visitor center and additional camping sites and recreational amenities as described in Section 1 of this initial study, which would not involve the production and/or disposal of any acutely toxic or otherwise hazardous materials. Implementation of the Plan would comply with all state and local waste diversion requirements, including AB 939 and Senate Bill 1016. **Less than significant impact.**

MITIGATION: None

T. MANDATORY FINDINGS OF SIGNIFICANCE		
DOES THE PLAN:	NO	YES
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, with mitigation	
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, less than significant	
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, with mitigation	
d. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	X, with mitigation	

a) **Less than significant impact with mitigation incorporated.** The Plan would involve the implementation of a range of improvements to be concentrated in specific focus areas that have been previously disturbed, within the greater context of the Santa Cruz Mountains. The implementation of the proposed park improvements would allow for the increased capacity for both day and overnight visitors. Construction activities have the potential to disturb migratory birds and other special-status species near the site or to encounter yet undiscovered cultural resources. While mature trees throughout the Park would be preserved, Mitigation Measures BIO-1 and BIO-2 would reduce the potential for adverse effects on special-status species to a less than significant level and Mitigation Measure BIO-3 would reduce impacts to nesting birds and raptors protected under the MBTA to a less than significant level. The presence of known cultural resource sites in the Park and its vicinity and the proximity of some of the proposed improvements to those resources require mitigation measures to avoid the accidental destruction or disturbance of undiscovered cultural resources, as well as human remains. Mitigation Measures CUL-1 and CUL-2 would reduce the potential impacts to less than significant levels. Therefore, after implementation of the mitigation measures described above, the Plan would not degrade the quality of the environment or eliminate important examples of major periods of California history or prehistory. **Less than significant impact with mitigation incorporated.**


- b) This initial study has not identified any long-term environmental impacts that could result from implementation of the Plan. While the Plan would result in temporary, localized impacts related to construction noise and the possible disturbance to nesting and breeding birds or cultural resources during construction activities, these impacts and potential impacts would be reduced to a less than significant level with the implementation of Mitigation Measures BIO-1, BIO-2, CUL-1, CUL-2, and Noise-related BMPs. Moreover, implementation of BMPs incorporated into the Plan, including the County of Santa Clara Parks Department's BMPs for the prevention of plant pathogen introductions on County Park Lands; Construction Site BMPs during construction activities to reduce pollutants in storm water discharges throughout construction; Standard County dust-reduction measures; and the Bay Area Air Quality Management District (BAAQMD) Basic Construction BMPs would further minimize the potential for adverse effects from Plan implementation. **Less than significant impact with mitigation incorporated.**
- c) The Plan would result in temporary, localized impacts related to construction noise and the possible disturbance to nesting and breeding birds or cultural resources during construction activities. These impacts and potential impacts would be reduced to a less than significant level with the implementation of Mitigation Measures BIO-1, BIO-2, CUL-1, CUL-2, and Noise-related BMPs. As described throughout this initial study, the Plan would not exacerbate existing environmental impacts, and, therefore, with the mitigation discussed above, the Plan's contribution to any associated cumulative impacts would be less than significant. **Less than significant impact with mitigation incorporated.**
- d) The Plan involves a range of improvements intended to facilitate and encourage recreational activities for County residents and visitors. Implementation of the Plan would result in temporarily, localized impacts that would be reduced to a less than significant level with implementation of Mitigation Measures BIO-1, BIO-2, CUL-1, CUL-2, and Noise-related BMPs. As such, compliance with applicable existing regulations and implementation of recommended mitigation measures would ensure the Plan would not result in substantial adverse effects on human beings, including effects related to noise and vibration or utilities. **Less than significant impact with mitigation incorporated.**

DISCUSSION OF ENVIRONMENTAL EVALUATION

Discuss on attached sheet(s) all "yes" answers and any "no" answers that are potentially controversial or require clarification. Describe any potential impacts and discuss possible mitigations. For source, refer to attached "Initial Study Source List." When a source is used that is not listed on the form or an individual is contacted, that source and/or individual should be cited in the discussion.

DETERMINATION: (To be completed by the Lead Agency). On the basis of this initial evaluation:

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

Signature		Date: <u>5/5/17</u>
Print Name & Title	<u>Kim Brosseau, Senior Planner</u>	

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INITIAL STUDY RECOMMENDED SOURCE LIST

1. Field Inspection
2. Project Plans
3. Planner's Knowledge of Area
4. Experience With Other Project of This Size and Nature
5. County General Plan
6. The South County Joint Area Plan
7. County Zoning Regulations (Ordinance)
8. Second Amendment to Agreement [with San Jose] for Allocation of Tax Increment Funds
9. MAPS (various scales)
 - a. County Zoning (500' or 1,000')
 - b. ABAG "On Shaky Ground"-Santa Clara County Map Set (2 miles)
 - c. Barclay's Santa Clara County Locaide Street Atlas (2631')
 - d. County Regional Parks, Trails and Scenic Highways Map (10,000')
10. 5000' or one mile Scale MAPS
 - a. County General Plan Land Use
 - b. Natural Habitat Areas
 - c. Relative Seismic Stability
 - d. Archaeological Resources
 - e. Water Resources & Water Problems
 - f. Viewshed and Scenic Road
 - g. Fire Hazard
 - h. Parks and Public Open Space
 - i. Heritage Resources
 - j. Slope Constraint
 - k. Serpentine soils
11. 2000' Scale MAPS
 - a. State of California, Special Studies Zones [Revised Official Map]
 - b. Water Problem/Resource
 - c. USGS Topo Quad (7-1/2 minutes)
 - d. Dept. of Fish & Game, Natural Diversity Data Base Map Overlays & Textual Reports
 - e. Natural Resources [Key to map found in: Natural Resource Sensitivity Areas-Locality Data, Harvey & Stanley Associates-Contact County staff]
12. 1000' Scale MAPS/Air Photos
 - a. Geologic Hazards
 - b. Color Air Photos (MPSI)
 - c. Santa Clara valley Water District-Maps of Flood Control Facilities & Limits of 1% Flooding
 - d. Soils Overlay Air Photos
 - e. "Future Width Line" map set
13. County Lexington Basin Ordinance Relating to Sewage Disposal
14. Los Gatos Hillside Specific Area Plan
15. Stanford University General Use Permit and Environmental Impact Report [EIR]
16. Stanford Protocol and Land Use Policy Agreement
17. County Geologist
18. Site Specific Geologic Report
19. State Department of Mines and Geology, Special Report #146
20. USDA, SCS, "Soils of Santa Clara County"
21. USDA, SCS, "Soil Survey of Eastern Santa Clara County"
22. County Environmental Health/Septic Tank Sewage Disposal System - Bulletin "A"
23. San Martin Water Quality Study
24. County Environmental Health Department Tests and Reports
25. Santa Clara County Heritage Resource (including Trees) Inventory [computer database]
26. Official County Road Book
27. County Transportation Agency
28. County Standards and Policies Manual (Vol. I - Land Development)
29. Public Works Departments of Individual Cities
30. County Off-street Parking Standards
31. ALUC Land Use Plan for Areas Surrounding Airports [1992 version]
32. County Fire Marshal
33. California Department of Forestry
34. BAAQMD Annual Summary of Contaminant Excesses & BAAQMD, "Air Quality & Urban Development-Guidelines for Assessing Impacts of Projects & Plans"
35. Architectural and Site Approval Committee Secretary
36. County Guidelines for Architecture and Site Approval
37. County Development Guidelines for Design Review
38. Open Space Preservation, Report of the Preservation 2020 Task Force, April 1987 (Chapter IV)
39. Riparian Inventory of Santa Clara County, Greenbelt Coalition, November 1988.
40. Section 21151.4 of California Public Resources Code.
41. Site Specific Archaeological Reconnaissance Report
42. State Archaeological Clearinghouse, Sonoma State University
43. Transportation Research Board, "Highway Capacity Manual," Special Report 209, 1985
44. Design Guidelines for Non-residential Development in San Martin.
45. Southwest San Martin Area Interim Development Guidelines
46. 2009 NPDES Storm Water Discharge Permit
47. 2002 Clean Water Act Section 303(d)
48. California Building Code (2007)
49. County of Santa Clara Ordinance Code
50. Santa Clara Countywide Trails Master Plan Update, November 1995
51. Santa Clara Valley Water District Water Resources Protection Collaborative Guidelines and Standards for Land Use Near Stream

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SECTION 2: REFERENCES

- Association of Bay Area Governments Resilience Program, Liquefaction Susceptibility Map. Accessed November 17, 2016.
- Association of Bay Area Governments Resilience Program, Shaking Scenario Map. Website: <http://gis.abag.ca.gov/website/Hazards/?hlyr=northSanAndreas&co=6081>. Accessed November 17, 2016.
- Bay Area Air Quality Management District (BAAQMD). 2011. CEQA Air Quality Guidelines. Website: http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/baaqmd-ceqa-guidelines_final_may-2012.pdf?la=en. Accessed November 9, 2016.
- CalFire Fire Hazard Severity Map. Website: http://frap.fire.ca.gov/webdata/maps/santa_clara/fhszs_map.43.pdf. Accessed December 22, 2016.
- California Department of Conservation Division of Mines and Geology in the report. 1989. Preliminary Map and Landslide Features and Coseismic Fissures in the Summit Road Area of the Santa Cruz Mountains Triggered by the Loma Prieta Earthquake of October 17, 1989. Website: <http://maps.conservation.ca.gov/cgs/lsi/>. Accessed December 21, 2016.
- California Department of Conservation Division of Mines and Geology in the report. 1989. Preliminary Map and Landslide Features and Coseismic Fissures in the Summit Road Area of the Santa Cruz Mountains Triggered by the Loma Prieta Earthquake of October 17, 1989. Website: <http://maps.conservation.ca.gov/cgs/lsi/>. Accessed December 21, 2016.
- California Department of Conservation, Farmland Categories. Website: http://www.conservation.ca.gov/dlrp/fmmp/mccu/Pages/map_categories.aspx. Accessed November 16, 2016.
- California Department of Conservation, Fault Activity Map. Website: <http://maps.conservation.ca.gov/cgs/fam/> Accessed November 16, 2016.
- California Department of Conservation, Office of Mine Reclamation Map. Website: <http://maps.conservation.ca.gov/mol/mol-app.html>. Accessed December 23, 2016.
- California Department of Conservation, Office of Mine Reclamation Map. Website: <http://maps.conservation.ca.gov/mol/mol-app.html>. Accessed December 23, 2016.
- California Department of Conservation, Office of Mine Reclamation Map. Website: <http://maps.conservation.ca.gov/mol/mol-app.html>. Accessed December 23, 2016.
- California Department of Transportation. Website: http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/. Accessed November 14, 2016.
- California Water Resources Control Board, NPDES Permit, Order R2-2009-0074.

References

- California Water Resources Control Board. Website: http://www.waterboards.ca.gov/publications_forms/publications/factsheets/docs/region_brds.pdf. Accessed November 18, 2016.
- CalRecycle, Guadalupe Sanitary Landfill. Website: <http://www.calrecycle.ca.gov/SWFacilities/Directory/43-AN-0015/Detail>. Accessed November 22, 2016.
- County of Santa Clara Department of Environmental Health. 2014. On-site Systems Manual.
- County of Santa Clara General Plan, page O-1. Accessed November 14, 2016.
- Federal Highway Administration (FHWA). 2006. Highway Construction Noise Handbook. August.
- Federal Transit Administration (FTA). 2006. Transit Noise and Vibration Impact Assessment. May.
- FEMA National Flood Hazard Map. Website: <http://fema.maps.arcgis.com/home/webmap/viewer.html?webmap=cbe088e7c8704464aa0fc34eb99e7f30&extent=-121.75285541348447,37.000159329537915,-121.66977130703927,37.02277657074848>. Accessed November 18, 2016.
- Missouri University of Institute and Technology. 2004. Correlations Between Soil Plasticity and Strength Parameters. Website: http://web.mst.edu/~rogersda/expansive_soils/Various%20Aspects%20of%20Expansive%20Soils.pdf. Accessed December 22, 2016.
- Mt. Madonna County Park Master Plan Traffic Study. 2017. Hexagon Transportation Consultants, Inc. February 1.
- Sacramento Metropolitan Air Quality Management District (SMAQMD). 2015. SMAQMD Thresholds of Significance Table. Website: <http://www.airquality.org/LandUseTransportation/Documents/CH2ThresholdsTable5-2015.pdf>. Accessed November 2, 2016.
- Santa Clara County Airport Land Use Commission: Palo Alto, San Jose Reid-Hillview, Moffet, and San Martin Airport Comprehensive Land Use Plans. Website: <https://www.sccgov.org/sites/dpd/Commissions/ALUC/Pages/ALUC.aspx>. Accessed November 22, 2016.
- Santa Clara County Annual Monitoring and Conformance Report 2014. Pages 9–10.
- Santa Clara County ClIFF Farmland Finder Map. Website: <http://maps.conservation.ca.gov/ciff/ciff.html>. Accessed November 16, 2016.
- Santa Clara County Code of Ordinances. Accessed November 17, 2016.
- Santa Clara County Congestion Management Program. 2013. Page 1.
- Santa Clara County Fire Department. 2015 Annual Report. Accessed December 23, 2016.

- Santa Clara County Fire Department. n.d. Website: <http://www.sccfd.org/about-sccfd/sccfd-overview>. Accessed November 21, 2016.
- Santa Clara County General Plan, Land Use Map. Website: https://www.sccgov.org/sites/dpd/DocsForms/Documents/landuse_plan_map_2015.pdf. Accessed November 16, 2016.
- Santa Clara County General Plan. Page F-25.
- Santa Clara County General Plan. Page P-16. November 17, 2016.
- Santa Clara County General Plan. Page P-21. Accessed November 18, 2016.
- Santa Clara County Land Use Plan. 2016. Accessed November 18, 2016.
- Santa Clara County Office of Education Trustee Area Map. Website: http://www.sccoe.org/countyboard/Pages/Adopted_Plan_9a.pdf. Accessed November 21, 2016.
- Santa Clara County Operational Area Emergency Operations Plan, page 46.
- Santa Clara County Parks Department. Website: <https://www.sccgov.org/sites/parks/AboutUs/Pages/About-the-County-Regional-Parks.aspx>. Accessed November 21, 2016.
- Santa Clara County Parks. 2016. About County Parks. Website: <https://www.sccgov.org/sites/parks/AboutUs/Pages/About-the-County-Regional-Parks.aspx>. Accessed December 22, 2016.
- Santa Clara County Sheriff's Department. Website: <https://www.sccgov.org/sites/sheriff/Pages/sheriff.aspx>. Accessed November 21, 2016.
- Santa Clara County. 1994. Santa Clara County General Plan. December 20.
- Santa Clara County. 1994. Draft EIR. Website: <https://www.sccgov.org/sites/dpd/PlansOrdinances/GP/Pages/GP.aspx>. Accessed December 23, 2016.
- Santa Clara County. 2016. Code of Ordinances. Website: https://www.municode.com/library/ca/santa_clara_county/codes/code_of_ordinances?nod=elid=TITBRE_DIVB11ENHE_CHIVONWATR. Accessed December 22, 2016.
- Santa Clara County. 2016. Santa Clara County Code of Ordinances. December 27. Website: <https://www.sccgov.org/sites/bos/legislation/ordinance-code/pages/default.aspx>. Accessed on January 3, 2017.
- Santa Clara County. 2016. Code of Ordinances. Website: https://www.municode.com/library/ca/santa_clara_county/codes/code_of_ordinances?nod=elid=TITBRE_DIVB11ENHE_CHIVONWATR. Accessed December 22, 2016.

References

- Santa Clara Housing Element Update. Page 9. Accessed November 18, 2016.
- Santa Clara Valley Habitat Agency. "Santa Clara Valley Habitat Plan." Accessed November 18, 2016.
- Santa Clara Valley Urban Runoff Pollution Prevention Program, Provision C.3 Handbook, April 2012.
- Santa Clara Valley Water District. 2015. Urban Water Management Plan. Pages 4-4, 6-11, and 7-2.
- Santa Clara Valley Water District. Website: <http://www.valleywater.org/about.aspx>. Accessed November 18, 2016.
- Santa Clara Valley Water District. Website: <http://www.valleywater.org/>. Accessed November 22, 2016.
- State Water Resources Control Board GeoTracker. Website:
https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0608501944.
Accessed November 17, 2016.
- State Water Resources Control Board. 2013. Water Quality Control Policy for Siting, Design, Operation and Maintenance of On-site Wastewater Treatment Systems (OWTS) Policy. Website: http://www.waterboards.ca.gov/water_issues/programs/owts/board_adopted_policy.shtml. Accessed December 22, 2016.
- U.S. Department of Agriculture Natural Resource Conservation Service Soil Survey. Website: <http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>. Accessed December 22, 2016.
- U.S. Department of Agriculture Natural Resource Conservation Service Soil Survey. Website: <http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>. Accessed November 17, 2016.

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