Volume 1

COYOTE LAKE-HARVEY BEAR RANCH COUNTY PARK MASTER PLAN

Final Environmental Impact Report

SCH No. 2003032075

December 2003

Prepared for

County of Santa Clara Department of Parks and Recreation



EXECUTIVE SUMMARY

INTRODUCTION

This environmental impact report (EIR) has been prepared by Environmental Science Associates for the County of Santa Clara Department of Parks and Recreation (County) pursuant to the applicable provisions of the California Environmental Quality Act (CEQA) and its implementing guidelines (CEQA Guidelines). The County is the lead agency for this EIR, which examines the overall effects of implementing the proposed Coyote Lake Harvey Bear Ranch County Park Master Plan (referred to throughout this document as the "Master Plan," "project," or "proposed project") for the 4,448-acre Coyote Lake Harvey Bear Ranch County Park (referred to throughout this document as "Park," "project site" or "site"), located in the southeastern portion of Santa Clara County.

This EIR has been prepared to inform the County, responsible agencies, trustee agencies, and the public of the proposed project's environmental effects. The EIR is intended to publicly disclose those impacts that may be significant and adverse, describe the possible measures that would mitigate or avoid such impacts, and describe a reasonable range of alternatives to the project. The illustrative figures of the proposed project contained herein, although necessarily conceptual in nature, describe the major features of the Master Plan.

SUMMARY OF GOALS AND NEED FOR THE MASTER PLAN

The Master Plan establishes a direction for development of this significantly expanded park and strives to balance the diversity of recreational needs of Santa Clara County residents with goals for natural and cultural resource preservation and restoration, and preservation of the ranchland character that helped define much of the region. The following summarizes goals of the Master Plan. Refer to Chapter 2, Project Description, for additional detail.

- Recognize and plan for the regional context of Coyote Lake Harvey Bear Ranch County Park.
- Provide a variety of sustainable recreational opportunities consistent with the needs of Santa Clara County residents and compatible with the environmental, cultural and historic resources of the land.
- Provide areas of land-based and water-based recreational activities.
- Ensure public access to the park for a wide range of users.

- Preserve and enhance the natural, ranchland character of the park.
- Develop a plan that can be implemented over time, taking into account available resources, potential phasing, and long-term management implications.

PUBLIC INVOLVEMENT

The master planning process was assisted by a 13-member citizens advisory Task Force representing a diversity of neighborhood, recreational, and environmental interests. The Task Force served as an advisory body to the Parks Department staff and to the Parks and Recreation Commission, which in turn is advisory to the Board of Supervisors. The Task Force held 14 public meetings over a period of 2 years to review each step of the Master Plan. A Technical

Advisory Committee was created representing the many local, state and federal agencies that influence the park's development and long-term management.

A project team of Parks Department staff representing managers, planners, rangers, maintenance staff, and others involved with day-to-day park operations, also provided input during the master plan process.

To further assist the Task Force and Park's Department staff, the public was actively involved in the master planning process through participation at regular Task Force meetings and at community meetings that were periodically scheduled to gather community input.

While consensus was reached on most areas of the 4,448-acre park, differences of opinion arose regarding the intensity and type of development that would be appropriate for the approximately 375-acre West Flat Area. This area, located adjacent to San Martin Avenue, has the easiest access to Santa Clara County population centers and is the most developable due to its flat topography. This became an area of focus throughout the process, and three alternatives were developed and evaluated for the West Flat Area during the preferred alternative phase. Task Force, Parks Department staff, Parks Commission and HLUET recommendations for the West Flat Area were presented to the Board of Supervisors in December, 2002. At that time, the Board unanimously provided direction for the West Flat Area and concurred with the consensus recommendations for the remaining areas of the park. This direction became the basis for the draft Master Plan.

MASTER PLAN SUMMARY

Selection of program elements was guided by recommendations of the Task Force and Technical Advisory Committee, and suggestions made by the public. The proposed Master Plan includes the following elements:

- Recreational Program Elements
- Trails Plan
- Historic Preservation and Interpretation
- Natural Resource Management

The Master Plan establishes the County's vision for improvement and management of the Park for the next 20 years. Implementation of Phase 1 of the Master Plan and on-going projects are expected to begin upon completion of the environmental review process. In particular, visitor access to the portions of the Park, using a combination of the existing system of ranch roads and new trails, is considered the highest priority. Action would begin immediately to prepare access locations and basic staging facilities, basic trail signage and guide maps, and ranger supervision. Other Phase 1 projects requiring additional planning, funding and implementation are expected to occur over the next three years.

Phase 1 and on-going projects included in the Master Plan include:

- Campground improvements: addition of showers and reduction of campground density
- Hang-gliding launch and emergency landing site in northern area
- Implementation of the Natural Resource Management Plan
- Lakeside pedestrian trail and fishing improvements
- Overflow parking/equestrian camping in West Flat Area by Special Use Permit
- Phase 1 trails, gates and fencing, staging areas at Western Flat Area and Mendoza Area, and trails naming and signage
- Self-launch areas for kayaks/non-motorized boats
- Use of southern pond for annual Fishability Days event
- Hang gliding landing site adjacent to Roop Road

Phase 2 and Phase 3 consists of longer-term projects and are presented at a conceptual level in the Master Plan. These actions will require time to develop detailed plans and may require subsequent environmental analysis to satisfy CEQA or other environmental compliance requirements. Some of these projects are likely to occur begin within several years, but others may not be undertaken until later in the 20-year planning window.

Phase 2 and Phase 3 actions included in the Master Plan include:

- Lakeside roadway safety improvements
- Bicycle sports park
- Completion of permanent staging area facilities
- Dog off-leash area
- Environmental education center
- Equestrian/agricultural events center
- Events pavilion
- Family and group picnic areas
- Fishing pond
- Golf course
- Hang-gliding launch and landing sites in Mendoza Area
- Historic restoration and interpretation
- Improvements to existing Lakeside entrance area, visitor center and maintenance yard
- Informal lawn play area
- Lakeside group picnic area
- Amphitheater
- Mendoza Area family picnic sites

- New Lakeside campground (based on demand)
- Phase 2 trails as described in the Trails Plan
- Phase 3 trails as described in the Trails Plan
- Re-alignment of the West Flat entrance road
- Youth campground
- Water play area

MASTER PLAN ALTERNATIVES SUMMARY

Alternatives to the proposed Master Plan considered herein (see Chapter 4) include:

NO ACTION ALTERNATIVE

Under the No Action Alternative, neither the Master Plan, Trails Plan, Historic Preservation, or the Natural Resources Management Plan would be implemented. The County would continue to implement existing protection, operations, and maintenance policies. The existing access to the Lakeside area would remain as is. Public access to this area would likely increase in proportion to population growth and recreational demand. No access would be granted to the Bear or Mendoza Ranch properties and no Master Plan improvements would occur. Park patrols and operation, grazing leases, erosion control, treatment of non-native species and pests, and road and facilities maintenance would continue at existing levels and intensities. The No Project Alternative would not address, or would only address in a partial and unsystematic manner, the goal of the Master Plan to enhance regional coordination and trail opportunities, provide a variety of sustainable interpretation and recreation opportunities, increase public access, and preserve and enhance natural and cultural resources. Therefore, this alternative was rejected.

MASTER PLAN ALTERNATIVE 1: NO GOLF COURSE

Alternative 1 was evaluated during the Master Plan planning process under the title Alternative B. This alternative is similar to the proposed Master Plan with the mix of amenities offered. The primary difference between this alternative and the proposed Master Plan is the substitution of a 500 person events pavilion and recreational vehicle campground in lieu of the golf course proposed by the Master Plan for the Western Flat area. This alternative was rejected because it would not meet the Master Plan goal to generate sufficient revenue to off-set long-term management costs of the Park and would not serve as wide a range of recreational uses as the Preferred Alternative (see Goals and Need for the Master Plan in Chapter 2, Project Description).

MASTER PLAN ALTERNATIVE 2: TRAIL ACCESS ONLY

Alternative 2 is a trail access-only option that would respond only to the public's demand for pedestrian, equestrian and bicycle access to the Park. The trails and access plan would utilize only existing ranch roads and no new trails or re-routing of existing trails to avoid steep segments would be developed. Basic access and staging would be constructed for both the Western Flat and Mendoza Ranch areas. Unlike the No Action Alternative, Alternative 2 would provide access to both the Bear or Mendoza Ranch properties. This Alternative would not address, or would only

address in a partial and unsystematic manner, the goal of the Master Plan to enhance regional coordination and trail opportunities, provide a variety of sustainable interpretation and recreation opportunities, increase public access, and preserve and enhance natural and cultural resources. In addition, this alternative would not generate sufficient revenue to off-set long-term management costs of the Park (see Goals and Need for the Master Plan in Chapter 2, Project Description). Therefore, this alternative was rejected.

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Under CEQA, a significant effect on the environment is defined as a substantial or potentially substantial adverse change in any of the physical conditions within the area affected by a project, including effects on land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. The criteria of significance used to determine whether or not effects are significant are included in the introduction to each topic discussion in this EIR.

This EIR presents information in the following impact categories, as required under CEQA:

- Air Quality
- Biological Resources
- Cultural Resources
- Geology, Geohazards and Soils
- Hazardous Materials
- Hydrology, Floodplains and Water Quality
- Land Use, Plans and Policies
- Noise
- Public Services and Utilities
- Recreation
- Transportation and Circulation
- Visual Resources

Potential environmental impacts of the project are summarized in Table ES-1 at the end of this chapter. This table lists impacts and mitigation measures in three major categories: significant impacts that would remain significant even with mitigation; significant impacts that could be mitigated to a less-than-significant level; and impacts that would not be significant. For each significant impact, the table includes a summary of mitigation measure(s) and an indication of whether the impact would be mitigated to a less-than-significant level. Please refer to Chapter 3, Environmental Setting, Impacts, and Mitigation Measures, for a complete discussion of each impact and associated mitigation.

Cumulative effects to which the project would contribute include increased demands on public utility and service systems, increases in traffic, and increases in traffic-related air pollutant emissions and noise, among others. None of the other cumulative effects are considered significant and unavoidable.



Environmental Impact	Mitigation Measures	Significance After Mitigation	
A. SIGN	NIFICANT UNAVOIDABLE IMPACTS		
None identified	None required		
B. SIGN	B. SIGNIFICANT BUT MITIGABLE IMPACTS		
	Air Quality		
Air Quality-1: Construction activities would generate short-term emissions of criteria pollutants.	Air Quality-1: During construction of Park facilities requiring grading or excavation, construction contractors shall implement a dust control program, which is recommended by the BAAQMD.	LS	
	BIOLOGICAL RESOURCES		
Biological Resources-1: Construction of a new trail segment to replace a portion of the ridgeline ranch road, and subsequent use and maintenance of the segment, could result in impacts to Bay checkerspot butterfly critical habitat and loss of individuals during reproductive periods.	Biological Resources-1a: Pre-construction surveys should be performed at locations where, trail construction, maintenance, mowing or other ground-disturbing activities are necessary to prepare or maintain the existing alignments for public use. Surveys should include searches for Bay checkerspot adult and larval life stages. Any ground-disturbing activities in occupied habitat should be limited to the fall months (September through November July through October) and completed prior to the rainy season. At this time of year, partially grown larvae are in diapause and hiding under rocks or in cracks and crevices in the soil, and are considered less vulnerable than when they are actively feeding in the spring. Maintenance and construction may take place at other times along portions of the trails where survey results do not detect the species.	LS	

SU = Significant and Unavoidable

LS = Less than Significant

B = Beneficial

Environmental Impact	Mitigation Measures	Significance After Mitigation
B. SIGNIFICA	NT BUT MITIGABLE IMPACTS (Continued)	
В	SIOLOGICAL RESOURCES (CONT.)	
	Biological Resources-1b: Vegetation management of annual and serpentine grasslands that support the food plants of these insects can improve the habitat quality by reducing weeds and annual grasses. Implementation of the Natural Resource Management Plan (NRMP) included as part of the proposed Master Plan would likely improve habitat quality and the potential for supporting a population of Bay checkerspot within the Park. Grazing with cattle has been used at other locations in Santa Clara County to effectively manage the butterfly's habitat. The timing and intensity of the grazing program is critical for favoring the growth of the food plants, and would be stipulated in response to monitoring as described in the NRMP.	LS
Biological Resources-2: Implementation of the Master Plan could result in direct and indirect disturbance of western pond turtle nesting habitat located near the pond next to the Bear Ranch house.	Mitigation Measure Biological Resources-2a: Consistent with the Natural Resources Management Plan, visual surveys should be conducted for pond turtles in late spring (May-June) and early fall (August-September), during warm days when turtles are likely to be active. Surveys should include counts of adult, juvenile, and hatchling turtles, as well as the presence, absence, or sign of predators (bass, bullfrogs, herons, raccoons or snakes. Although difficult to locate, any potential nest sites also should be documented.	LS
	Mitigation Measure Biological Resources-2b: Surveys should assess the adequacy of basking sites, an important habitat element for pond turtles. If shoreline basking sites become limited by vegetation growth, or are otherwise unavailable, then new basking sites should be created. Suitable sites can be provided by placement of a tree trunk or floating platform, secured to remain in the middle of the pond.	LS

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Environmental Impact	Mitigation Measures	Significance After Mitigation
B. SIGNIFICA	NT BUT MITIGABLE IMPACTS (Continued)	
E	SIOLOGICAL RESOURCES (CONT.)	
	Mitigation Measure Biological Resources-2c: Consistent with the Natural Resources Management Plan, park visitors and their pets should be limited to approximately 150 feet from the pond edge to prevent trampling of nests. Nesting season extends from approximately April through August, therefore, the limits to access may be relaxed outside of this period. The family picnic/overlook may be located within the 150 buffer, but would be offset by a larger buffer elsewhere around the pond.	LS
	Mitigation Measure Biological Resources-2d: A speed limit of 10 miles per hour during April-August should be established and enforced on the driveway to the family picnic/overlook.	LS
	Mitigation Measure Biological Resources-2e: The golf course should be designed to include a buffer, or setback, of 150 feet between the south and west of the pond and the nearest fairway. Fairway margins should retain a high rough that is subject to maintenance only outside of the pond turtle nesting period. The buffer would encompass the slope below the pond with the exposures preferred for nesting. The extensive grassland habitat to the east of the pond will remain in its current natural condition, also available for nesting.	LS
Biological Resources-3: Implementation of the trails plan in the proposed Master Plan could result in temporary displacement of habitat for big-scale balsam root.	Biological Resources-3a: A qualified botanist should survey the proposed alignment of proposed trail segments 2 and 5, as identified in the trails Plan. The survey should occur during the same season that trail construction would occur, and during the flowering season for the species (March through June) to ensure recognition if the plant is present. If the plant is present within 25 feet of the proposed alignment centerline, then realignment is recommended.	LS

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Environmental Impact	Mitigation Measures	Significance After Mitigation
B. SIGNIFICA	NT BUT MITIGABLE IMPACTS (Continued)	
В	IOLOGICAL RESOURCES (CONT.)	
	Biological Resources-3b: Big-scale balsam root plants located near the trail should be protected during trail construction. Bright orange temporary fencing should be installed to create a buffer and isolate the plants from the work area. Workers should be educated about the presence of the plant, and instructed to avoid disturbing it.	LS
Biological Resources-4: Construction of Park facilities could result in displacement of oak woodland and native grassland.	Biological Resources-4a: The County would retain a certified arborist to assess the health and vigor of all trees in proximity to proposed facilities planned for intensive public use. The arborist would provide recommendations for the preservation or removal of trees that pose substantial risk of injury to life or property of Park visitors and staff.	LS
	Biological Resources-4b: In the event that tree removal is necessary, the impacts would be offset through planting of native oak trees elsewhere in the Park. In all cases, ample opportunities exist to plant trees close to the locations of those removed, with identical site conditions and microclimate. In the Western Flat Area, oak trees may be planted near the historic preservation area, events pavilion, equestrian center, picnic areas, along several small seasonal drainages, and elsewhere throughout the golf course. In the Lakeside Area, new trees could be planted in the campground and picnic areas. Trees should be cultivated by a qualified native plant nursery from acorns collected within the park, and should be planted and maintained according to standard native plant establishment guidelines to protect them against damage from wildlife or park visitors.	LS

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Environmental Impact	Mitigation Measures	Significance After Mitigation
B. SIGNIFICA	NT BUT MITIGABLE IMPACTS (Continued)	
В	IOLOGICAL RESOURCES (CONT.)	
	Biological Resources-4c: Prior to establishing the final alignments of new trails, a qualified botanist should survey the alignments to determine whether native perennial grasslands would be traversed. Modest realignment of at trail should be considered if it would avoid native grasslands without compromising the purpose of the new trail, <i>i.e</i> , to improve connectivity and gradients. The area of displaced native grassland should be quantified to facilitate revegetation or enhancement efforts elsewhere in the Park (see Measure 3-d).	LS
	Biological Resources-4d: Revegetation of native perennial grassland would be implemented according to recommendations and guidelines in the NRMP in the areas abandoned by reduction of campground density, and in the golf course to establish roughs and buffers along the small seasonal drainages.	LS
Biological Resources-5: Construction of Park facilities could result in loss of raptor nests and other bird nesting habitat in oak woodland.	Biological Resources-5: Construction that results in removal of nests during the non-breeding season (generally September 1 through January 31) does not require mitigation. To the extent feasible, construction of park facilities in proximity to areas identified during the breeding bird survey as active nesting areas will take place outside the period February 15 through August 31.	LS
	During construction activities, there is a possibility of impact to individual burrowing owls, a special-status species currently at very low population levels in the Santa Clara Valley. Therefore, in additional to the general measure described above, the following protection measures for the burrowing owl shall be implemented:	

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Environmental Impact	Mitigation Measures	Significance After Mitigation
B. SIGNIFICA	NT BUT MITIGABLE IMPACTS (Continued)	
В	SIOLOGICAL RESOURCES (CONT.)	
	 A pre-construction survey shall be conducted in all areas providing suitable habitat at least 30 days prior to construction according to the most recent CDFG Burrowing Owl Survey Protocol and Mitigation Guidelines (CDFG, 1995) or the approved methodology at the time surveys are conducted. Surveys shall include grassland areas within a 500-foot buffer around the project area, checking for burrowing owls and owl sign. If owls are found to be using the site and avoidance is not feasible, a passive relocation effort (displacing the owls from the site) may be conducted as described below, subject to the approval of CDFG. Establish areas around any occupied burrows where no disturbance may occur. The sensitive areas shall extend 160 feet around the occupied burrows during the non-breeding season of September 1 through January 31, and shall extend 250 feet around occupied burrows during the breeding season from February 1 through August 31. If the above avoidance requirements cannot be met, passive relocation of on-site owls may be implemented as an alternative, but only during the non-breeding season and with the approval of CDFG. Passive relocation shall be accomplished by installing one-way doors on the entrances of burrows located within 160 feet of the project area alignment. The one-way doors shall be left in place for 48 hours to ensure that the owls have left the burrow. 	

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Environmental Impact	Mitigation Measures	Significance After Mitigation
B. SIGNIFICA	NT BUT MITIGABLE IMPACTS (Continued)	
В	IOLOGICAL RESOURCES (CONT.)	
	 For each burrow that will be excavated by project construction, one alternate unoccupied natural or artificial burrow shall be provided outside of the 160-foot buffer zone. The alternate burrows shall be monitored daily for one week to confirm that owls have moved and acclimated. Burrows within the construction area shall be excavated under the supervision of a biological monitor using hand tools and then refilled 	
	to prevent reoccupation. If any burrowing owls are discovered during excavation, the excavation shall cease and the owl will be allowed to escape. Excavation may be completed when the biological monitor confirms that the burrow is empty.	
Biological Resources-7: Construction that occurs within or adjacent to habitat that supports bat roosts may disrupt breeding behavior and cause roost abandonment and loss of young.	Biological Resources-7: If construction activities are scheduled during the non-breeding season (generally September through January, but this is subject to case-by-case consideration of the breeding activity) within or adjacent to habitats that may support protected nesting bird or roosting bat species, mitigation is not required. Measures such as avoidance and passive relocation of species, which are included in these protocols, will be required for construction activities within or adjacent to suitable habitat.	LS
Biological Resources-8: Development of Park facilities could result in temporary and permanent impacts to jurisdictional wetlands and other waters of the U.S. under jurisdiction of the U.S. Army Corps of Engineers, and streams under regulatory authority of the California	Biological Resources-8a: Disturbance of the seasonal streams or the lake bed or shore will require regulatory permits from the U.S. Army Corps of Engineers, the California Department of Fish and Game, and the Regional Water Quality Control Board and Santa Clara Valley Water District.	LS
Department of Fish and Game and the Regional Water Quality Control Board.	Biological Resources-8b: A plan should be developed for the restoration of the riparian corridors associated with the seasonal streams in the Western Flat Area.	LS

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Environmental Impact	Mitigation Measures	Significance After Mitigation
B. SIGNIFICA	NT BUT MITIGABLE IMPACTS (Continued)	
E	BIOLOGICAL RESOURCES (CONT.)	
Biological Resources-10: Construction of Park facilities could contribute to erosion or result in discharge of sediment to surface waters, which would adversely affect aquatic habitat quality.	This impact and measures to mitigate it is addressed in the Hydrology, Floodplains and Water Quality Section. No additional mitigation measures required.	LS
	CULTURAL RESOURCES	
Cultural Resources-1: Implementation of the Master Plan has Potential to Adversely Affect Archaeological and Historical Resources.	Cultural Resources-1a: The County shall implement a Cultural Resource Protection Program.	LS
	Cultural Resources-1b. The County shall implement a <u>Historic Cultural</u> Resource Protection Program.	LS
	Cultural Resources-1c: The County shall conduct site-specific review of program-level Master Plan components.	LS
Cultural Resources-2: Implementation of the Master Plan has Potential to Adversely Affect Paleontological Resources.	Cultural Resources-2a: The County shall implement a paleontological resource protection program.	LS
Cultural Resources-3: Implementation of the Master Plan has Potential to Adversely Affect Human Remains.	Cultural Resources-3a: The County shall implement a human remains protection program.	LS
	Cultural Resources-3b: The County shall implement a human remains protection program.	LS

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Environmental Impact	Mitigation Measures	Significance After Mitigation
B. SIGNIFICA	NT BUT MITIGABLE IMPACTS (Continued)	
GE	OLOGY, GEOHAZARDS AND SOILS	
Geology, Geohazards, and Soils-1: In the event of a major earthquake on the Calaveras fault portions of the Park could be susceptible to surface fault rupture due to excessive seismic ground motion. Such an event could expose people and property to the hazards associated with lateral and/or vertical ground offset.	Geology, Geohazards, and Soils-1: Comply with applicable engineering and design rules and regulations.	LS
Geology, Geohazards, and Soils-2: In the event of a major earthquake in the region, seismic ground shaking could potentially injure people and cause collapse or structural damage to existing and proposed structures.	Geology, Geohazards, and Soils-2: Implement Mitigation Measure Geology, Geohazards, and Soils-1.	LS
Geology, Geohazards, and Soils-3: In the event of a major earthquake in the region, seismic ground shaking could potentially expose people and property to seismic-related hazards, including liquefaction and seiche.	Geology, Geohazards, and Soils-3: Conduct appropriate geologic and hazard assessments and implement necessary measures to reduce impacts.	LS
Geology, Geohazards, and Soils-4: Construction activities may result in soil erosion, and expose visitors and staff to geologic hazards associated with expansive soils.	Geology, Geohazards, and Soils-4: Proposed trails shall be constructed to avoid existing erosion and landside areas within the Park, and shall incorporate trail location recommendations identified in the Trails Plan component of the proposed Master Plan and the Draft Natural Resource Management Plan: Coyote-Lake-Harvey Bear Ranch County Park (Rana Creek Habitat Restoration, 2002).	LS

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Environmental Impact	Mitigation Measures	Significance After Mitigation
B. SIGNIFICA	NT BUT MITIGABLE IMPACTS (Continued)	
	HAZARDOUS MATERIALS	
Hazardous Materials-1: Construction workers and future visitors in the West Flat Area may encounter hazardous materials in impacted soil associated with historic ranching operations at the Bear Ranch.	Hazardous Materials-1a: The County shall continue investigation and remediation of the former UST, AST, and household dump in accordance with Santa Clara County Environmental Health Department regulations. This may include the excavation and removal of petroleum hydrocarbon impacted soils.	LS
	Hazardous Materials-1b: The County shall develop and implement an environmental site health and safety plan to address worker safety hazards that may arise during project- and program-level construction activities.	LS
Hazardous Materials-2: Demolition or renovation of existing structures on the Bear and Mendoza Ranches could expose construction workers and the public to lead-based paint and asbestos.	Hazardous Materials-2a: The County shall assess historic ranch structures on the Mendoza and Bear Ranches for the potential presence of lead-based paint and asbestos prior to implementation of program-level components that involve the destruction, renovation, or maintenance of existing structures.	LS
	Hazardous Materials-2b: The health and safety plan described above in Mitigation Measure Hazardous Materials-1b shall apply to potential lead-based paint risks present during construction.	LS
	Measure Hazardous Materials-2c: A lead-based paint abatement plan containing, but not limited to, the following elements shall be implemented:	LS
	Develop an abatement specification approved by an Interim-Certified Project Designer;	
	Acquire necessary approvals from the Santa Clara County Environmental Health Department for specifications or commencement of abatement activities;	

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Environmental Impact	Mitigation Measures	Significance After Mitigation
B. SIGNIFICA	NT BUT MITIGABLE IMPACTS (Continued)	
H	AZARDOUS MATERIALS (CONT.)	
	Prepare a site health and safety plan, as needed;	
	Contain all work areas to prohibit off-site migration of paint chip debris;	
	Remove all peeling and stratified lead-based paint on building surfaces and on non-building surfaces to the degree necessary to safely and properly complete demolition activities according to recommendations of the survey. The demolition contractor shall be responsible for the proper containment and disposal of intact lead-based paint on all equipment to be cut and/or removed during the demolition;	
	Provide on-site air monitoring during all abatement activities and background monitoring to ensure no contamination of work areas or adjacent properties;	
	Cleanup and/or HEPA of vacuum paint chips;	
	Collect, segregate, and profile waste for disposal determination; and	
	Provide appropriate disposal of all waste.	
	Hazardous Materials-2d: Asbestos abatement shall be conducted prior to demolition or renovation of the existing buildings.	LS
Hazardous Materials-4: Long-term storage and use of hazardous materials associated with golf course operation and maintenance could result in adverse impacts to soil, groundwater, and nearby surface water bodies.	Hazardous Materials-4: The golf course would be operated in conformance with the County of Santa Clara's guidelines for golf course design (County of Santa Clara, 1996) and the County's Integrated Pest Management Ordinance (County of Santa Clara, 2002). These guidelines set strict limits on types and quantities of allowable use of pesticides and herbicides, and also establish standards for groundwater and surface water quality in vicinity of their use.	LS

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Environmental Impact	Mitigation Measures	Significance After Mitigation
B. SIGNIFICA	NT BUT MITIGABLE IMPACTS (Continued)	
Hydrology,	FLOODPLAINS AND WATER QUALITY (CONT.)	
Hydrology, Floodplains and Water Quality-1: Construction activities could result in soil erosion and increase levels of suspended sediments and contaminants in stormwater run-off, resulting in adverse impacts to surface water quality. Less Than Significant with Mitigation Measures.	Hydrology, Floodplains and Water Quality-1a: Construction-related grading and other activities would be required to comply with the Association of Bay Area Governments' (ABAG) Manual of Standards for Erosion and Sediment Control Measures (ABAG, 1995) and with the California Stormwater Quality Association (CASQA), Stormwater Best Management Practice Handbook for Construction (CASQA, 2003a). The County is also required to apply for coverage under the SWRCB's General Construction NPDES permit and The County will-prepare a SWPPP prior to construction activities, as required by the SWRCB's General Permit for Construction Activities. Implementation of the SWPPPplan starts with the commencement of construction and continues though the completion of the project. Upon completion of the project, the sponsor must submit a Notice of Termination to the SWRCB to indicate that construction is completed. At a minimum, this plan will include the following requirements:	LS
	Mitigation Measure Hydrology, Floodplains and Water Quality-1b: The County shall minimize temporary or permanent realign of streams or drainage swales associated with the project to the maximum extent possible. Designs for proposed permanent stream realignments shall be prepared by a California-registered geologist or civil engineer experienced in streambed restoration and fluvial processes. All stream realignment activities, both temporary and permanent, shall comply with federal, state, and local agency requirements in order to minimize potential adverse short-term and long-term water quality impacts.	

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Environmental Impact	Mitigation Measures	Significance After Mitigation
B. SIGNIFICA	ANT BUT MITIGABLE IMPACTS (Continued)	
Hydrology,	FLOODPLAINS AND WATER QUALITY (CONT.)	
Hydrology, Floodplains and Water Quality-2: Creation of new trails may increase erosion by altering existing drainage patterns. Less Than Significant with Mitigation Measures.	Hydrology, Floodplains and Water Quality-2: Implement Mitigation Measure Geology, Geohazards and Soils-4. Trails shall be designed to minimize alterations to existing drainage patterns, prohibit trail short-cutting, and protect water quality in Coyote Lake. In addition, the County shall post information in equestrian staging areas to educate park users about potential adverse water quality impacts associated with undesignated trail use.	LS
Hydrology, Floodplains and Water Quality-3: An increase in impervious surfaces associated with construction of project- and program-level components may increase surface water run-off, potentially exceeding drainage system capacities, resulting in downstream flooding.	Hydrology, Floodplains and Water Quality-3a: Potential mitigation may include installation of a new subsurface storm drainage system in the West Flat Area, and evaluation of San Martin's adjoining existing storm drain system to incorporate increased flow volumes originating from the Park.	LS
	Mitigation Measure Hydrology, Floodplains and Water Quality-3b: Existing pervious surfaces shall be preserved to minimize the amount of newly generated storm runoff to the greatest extent possible, in accordance the recommendations provided in the Bay Area Stormwater Management Agencies Association's (BASMAA) Start at the Source Design Guidance Manual for Stormwater Quality Protection (BASMAA, 1999). The County shall also comply with Santa Clara County's Storm Water Drainage Manual, and South Santa Clara County and Martin's Small MS4 NPDES permit and SWMP requirements in order to minimize increases in stormwater discharge associated with project and program level components located within the CCRWQCB jurisdiction.	

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Environmental Impact	Mitigation Measures	Significance After Mitigation
B. SIGNIFICA	NT BUT MITIGABLE IMPACTS (Continued)	
Hydrology,	FLOODPLAINS AND WATER QUALITY (CONT.)	
Hydrology, Floodplains and Water Quality-4: Proposed program-level components, including those resulting in increased impervious surface area, may result in long-term adverse water quality impacts.	Hydrology, Floodplains and Water Quality-4a: Implement Mitigation Measures Hydrology, Floodplains and Water Quality-3a and 3b. In addition, the County shall prepare and develop design specifications for a Storm Water Design Plan (SWDP) to significantly reduce and where feasible, eliminate, the off-site migration of sediments and storm water pollutants associated with storm water runoff generated from program level components, including as parking lots, the equestrian center and golf course. The SWDP shall incorporate appropriate source control and treatment measures recommended in the California Storm Water Best Management Practice Handbook for New Development and Redevelopment (CASQA, 2003b), Santa Clara County's Storm Water Drainage Manual, and Non-Point Source Ordinance, and standards developed South Santa Clara County's SWMP and Small MS4 NPDES permit for program level components located within CCRWQCB jurisdiction or SCVURPPP and Santa Clara Countywide NPDES permit, including new C.3 regulations, for components located within SFRWQCB jurisdiction. The SWDP shall adhere to the County's Integrated Pest Management and Pesticide Use Ordinance (County of Santa Clara, 2002) and develop a turf grass management plan for the golf course as a component of the SWDP to minimize the amount of fertilizer and other chemicals that are used resulting in lower levels of pollutants to surface and ground water, with the goal of reducing potential discharge of such chemicals to local waterways. Manure management plans shall also be developed for the equestrian staging and camping areas, and the equestrian/agricultural education center as part of the SWDP.	LS

SU = Significant and Unavoidable LS = Less than Significant

Environmental Impact	Mitigation Measures	Significance After Mitigation
B. SIGNIFICA	NT BUT MITIGABLE IMPACTS (Continued)	
Hydrology,	FLOODPLAINS AND WATER QUALITY (CONT.)	
	Mitigation Measure Hydrology, Floodplains and Water Quality-4b: Golf course design shall minimize turf grass coverage to the maximum extent possible. Water supply for golf course construction, operation, and maintenance shall minimize potential reliance on local groundwater sources.	
	Noise	
Noise-1: Development of park facilities in the West Flat Area would result in temporary noise impacts during project construction. This would be a potentially significant noise impact.	 Noise-1a: The County will incorporate the following measures into contract specifications: Construction activities shall be limited to between 7:00 a.m. and 7:00 p.m. Monday through Saturday to be consistent with the Santa Clara County Noise and Vibration Ordinance and to avoid noise-sensitive hours of the day. Construction activities shall be prohibited on Sundays and holidays. Construction equipment noise shall be minimized during project construction by muffling and shielding intakes and exhaust on construction equipment (per the manufacturer's specifications) and by shrouding or shielding impact tools. Construction contractors shall locate fixed construction equipment (such as compressors and generators) and construction staging areas as far as possible from adjacent residences. 	LS

SU = Significant and Unavoidable LS = Less than Significant

Environmental Impact	Mitigation Measures	Significance After Mitigation
B. SIGNIFICA	NT BUT MITIGABLE IMPACTS (Continued)	
	Noise (cont.)	
	Noise-1b: To further address the nuisance impact of project construction, construction contractors shall implement the following:	LS
	Signs will be posted at the construction site that include permitted construction days and hours, a day and evening contact number for the job site, and a contact number with the Santa Clara County in the event of problems.	
	An onsite complaint and enforcement manager will be posted to respond to and track complaints and questions related to noise.	
P	UBLIC SERVICES AND UTILITIES	
Public Services and Utilties-2: The expansion of the trail system throughout the park may increase the potential for incidents to which emergency fire and medical services may need to respond.	Public Services and Utilties-2: The County Department of Parks and Recreation, the County Fire Marshall, CDF, and SSCCFPD shall review current policies and procedures as to how wildfires will be addressed on and near the Park as program-level components of the Master Plan are developed, and shall incorporate revisions or changes into subsequent environmental reviews that may be required for those developments.	LS
Public Services and Utilties-3: Facilities planned under the Park Master Plan may not include adequate fire prevention measures in their design, have adequate water supply and water flow for firefighting purposes, and accessibility for emergency response vehicles.	Public Services and Utilties-3: Potential fire protection services impacts should be reviewed at the project-level for specific facilities proposed under the Master Plan.	LS
Public Services and Utilties-4: Implementation of the Master Plan may increase water demand. Less Than Significant with Mitigation	Public Services and Utilties-4a: The County shall ensure an adequate water supply for Phase 1 projects.	LS
Measures.	Public Services and Utilties-4b: The County shall ensure an adequate water supply for Phase 2 and Phase 3 projects.	LS

SU = Significant and Unavoidable LS = Less than Significant

Environmental Impact	Mitigation Measures	Significance After Mitigation
B. SIGNIFICA	NT BUT MITIGABLE IMPACTS (Continued)	
Publ	IC SERVICES AND UTILITIES (CONT.)	
Public Services and Utilties-5: Installation of showers as one of the campground improvements proposed at Lakeside Campground under Phase 1 of the Master Plan would increase wastewater flows to the park's existing septic system in the Lakeside Area. This is a potentially significant impact.	Public Services and Utilties-5a: The County shall implement controls on the amount of wastewater generated by the shower facility proposed at the Lakeside Campground showers and ensure adequate septic capacity.	LS
Public Services and Utilities-6: Operation of projects included in the Master Plan could generate additional solid waste.	Public Services and Utilties-6: Facilities and plans implemented under Phase 2 and Phase 3 of the Park Master Plan shall undergo further review with respect to their impact on solid waste services in the County at the project level.	LS
Public Services and Utilities-7: Operation of the facilities to be implemented under the Master Plan could consume additional energy.	Public Services and Utilties-7: The County shall ensure energy efficiency in the operation of its campground facilities.	LS
	RECREATION	
Recreation-1: Implementation of the project would result in short-term adverse recreation impacts associated with project construction.	Recreation-1: The County shall implement Noise, Air Quality, Transportation, and Visual Resources mitigation measures included in this EIR.	LS
	TRAFFIC AND CIRCULATION	
Transportation and Circulation-2: Implementation of the Master Plan could result in adverse effects on access and internal circulation within the park. Less than Significant with Mitigation	Transportation and Circulation-2a: Provide eastbound left turn channelization on San Martin Avenue on the Western Flat entrance.	LS
	Transportation and Circulation-2b: Design the Western Flat area entrance kiosk location to ensure adequate on-site storage is provided for vehicles entering the park.	LS
Transportation and Circulation-3: Construction traffic could adversely impact local traffic conditions.	Transportation and Circulation-3: Construction traffic control plans shall be mitigated in accordance with the Caltrans Traffic Manual and subject to the approval of the Santa Clara County Department of Roads and Airports Department.	LS

SU = Significant and Unavoidable LS = Less than Significant

Environmental Impact	Mitigation Measures	Significance After Mitigation
B. SIGNIFICA	NT BUT MITIGABLE IMPACTS (Continued)	
	VISUAL RESOURCES	
Visual Resources-1: Implementation of the Master Plan would result in short-term adverse visual impacts associated with project construction.	Visual Resources-1: The following measures are included to minimize or reduce project impacts on existing scenic resources and visual quality during project construction:	LS
	During construction of Park facilities construction staging shall be located in areas that are not visible from public vantages, to the extent possible.	
	Avoid damage to natural surroundings in and around the work limits.	
	Provide temporary barriers to protect existing trees, plants, and root zones, if necessary.	
	Construction activities shall be phased to minimize the appearance of disturbed areas within the Park.	
Visual Resources-2: The proposed Master Plan would alter and visually intrude upon the open, natural character of the Park in which	Visual Resources-2: The following measures are included to minimize or reduce project impacts on existing scenic resources and visual quality.	LS
new development is proposed.	Minimize development footprints.	
	Choose building materials that are visually compatible or do not compete with the landscape.	
•	In the West Flat and Mendoza areas, architecture of new facilities shall enhance the existing rustic ranchland character.	
	In the West Flat area, existing barns shall remain the dominant structures, with no other structure exceeding the barns in height.	
	New structures shall include arbors, porches, and patios to blend indoor and outdoor spaces.	

SU = Significant and Unavoidable LS = Less than Significant

Environmental Impact	Mitigation Measures	Significance After Mitigation
B. SIGNIFICA	NT BUT MITIGABLE IMPACTS (Continued)	
	VISUAL RESOURCES (CONT.)	
	New architectural features in the Lakeside area shall blend with the existing architectural styles.	
	Staging areas shall be paved with asphalt or be unpaved with road base material.	
	Overflow parking areas shall be grass that can be mowed seasonally.	
	Provide native vegetative screening to block views of new developed areas at the Park from public view corridors. Select tree and vegetation species that enhance the ranchland character theme.	
Visual Resources-4: The proposed Master Plan would introduce sources of light and glare to the Park.	Visual Resources-3: The following mitigation measures are recommended to minimize project impacts of light and glare:	LS
	Exterior lighting shall use fixtures with low-level lighting, focused beams, and directional hoods to minimize light visible from other properties and reduce night sky impacts.	
	Vegetative screening and islands shall be utilized in parking, staging, and camping areas to reduce reflective glare.	
	Non-reflective asphalt surfaces shall be utilized to reduce glare.	
C. LESS THAN SIGNIFICANT IMPACTS		
Air Quality		
Air Quality-2: The Park Master Plan would result in an increase in criteria pollutant emissions due to project-related traffic. This would be a less than significant impact.	None required.	LS

SU = Significant and Unavoidable LS = Less than Significant

Environmental Impact	Mitigation Measures	Significance After Mitigation
C. LE	ESS THAN SIGNIFICANT IMPACTS	
	AIR QUALITY (CONT.)	
Air Quality-3: The proposed project would contribute to a reduction of cumulative regional air emissions by the operation of the Park under the Master Plan. This would contribute to a net air quality benefit.	None required.	В
	BIOLOGICAL RESOURCES	
Biological Resources-5: Implementation of the proposed Master Plan could result in loss of up to 210 acres of raptor foraging habitat.	None required.	LS
Biological Resources-8: Implementation of the Master Plan would ensure preservation of regional wildlife corridors.	None required.	В
	HAZARDOUS MATERIALS	
Hazardous Materials-3: Hazardous materials used onsite during construction activities (i.e., petroleum products) could be spilled through improper handling or storage.	Hazardous Materials-3: Apply best management practices during construction of project- and program-level facilities.	LS
	Noise	
Noise-2: Traffic associated with operation of the park under the Master Plan would result in an increase in ambient noise levels on nearby roadways used to access the park.	None required.	LS
C. LESS TH	HAN SIGNIFICANT IMPACTS (Continued)	
PUBLIC SERVICES AND UTILITIES		
Public Services and Utilities-1: Construction activities under the Park Master Plan have the potential to ignite fires.	Public Services and Utilities-1: Continuing compliance with the County's Fire Prevention Operational Procedure; no additional mitigation required.	LS

SU = Significant and Unavoidable LS = Less than Significant

Environmental Impact	Mitigation Measures	Significance After Mitigation
	RECREATION	
Recreation-2: Implementation of the Coyote Lake-Harvey Bear Ranch County Park Master Plan would expand the publicly accessible open space of the park resulting in a beneficial recreation impact.	None required.	В
Recreation-3: Implementation of the project would improve and expand the types of publicly accessible recreation facilities and trails in the park resulting in beneficial effects on the visitor experience.	None required.	В
Recreation-4: Implementation of the project would expand the trail system within the park and improve regional trail connectivity.	None required.	В
	TRAFFIC AND CIRCULATION	
Transportation and Circulation-1: Implementation of the Master Plan has potential to adversely affect levels of service (LOS) at local intersections. Less than Significant.	None required.	LS
VISUAL RESOURCES		
Visual Resources-3: The proposed Master Plan would introduce new publicly accessible trails on the site providing new opportunities for scenic views.	None required.	В

SU = Significant and Unavoidable LS = Less than Significant

B = Beneficial

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CHAPTER 1

INTRODUCTION

INTRODUCTION

This environmental impact report (EIR) has been prepared by Environmental Science Associates for the County of Santa Clara Department of Parks and Recreation (County) pursuant to the applicable provisions of the California Environmental Quality Act (CEQA) and its implementing guidelines (CEQA Guidelines). The County is the lead agency for this EIR, which examines the overall effects of implementing the proposed Coyote Lake-Harvey Bear Ranch County Park Master Plan (referred to throughout this document as the "Master Plan," "project," or "proposed project") for the 4,448-acre Coyote Lake-Harvey Bear Ranch County Park (referred to throughout this document as "Park," "project site" or "site"), located in the southeastern portion of Santa Clara County.

CEQA requires that, before a decision can be made to approve a project with potentially significant environmental effects, an EIR must be prepared that fully describes the environmental effects of the project. The EIR is a public informational document for use by governmental agencies and the public. It is intended to identify and evaluate potential environmental consequences of the proposed project, to identify mitigation measures that would lessen or avoid significant adverse impacts, and to examine feasible alternatives to the project. The information contained in the EIR is reviewed and considered by the lead agency prior to its action to approve, disapprove, or modify the proposed project.

CEQA states that the lead agency (in this case the County) shall neither approve nor implement a project as proposed unless the significant environmental effects of that project have been reduced to a less-than-significant level, essentially "eliminating, avoiding, or substantially lessening" its expected impacts. If the lead agency approves the project despite residual significant adverse impacts that cannot be mitigated to less-than-significant levels, the agency must state the reasons for its action in writing. This "Statement of Overriding Considerations" must be included in the record of project approval.

This EIR has been prepared to inform the County, responsible agencies, trustee agencies, and the public of the proposed project's environmental effects. The EIR is intended to publicly disclose those impacts that may be significant and adverse, describe the possible measures that would mitigate or avoid such impacts, and describe a reasonable range of alternatives to the project. The illustrative figures of the proposed project contained herein, although necessarily conceptual in nature, describe the major features of the Master Plan.

HISTORY OF PLANNING EFFORTS FOR COYOTE LAKE-HARVEY BEAR RANCH COUNTY PARK

THE EARLY YEARS – 1936 TO 1990

In 1936, Santa Clara Valley Water District (SCVWD) constructed a dam on Coyote Creek that created the lake and leased out lands along its shoreline to private concessionaires for recreation. By the 1960's, efforts to improve water quality and interest in creating more public access led the SCVWD to conclude that private leases should be phased out at the lake. Coyote Lake County Park was established in 1969 when the County entered into a long-term lease with SCVWD to operate Coyote Lake for recreational purposes. The County Park included 760 acres owned by SCVWD, including the 625 acre lake. This land, plus 36 acres of County Parks property, comprised the original Park. Under the lease, operation of all recreational activities became the responsibility of the Santa Clara County Parks Department while the SCVWD retained control of the lake's waters.

From 1969 to 1990, County Parks made improvements to facilities at Coyote Lake that emphasized water based recreation. Boating, fishing, water skiing, camping, and swimming were popular pastimes. By 1979 any remaining leases for private cabin plots had expired and all cabins were removed. In the late 1980's, Coyote Lake was designated as Secondary Drinking Water Source by SCVWD and swimming was prohibited. In 1989, Coyote Lake was drained by SCVWD to construct new dam outlets. The California Department of Dam Safety was also considering new seismic regulations that would eventually limit the lake level to 50% of capacity, thereby impacting boating and fishing.

THE RECENT PAST – 1990 TO 1997

With increasing water restrictions at Coyote Lake and rising demand for outdoor recreation in the County, the Parks Department began a master planning effort in the early 1990's. As one of its goals, the 1992 Draft Master Plan sought to look beyond water based recreation for the area. The 1992 Draft Master Plan outlined an ambitious plan to diversify recreation at Coyote Lake and meet the demands for many types of recreation otherwise unavailable in the area. In 1993, the Draft Master Plan was put on hold pending the completion of a countywide SCVWD Watershed Management Study. Coyote Watershed Stream Stewardship Plan was completed studying February 2002.

In 1997, the County Parks and Recreation Department acquired 2,940 acres of the former Harvey Bear Ranch and 711 acres of the adjacent Mendoza Ranch. The families of the former owners wished that these properties be retained as open space and parklands in memory of their parents. These properties were added to Coyote Lake County Park.

PLANNING EFFORTS TODAY

Coyote Lake-Harvey Bear Ranch County Park is now a much larger Park than was previously addressed in the 1992 Draft Master Plan. The original 796-acre Park has been expanded with the above-noted acquisitions by an additional 3,652 acres. It now encompasses the entire western side of Coyote Lake, the ridgeline and lands west of the ridge. The regional context of area has also changed. Since 1992, the Santa Clara County Open Space Authority, in cooperation with the Nature Conservancy, has acquired the 9,000 acre Lakeview Meadows Ranch directly east of Coyote Lake. A significant number of acres have been added to nearby Henry Coe State Park. Meanwhile, suburbanization of southern Santa Clara County has occurred. It was determined that a new master plan effort would be required to make considered and informed decisions about the use and management of Coyote Lake Harvey Bear Ranch County Park for the next twenty years.

Preparation of a new master plan began in November 2000. It included extensive cataloging of natural resources, sensitive habitats, emerging trends and use patterns of Parks visitors, and the direct involvement of the local community. The new Master Plan has considered earlier planning efforts, best management practices, and cost/benefit analysis of any proposed new uses. It also focused on diversifying water and land-based recreation, as well as the preservation and enhancement of the Park's natural resources.

The proposed project is the adoption and implementation of the proposed Coyote Lake-Harvey Bear Ranch County Park Master Plan. The Draft Master Plan was published in May 2003 (Bellinger Foster Steinmetz Landscape Architecture, 2003), and is incorporated by reference into this EIR. The Master Plan includes implementation of the Natural Resource Management Plan (Rana Creek, 2003), which also is incorporated by reference into this EIR.

APPROACH OF THE EIR

The Coyote Lake-Harvey Bear Ranch County Park Master Plan is subject to a program EIR because the Master Plan constitutes a series of actions that can be characterized as one large project that is related: "...a) geographically; b) as logical parts in a chain of contemplated actions; and c) in connection with the issuance of...plans...to govern the conduct of a continuing program..." (CEQA Guidelines 15168[a]). A program EIR generally establishes a foundation for "tiered" or project-level environmental documents that may be subsequently prepared in accordance with the overall program. According to CEQA Guidelines Section 15168(b), a program EIR can provide the following advantages:

- (1) Provide an occasion for a more exhaustive consideration of effects and alternatives than would be practical in an EIR on an individual action;
- (2) Ensure consideration of cumulative impacts that might be slighted in a project-level analysis;
- (3) Avoid duplicative reconsideration of basic policy considerations;
- (4) Allow the lead agency to consider broad policy alternatives and program-wide mitigation measures at the earliest possible time when the agency has greater flexibility to deal with basic problems or cumulative impacts; and

(5) Allow a reduction in paperwork.

The Program EIR analyzes, at a general level, a broad range of policies and management actions. In this way, decision-makers and the public can get a sense of the overall physical effects of the whole Master Plan. The purpose of the Program EIR is to focus attention to those aspects of a future project (often a long-range plan) that could bring about adverse physical impacts. A Program EIR in this way serves as a foundation for subsequent environmental documentation and/or clearance. CEQA Guidelines Section 15146 indicates that "the degree of specificity required in an EIR will correspond to the degree of specificity involved in the underlying activity which is described in the EIR...."

The Program EIR identifies and analyzes the potential environmental impacts of the program-wide policies and management actions presented in the Master Plan, and proposes mitigation measures that would reduce those impacts determined to be significant. With the Program EIR, the County and the public will be able to consider the Master Plan in its entirety and the impacts of associated with policies and management actions in the Master Plan, some of which might be overlooked if considered on a case-by-case basis. The Program EIR also allows for consideration of broad policy alternatives and their possible environmental effects in a more exhaustive manner than would otherwise be possible. Optimally, this process allows for development of program-wide mitigation measures at a stage when the agency has greater flexibility to deal with basic problems or cumulative environmental impacts, and provides an opportunity to reduce paperwork. Program-level analysis differs from project-level analysis, which benefits from detailed, specific plans of a project (i.e., grading, footprint) and usually applies more directly to actual construction.

This Program EIR calls out specific management actions or policies that would probably require further project-level environmental analysis, such as new trails or facilities. In addition, some County activities that require approval from other agencies may be subject to subsequent CEQA review. The project description included in Chapter II indicates those management actions that could require further environmental analysis. In addition, if new information becomes known prior to implementation of an action that could lead to significant impacts, such as project location, further environmental analysis would be required.

The following elements of the Master Plan are reviewed at a project-level in this report:

- Interim Park entrance at West Flat area
- Picnic areas in Western Flat area
- Trail staging areas at West Flat area and Mendoza Ranch
- Overflow Parking/equestrian camping in West Flat Area
- Phase 1 trails, gates and fencing, and trails naming and signage, West Flat Area and Mendoza Ranch Area,
- Implementation of the Natural Resource Management Plan
- Hang-gliding launch and emergency landing site in northern ridge area, and landing area adjacent to Roop Road
- Campground improvements: addition of showers and reduction of campground density
- Lakeside pedestrian trail and fishing improvements
- Self-launch areas for kayaks/non-motorized boats

- Historical/Cultural Preservation/Interpretation
- Use of southern pond for annual Fishability Days event

The following elements of the Master Plan are reviewed at a program-level in this report:

- Bicycle park
- Dog off-leash area
- Equestrian/agricultural events center
- Events pavilion
- Golf course
- Fishing pond
- Historic restoration and interpretation
- Maintenance facilities at West Flat and Lakeside areas
- Park Entrance (West Flat final configuration to replace interim plan; new entrance at Mendoza Ranch area)
- Ranger office
- Completion of staging areas
- Phase 2 and Phase 3 trails as described in the Trails Plan
- Informal lawn play area
- Implementation of the Natural Resource Management Plan
- Campground amphitheater
- New Lakeside campground (based on demand)
- Improvements to existing Lakeside entrance area, visitor center and maintenance yard
- Increased fish stocking, habitat and shoreline improvements
- Picnic area improvements and new group picnic area
- Water play area
- Youth campground
- Hang-gliding landing site Mendoza Ranch area
- Environmental education center
- Lakeside roadway safety improvements

This includes a specific analysis and mitigation so that decisions regarding these projects could be made as quickly as possible. If new information becomes known about these projects prior to implementation that could lead to significant impacts, such as a change in the project description, further environmental analysis could be required.

ENVIRONMENTAL REVIEW PROCESS

On March 14, 2003, the County issued a Notice of Preparation–Environmental Impact Report (NOP) to governmental agencies, organizations, and persons interested in the project. The NOP is included as Appendix A in this EIR. The NOP requested those agencies with regulatory authority over the project to identify the environmental issues relevant to their authority that should be addressed in the EIR, and encouraged agencies and the public, in general, to provide comments on the proposed content of the EIR. Comments on the NOP were received from the several local, state, and federal agencies. No members of the public submitted written comments on the NOP.

A kickoff meeting was held in November 2000 to provide the public opportunity to present comments on the proposed content of the Master Plan and EIR. The meeting was advertised in

the *Gilroy Dispatch* and *Morgan Hill Times* newspaper and on the Parks Department website, and the public was invited to attend. Approximately 120 members of the public attended the meeting; participated in roundtable discussions, and filled out comment cards. From this meeting and subsequent meetings, a mailing list of almost 500 names was developed. Only 22 people provided comments.

This Draft EIR will be published and circulated for review and comment by the public and other interested parties, agencies, and organizations for a 45-day period. The Draft EIR will also be available for review and comment on the internet, accessible at: http://www.parkhere.org and the Gilroy Public Library. The public review period will be from June 4, 2003, to July 21, 2003 A public hearing on the Draft EIR will be held during this time. The public is invited to attend the hearing and to offer comments on the Draft EIR. All comments or questions about the Draft EIR should be addressed to:

Elish Ryan, Park Planner Santa Clara County Parks Department 298 Garden Hill Drive Los Gatos, CA 95032 (408)355-2236

email: elish.ryan@mail.prk.co.santa-clara.ca.us

Following the public review, responses to all substantive comments received on the adequacy of the Draft EIR and submitted within the specified review period will be prepared and included in the Final EIR. The County will then review and consider the Final EIR prior to any decision to approve, revise and approve, or reject the proposed project. Prior to County approval of the Master Plan, the County must certify the Final EIR as complete and adequate and adopt a Mitigation Monitoring Program.

ORGANIZATION OF THE DRAFT EIR

This EIR is organized to allow the reader to quickly and logically review a summary of the analysis, review the recommended mitigation measures, and identify the residual environmental impacts after mitigation, if any (see Executive Summary). Those readers who wish to read the Draft EIR in greater detail are directed to Chapter 3, Environmental Setting, Impacts, and Mitigation Measures.

The Draft EIR begins with this **Introduction** (**Chapter 1**). The chapters following the Introduction are organized as follows:

Chapter 2, Project Description, provides a description of the project site and location, the project objectives, the proposed project characteristics, and an outline of the approval process.

Chapter 3, Environmental Setting, Impacts, and Mitigation Measures, contains an analysis of environmental topics. The discussion of each topic is divided into the *Setting* section that describes baseline environmental information and the *Project Impacts and Mitigation Measures* section that describes the project-specific impacts and mitigation measures.

Chapter 4, Alternatives to the Project, provides an analysis of a reasonable range of alternatives to the proposed project. As required by the CEQA Guidelines, a discussion of the reasons for selecting the alternatives analyzed in this section is provided, along with a comparative analysis of each alternative and identification of the "environmentally superior" alternative.

Chapter 5, CEQA Statutory Sections, reviews the significant, irreversible effects (if any) and cumulative impacts identified in Chapter 4, and describes the project's potential for inducing growth, as well as the short-term versus long-term productivity of the proposed project, as required by CEQA.

Chapter 6, List of Preparers, lists the firms and staff members that prepared the Master Plan and EIR.

Appendices, presents the background documents and technical information used in support of the impact analyses provided in the EIR. Appendix A is the NOP for the project. Appendix B is a summary of laws and regulations.

CHAPTER 2

PROPOSED PROJECT

PARK LOCATION

Coyote Lake—Harvey Bear Ranch County Park (Park) is located in the western foothills of the Mt. Hamilton Range (Figure 2-1). The Park lies east of the City of Gilroy, in southern Santa Clara County. The 4,448 acre site encompasses the entire western side of Coyote Lake, straddles the ridgeline that divides the upper Coyote Creek watershed and Coyote Lake from the Santa Clara Valley, and reaches to the valley floor near the community of San Martin.

GOALS AND NEED FOR THE MASTER PLAN

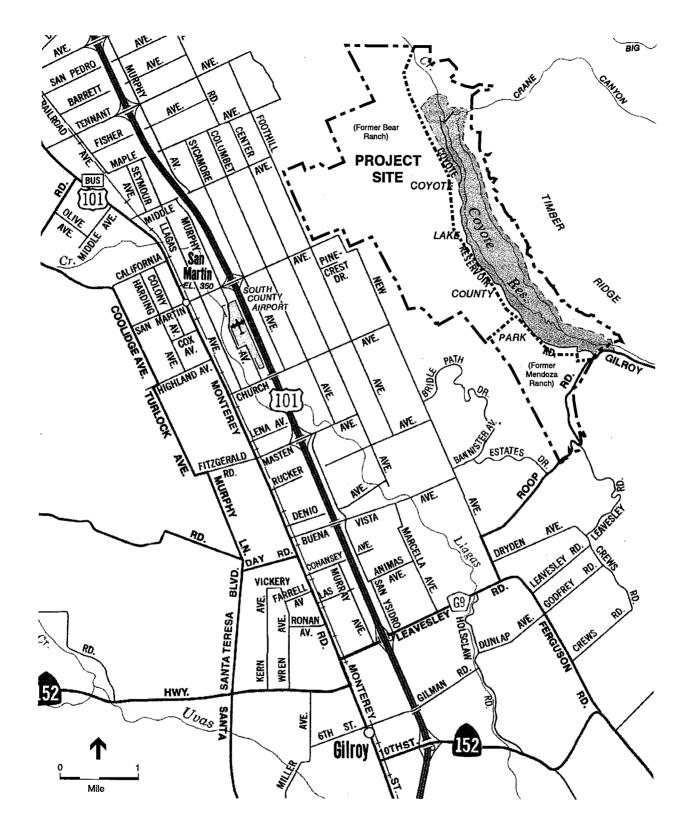
The Master Plan for Coyote Lake — Harvey Bear Ranch County Park establishes a direction for development of this significantly expanded Park. The Master Plan strives to balance a diversity of recreational needs of Santa Clara County Residents with goals for natural and cultural resource preservation and restoration, along with a desire to maintain the ranchland character that helped define much of the region. The following goals were established to guide the Master Plan process. These goals were compiled from a variety of sources, including the Task Force, County General Plan, Countywide Trails Master Plan, Strategic Plan documents, the previously prepared draft Coyote Lake Master Plan, and comments from the first community meeting. Master Plan goals include:

Recognize and plan for the regional context of Coyote Lake – Harvey Bear Ranch County Park.

- Where appropriate and feasible, provide regional trail connections to State, County, and other public parks and open spaces.
- Provide consistency with the goals and policies of the Santa Clara County Parks and Recreation Department, Countywide Trails Master Plan, and County General Plan.

Provide a variety of sustainable recreational opportunities consistent with the needs of Santa Clara County residents and compatible with the environmental, cultural and historic resources of the land.

 Provide areas of high an low-intensity recreational use activities based on sound resource management principles.



Coyote Lake - Harvey Bear Ranch County Park Master Plan EIR / 201017

Provide areas of land-based and water-based recreational activities.

- Recognize the needs of adjacent residents and property owners.
- Consider both environmental and financial aspects of sustainability.
- Incorporate opportunities for environmental, historic and cultural preservation, restoration, and interpretation.

Ensure public access to the Park for a wide range of users.

- Design recreational facilities, including trails, to be accessible to all people, regardless of
 physical abilities, consistent with the constraints of the natural landscape and physical
 resources of the site.
- Provide trails for a variety of users, including hikers, bicyclists and equestrians.
- Accommodate public transit access to the Park.
- Consider the concerns of adjacent residents and property owners when locating parking and staging areas.
- Consider public safety in remote and fire hazardous areas.

Preserve and enhance the natural, ranchland character of the Park.

- Park structures and recreational facilities should reflect and reinforce the distinct ranchland character of the Park. Consider the visual impact of Park facilities and structures.
- Facilities and infrastructure should be subordinate to the natural landscape setting. Indigenous plant material should be used where feasible.
- Management of the natural resources of the Park should enhance wildlife habitat, protect environmentally sensitive areas of the Park, reduce the threat of erosion and wildfire, restore native plant communities, and protect the water quality of Coyote Lake.
- Incorporate opportunities for interpretation of the Park's natural and cultural history.
- Consider programs and facilities to educate the public, especially youth, about Santa Clara County's ranching heritage.

Develop a plan that can be implemented over time, taking into account available resources, potential phasing, and long-term management implications.

- Consider the environmental resources of the land, as well as the existing and potential future human and financial resources of the County Parks and Recreation Department, as well as other agencies that will be responsible for the implementation and long-term management of the master plan.
- Consider opportunities for revenue generation that can off-set long-term management costs, consistent with other master plan goals.

- Continue to encourage interagency coordination and collaboration throughout the design process, as well as during implementation and long-term management.
- Coyote Lake and the surrounding watershed shall be managed to meet the mutually beneficial
 goals of the County and the Santa Clara Valley Water District, for joint water supply and
 recreational use, meeting the needs of Santa Clara County residents.
- Encourage partnerships with other agencies and organizations that can assist in implementing and maintaining Park facilities and programs.
- A phased program of Park improvements should be based on plan priorities determined by natural resource implications, funding for development, recreational need, logical construction and sequencing, coordination with reservoir management, and maintenance implications.
- Incorporate regular monitoring, review and update of the Master Plan to assess natural resource impacts, changes in recreational need, and available management resources to ensure the long-term sustainability of the Park.
- Strive to open portions of the Park for public use as soon as possible, consistent with other goals and CEQA requirements.

THE PROPOSED MASTER PLAN

OVERVIEW

Selection of program elements was guided by recommendations of the Task Force and Technical Advisory Committee, and suggestions made by the public. A preliminary environmental analysis, incorporated into the Master Plan Program Document (BFSLA, 2002), examined opportunities and constraints and screened certain elements based on the location and sensitivity of resources present and the potential for impacts that could result from implementation of the proposed facilities and programs. Discussion of the proposed Master Plan is organized as follows:

- Recreational Program Elements
- Trails Plan
- Historic Preservation and Interpretation
- Natural Resource Management

RECREATIONAL PROGRAM ELEMENTS

For planning purposes, the Park has been divided into four distinct planning zones, each with its own character and suite of program elements. The following describes the four planning zones as well as recreational program elements proposed within each zone. The locations of the four planning zones, as well as the location of proposed program elements within each zone, are summarized in Table 2-1 and depicted on Figure 2-2.

West Flat Area			, a
Program Element	Description	Comments	Phase
Bicycle Park	Fenced dirt area for practice jumping and riding (1-3 acres).	Locate to provide access from staging area and trails, and visibility for supervision, but screening from park entrance and adjacent properties.	2
	Possible use area for permitted special events.		
	•	No night use or night lighting.	
		Bike park may be operated through an agreement with bicycle organizations.	
Camping	Equestrian camping in overflow parking area.	Equestrian camping by permit in Phase 1, potential reservation in Phase 2.	2
		No facilities provided for equestrian camping.	
Dog Off-leash Area	Fenced dog off-leash area.	Locate to minimize conflict with equestrian center.	2
		Possible range of ground surfaces (turf, un-irrigated mowed grasses, compacted earth).	
		Accommodate time and space for turf rest/renewal within operations schedule.	
		Possible use for special events by permit.	

West Flat Area			
Program Element	Description	Comments	Phase
Equestrian/Agricultural Education Center	Use existing ranch structure (barns and corrals) to create equestrian/agricultural center that may include the following elements:	Use existing structures to the greatest extent possible. The primary new structure would be the arena. The arena may be covered.	2
	 historic/cultural interpretive displays and programs; multi-use arena that may be used for warm-up/cool-down associated with trail riding; equestrian events; agricultural education events; other special events; and use of existing barns for storage and maintenance, animal showing as a part of special events, and indoor interpretive displays. 	If the arena is covered, consider lighting for potential extended use in winter and special events, taking into account park operational issues of extended use and the need to eliminate glare into the adjacent neighborhood. Design should maximize flexibility to accommodate a variety of uses and programs. Consider seasonal equestrian day camps for children. Maintain infrastructure for grazing operation. Possible operation by lease operator or non-profit organization. See park development issues noted below.	
Events Pavilion	Indoor and outdoor spaces that could be rented for meetings, weddings, cultural and special events. Indoor space to accommodate up to 200 people per event.	Consider a cluster of indoor and outdoor spaces that could be rented individually for smaller events or together for larger events. Pavilion may be placed adjacent to golf course clubhouse for efficiency of infrastructure and	2 or 3
		management. Possible lease operation.	

West Flat Area			
Program Element	Description	Comments	Phase
Golf Course	18-hole golf course with clubhouse and support facilities.	See park development issues noted below.	2
	Predominant use of native plants for habitat restoration between	Possible lease or contract operation.	
	fairways and greens while maintaining functionality for golfers. Golf course to be regional model of environmentally sensitive design and operations.	Golf course design and operations to be consistent with County Golf Course Design Guidelines and County Integrated Pest Management	
	Provide native grass buffer zone between golf course and adjacent streets.	Program.	
Fishing Pond	New fishing pond.	Fishing pond may be coordinated with golf course design so that one side of the pond faces the golf course while the other side is accessible for fishing and near the group picnic area.	2
		Naturalized design to complement park setting.	
		Fishing pond should be incorporated into drainage design for West Flat Area.	
		Focus of fishing programs should be children and youth.	
	•	Develop stocking program.	
Historic/Cultural Preservation/	Protect and interpret site of Martin Murphy home. Provide interpretation of other cultural and historic sites.	Consider interpretive element for West Flat Area trails.	2
Interpretation		Consider grant opportunities for interpretive development.	
		Evaluate health of orchard for inclusion in historic area.	
Maintenance Facility	Maintenance facility for West Flat Area.	Provide adequate screening of maintenance area and equipment.	2

West/Flat Area			
Program Element	Description	Comments	Phase
Park Entrance	Park entrance off San Martin. Self-pay system and seasonal kiosk.	Interim entrance at existing location.	1, 2
		Final entrance configuration to be determined based on traffic study and detailed golf course design.	
		Entrance design to complement ranchland theme.	
Picnic Areas	Individual picnic areas located along selected trails and near staging areas.	Group picnic area parking may be separate from general staging area.	1, 2
	Group picnic site and parking for up to 200 people.	Group and some individual picnic sites should be located adjacent to irrigated turf and open fields.	
Ranger Office	Ranger office in association with historical area or equestrian/agricultural education area.	Ranger office will serve as park staff operations base for West Flat Area. It should be easily accessible to park users.	2
Staging Areas	Designated staging area for 50 cars and 25 horse trailers. Staging area to include bike racks, seating areas, drinking water, portable restrooms (Phase 1), watering troughs, trails access and trails signage.	Separate parking area for golf course, group picnic area and events pavilion.	1, 2, 3
		Portable restrooms may be replaced with permanent restrooms in Phases 2–3.	
	Staging area may include bus stop for transit access.		
	Unpaved overflow parking area to accommodate 125 vehicles.		

West Flat Area	A STATE OF S	Here C. C. Comments	ı.
Program Element	Description	Comments	Phase
Trails	Flat, accessible multi-use trails, perimeter trail, and connections to other Park trails.	Some trails to be accessible to horse-driven carts by reservation.	1, 2, 3
	Street-adjacent trails to controlled access points where feasible.	Consider interpretive element for some trails.	
	Regional trail connection to San Martin area trails.	While most West Flat Area trails will be open year round, access from the West Flat Area to Slope and Ridge Area trails may be limited or closed in winter.	
	·	Development/maintenance per Natural Resource Management Plan guidelines.	
Turf Area	Irrigated turf areas for informal recreational play.	Turf areas should be located adjacent to picnic areas and fishing pond.	2
Natural Resource Management	Development and uses to be consistent with Natural Resource Management Plan.	Maintain/improve grazing infrastructure for cattle loading/unloading at West Flat Area.	1, 2, 3
		Coordinate grazing infrastructure with staging area, trails and roadway layout.	
		Protect and enhance riparian corridors through West Flat Area.	

Development Issues for the West Flat Area

Water Availability

Multiple water sources and a water storage system integrated with the golf course design will be explored during subsequent design studies in order to minimize negative effects on groundwater supply. Consider hook-up to recycled water from Gilroy treatment plant.

Incorporate drought-tolerant native planting to minimize supplemental water needs.

West Flat Area			
Program Element	Description	Comments	Phase
Development Issues for	the West Flat Area		
Water Quality	Surface and groundwater quality shall not be adversely impacted by West Flatarea uses. "Best Management Practices", including County's Integrated Pest Management Program, shall be followed for all uses to minimize the risk of negative effects on water quality. Golf course design shall incorporate surfact water filtration though native grass drainage areas. Equestrian facilities and special events shall incorporate effective manure management practices.		rated Pest ne risk of rate surface ities and
		off-leash area, and bicycle park shall be osion and other potential impacts of water	
Drainage	Park features shall be des drainage patterns are not	signed so that current freshwater resources negatively affected.	and off-site
Native Habitat	uses shall be designed to	s, park peripheral areas, and transition are restore and enhance native habitat. Native us to the area shall be used as the predomi	trees and
Visual	West Flat Area uses shal and ridges.	not impede views from the valley floor to	the hillside
	Architectural design shall be consistent with the ranchland character theme and the San Martin Area Design Guidelines.		
	Landscape design shall be consistent with the ranchland character and shall emulate indigenous natural landscapes.		
	New structures shall complement the predominant character of the existing barns.		
	The golf course should be located on the valley floor only.		
	appropriate fencing inclu	tent with the ranchland character theme. Ende split rail, corral, and wire with wood poas a part of the golf course, it should be si	osts. Îf a
Feral Pigs	Feral pig control should by Natural Resource Manage	be consistent with county parks policies an ement Plan.	id the

Slopes and Ridge A	rea		
Program Element	Description	Comments	Phase
Hang Gliding/ Paragliding	Consider advanced-skill launch- site along northern ridge accessible by trail. Consider emergency landing site on plateau	This launch site for advanced pilots only and with access only by multi-use trails. No public motorized vehicular access.	1
	above West Flat Area. Target landing to be in Mendoza area.	Regular landing areas should be accessible to staff emergency response vehicles.	
Natural Resource Management	Recreational development and use to be consistent with Natural Resource Management Plan.	Fencing, gates, and watering troughs shall be adjusted to be consistent with Natural Resource Management Plan grazing recommendations and to minimize conflicts between grazing and trails.	1, 2, 3
		Protect existing native habitats and provide incremental restoration to expand native vegetation areas.	
Trails	Multi-use trails where feasible. (Some trails may not be multi-use due to topography, safety and/or environmental concerns.) Some trails may be seasonal.	Use existing ranch roads where feasible as trails.	1, 2, 3
		Some portions of ranch roads will be re-routed due to steep grades and environmental	
	Mix of trails to provide loops of	concerns.	
	varying distance and park experience.	See Park Trails Plan.	
	Regional trail connections to the Bay Area Ridge Trail. Trail connections to other park areas.	Possible seasonal closures due to severe weather conditions, trail damage and adverse soil conditions.	
	Some interpretive trails/signage where feasible.	Development and maintenance per Natural Resource Management Plan guidelines.	

Program Element	Description	Comments	Phase
Amphitheater	Small amphitheater close to existing campground.	Use of amphitheater to support park interpretive programs.	2
Boating	Same as existing with self-launch areas with floating docks for kayaks and non-motorized small boats.	Access to self-launch areas via pedestrian trails from campgrounds, picnic areas and parking.	1, 2
Camping	Reduce density of existing campground by 10-15 sites. Add native grass spaces and shade trees.	Some replacement sites may be designed to accommodate RV's, but no RV disposal facility onsite.	1, 2, 3
	Add showers. Replace lost camp sites at adjacent Lakeview Meadows area. Some of the replacement sites as part of expanded campground may be for group camping.	Consider RV size restrictions based on Roop Road and park entrance road safety conditions.	
	Provide new campground near existing boat launch if future demand dictates need for additional camp sites.		
Entrance Kiosk	Upgrade entrance and kiosk.	Improve customer service for park users.	2
		Upgrade kiosk to newer standard design.	
Entrance Road	Minor safety improvements to lakeside road where feasible.	Improvements may include expanded shoulder areas and bank stabilization.	2, 3
Fishing	Consider increased stocking/habitat/shoreline improvements for fishing.	Designate controlled access areas coordinated with lakeside trail system to minimize impacts to shoreline.	2, 3
Historic/Cultural Preservation/ Interpretation	Protect existing known resources.	Potential for expanded interpretation in conjunction with environmental education center.	1, 2, 3
Maintenance Facility	Remodel/expand with redesign of kiosk area.	Improve maintenance support and equipment storage. Screen facility from visitor areas.	2, 3

Program Element	Description	Comments	T
<u> </u>		Comments	Phase
Natural Resource Management	Recreational development and use to be consistent with Natural Resource Management Plan.	Lake water quality to be protected through coordination with SCVWD.	1, 2, 3
	Protect sensitive shoreline environmental resources through trail and other improvements to control and focus shoreline access.		
Picnic Areas	Minor improvements of existing picnic sites, including new shade trees and/or shade structures. Relocate Lakeview Meadows picnic sites to other sites along lake and to Mendoza area.	Provide access and parking for new picnic areas	2, 3
	Provide group picnic site and parking to accommodate up to 50 people near boat launch and Sandy Beach.		
Ranger Offices / Visitor Center	Maintain existing offices /visitor center near kiosk and maintenance facility.	Consider upgrade/expansion of visitor center as part of entrance area improvements.	3
Ranger Residence	No change.	Maintain separation from visitor areas.	N/A
	Existing ranger residence near campground to remain.		
Trails	Pedestrian trail improvements to lakeside amenities.	Development and maintenance per Natural Resource	1, 2, 3
	Separate multi-use trail west of Lakeside Road with buffer zone from the lake edge.	Management Plan guidelines.	
	Regional trail connection to Anza National Historic Trail and to Coe Park, other public lands.		
	Regional and park trail connections to be multi-use where feasible.		
Water Play	Fenced and self-contained water play feature, such as sprayers, fountains, etc. for seasonal use.	Should be located in or within easy walking distance to campground.	2, 3

Mendoza Ranch			
Program Element	Description	Comments	Phase
Camping	Approximate 100-person youth campground associated with environmental education center. Equestrian camping by permit.	Imported food for equestrian camping to be limited to grain or pelleted food, or certified weed-free hay to minimize weed infestation. Also consider pasturage.	2, 3
Park Entrance	Park entrance at existing Mendoza Ranch. Entrance on Roop Road.	Kiosk may be needed in the future for access control to environmental education center/youth campground and trail system.	1, 2, 3
Staging Area	Staging area to accommodate up to 10 horse trailers, 40 cars and parking for environmental education center/youth camping. Staging area to include bike racks, seating areas, drinking water, restrooms, watering trough and hitching posts, trails access and trails signage.	Mendoza staging and camping areas should be designed to park vehicles near Roop Road entrance and then enjoy property via non-motorized trail access.	2, 3
		Possible overflow parking areas near Roop Road to accommodate special events at youth campground/environmental education center.	
		Permanent water supply and restrooms may not be provided until later plan phases.	
Environmental Education and Interpretation	Expansion/conversion of Mendoza House as Environmental Education Center, or creation of separate Environmental Education Center, possibly using barn area.	Possible non-profit lease to build and/or operate.	2, 3
Hang Gliding/ Paragliding	Launch and landing sites as noted on plan. Northern Mendoza landing site is included in Phase 1 and may include gated access from Roop Road. Southern Mendoza landing site is included in Phase 2 or 3 and will require hiking out to main staging area. No Roop Road access from Southern landing site.	Access to launch site by multi- use trail with no motorized vehicular access.	1, 2, 3

Mendoza Ranch A	rea		
Program Element	Description	Comments	Phase
Historic/Cultural Preservation/ Interpretation	Protect existing known resources with interpretation.	Evaluate further historic significance of structures and barn complex.	1, 2, 3
Natural Resource Management	Recreational development and use to be consistent with Natural Resource Management Plan.	Protect existing native habitats and provide incremental restoration to expand native vegetation areas.	1, 2, 3
Picnic Areas	Family picnic sites near staging area and along selected trails.		2, 3
	No group picnic facility.		
Trails	Accessible multi-use trails where feasible and connections to other Park trails, including regional trials.	Use existing ranch roads where feasible as trails.	1, 2, 3
		See Parks Trails Plan.	
	Street-adjacent trails to controlled access points where feasible.	Development and maintenance per Natural Resource Management Plan guidelines.	
Temporary Fishing Pond	Stocking of existing Southern pond near Roop Road for youth-related special fishing events.	Use as stocked fish pond (for special events only) to be phased out with completion of fishing pond in Western Flat Area.	1
		Restore pond to more natural condition following interim fishing use.	

SOURCE: Bellinger Foster Steinmetz Landscape Architecture

SOURCE: Bellinger Foster Steinmetz Landscape Architecture

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Figure 2-2 Draft Master Plan

LAKESIDE AREA

The Lakeside Area is the existing Park area currently open to the public. The recreational focus consists of activities on and near Coyote Lake, such as camping, boating, fishing, hiking and horseback riding. These activities are proposed to continue, with the addition of the following enhancements (Table 2-1):

- Campground improvements, including addition of showers, reduction in campground density, and the addition of replacement of camping spaces on an adjacent site;
- Water play area and amphitheater near the campground;
- Picnic area improvements and construction of a new group picnic area;
- Potential future addition of a new campground if demand dictates;
- Trail improvements;
- Self-launch area for kayaks and non-motorized boats; and,
- Improvements to the Park entrance area, kiosk, visitor center, and maintenance facility.

MENDOZA RANCH AREA

The Mendoza Ranch, located in the southern end of the Park off Roop Road is currently not open to the public, but is used for Park administration. The ranch contains some of the most beautiful and pristine areas of the Park, including some of the best stands of native grassland. With the exception of the areas around the existing ranch house and barn, the Mendoza Ranch area is proposed to remain essentially undeveloped, accessible only by trails. Proposed improvements for the Mendoza Ranch Area include (Table 2-1):

- Trail staging area;
- Environmental education center and youth campground;
- Family picnic sites;
- Hang gliding/paragliding launch and landing sites: and.
- Multi-use trails and regional trail connections.
- Equestrian campground by special use permit.

SLOPES AND RIDGE AREA

The slopes and ridges comprise the spine of the Park running from the northwest to the southeast. This area of the Park has spectacular vistas to the valley floor to the west and Coyote Lake and Palassou Ridge to the east. Some of the most sensitive habitat areas are located along the ridge line. The steepness of the terrain, recreational facilities are limited to trails and a hang gliding/paragliding launch site accessible only by multi-use trail. A portion of the ridge trail will become part of the Bay Area Ridge Trail, but is being evaluated separately from the remainder of trails within the Park.

WEST FLAT AREA

The West Flat Area of the Park has the greatest potential for more active recreational facilities given its relatively level topography, history of cultivation, proximity to population centers, and easy access from San Martin Avenue. Most of the Park's new development is proposed for this

area, including the gold course, events pavilion and agricultural/equestrian education center. All program elements proposed for the Western Flat Area are summarized in Table 2-1 and are illustrated in Figure 2-3. Most of the proposed new development is proposed for this area and includes:

- 18-hole golf course;
- Equestrian/agricultural education center;
- Events pavilion;
- Bicycle Park;
- Multi-use trails:
- Historic area centered on the Martin Murphy homesite and ranch era orchard;
- Fishing pond;
- Dog off-leash area;
- Family and group picnic area;
- Irrigated turf areas;
- Satellite ranger office and maintenance facility; and
- Equestrian camping by special use permit.

Development Issues for the West Flat Area

Water Availability

Multiple water sources and a water storage system integrated with the golf course design will be explored in order to minimize negative effects on groundwater supply. Consider hook-up to recycled water from Gilroy treatment plant.

Water Quality

Surface and groundwater quality shall not be adversely impacted by West Flat Area uses. "Best Management Practices," including County's Integrated Pest Management Program, shall be followed for all uses to minimize the risk of negative effects on water quality. Golf course design shall incorporate surface water filtration through native grass drainage areas. Equestrian facilities and special events shall incorporate effective manure management practices.

Drainage

Park features shall be designed so that current off-site drainage patterns are not negatively affected.

Native Habitat

Golf course "rough" areas, Park peripheral areas, and transition areas between uses shall be designed to restore and enhance native habitat. Native trees that are indigenous to the area shall be used.

Visual

West Flat area uses shall not impede views from the valley floor to the hillside and ridges. Architectural design shall be consistent with the ranchland character theme and the San Martin Area Design Guidelines. Landscape design shall be consistent with the ranchland character and

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Figure 2-3

Proposed Western Flat Facilities

SOURCE: Bellinger Foster Steinmetz Landscape Architecture

shall emulate indigenous natural landscapes. The existing barns should remain the most dominant visual structures. The golf course should be located on the valley floor only. Fencing should be consistent with the ranchland character theme. Examples of appropriate fencing include split rail, corral, and wire with wood posts. If a driving range is included as a part of the golf course, it should be sited to minimize fencing.

PARK TRAILS PLAN

REGIONAL TRAILS OVERVIEW

The Park Trails Plan is not only significant for access to diverse recreational experiences within the Park, Coyote Lake—Harvey Bear Ranch County Park, but is also integral to numerous regional trail alignments that either cross through, or are adjacent to the Park, as identified in the 1995 County Wide Trails Master Plan update, and as noted below and shown on Figure 2-4.

Regional Trail Alignments within or Adjacent to the Park

Bay Area Ridge Trail

(Regional Trail Route R5-B in the 1995 Countywide Trails Master Plan) The Bay Area Ridge Trail system follows the ridges and mountains that circle San Francisco Bay, including the Diablo Range where the park is located.

Juan Bautista de Anza National Historic Trail (Southern Expedition Route)

(Regional Trail Route R1-C in the 1995 Countywide Trails Master Plan) This nationally recognized trail commemorates the route taken by Anza from Sonora, Mexico to the San Francisco Bay in 1775–1776.

Benito-Clara Trail

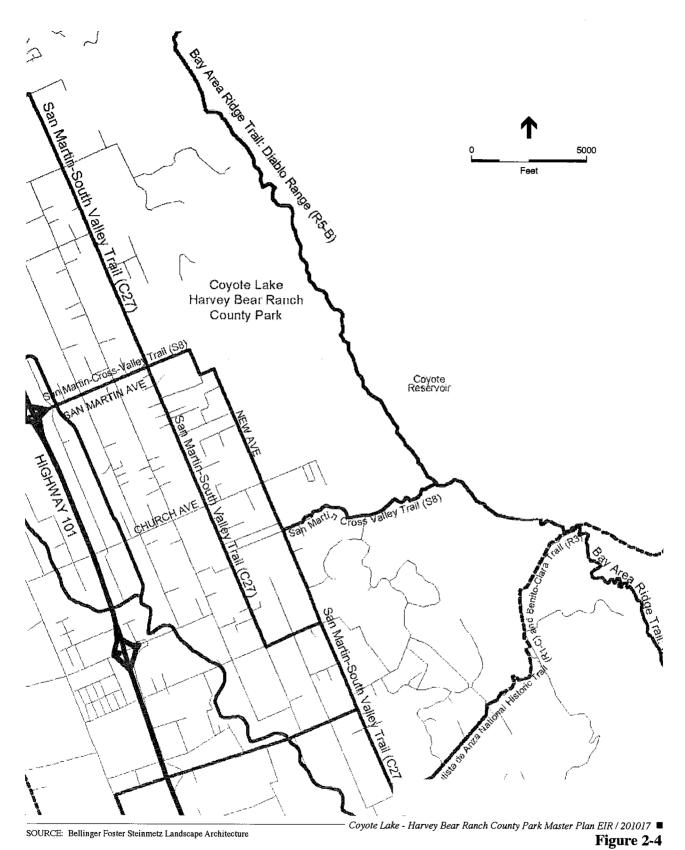
(Regional Trail Route R3 in the 1995 Countywide Trails Master Plan) This is a loop trail linking recreational resources in Southern Santa Clara County and Northern San Benito County, including the cities of Morgan Hill, Gilroy, Hollister and San Juan Bautista.

San Martin Cross-Valley Trail

(Subregional Trail Route S-8 in the 1995 Countywide Trails Master Plan) This is an east-west route connecting trails in southwest Santa Clara County (Hayes Valley and Uvas Reservoir areas), to the Anza Trail and Bay Area Ridge Trail.

San Martin/South Valley Trail

(Connector Trail Route C-27 in the 1995 Countywide Trails Master Plan) This is a north-south trail connecting Morgan Hill with the Anza Trail and the Bay Area Ridge trail.



Proposed Trail Segments and Abandoned
Segments County-Wide Trails Master
Plan Routes

The Park Trails Plan provides links to existing and future regional trails within the vicinity of the park, and establishes segments for those regional trail alignments that cross through the Park, such as the Bay Area Ridge Trail.

INTERNAL PARK TRAILS

The trails plan strives to provide as many multi-use trails as feasible, and also creates limited use trails where applicable. The trails are proposed to provide loops and access to varying locations and amenities of the Park, with varying experience and degree of difficulty. Existing ranch roads were used where feasible, but due to steep terrain, soil conditions, sensitive habitats, and safety and maintenance concerns, the trails outlined in this plan do not incorporate all existing routes. Some existing routes are proposed to be abandoned. Abandoned trails will be restored to adjacent natural conditions. In some instances, trails were re-routed or extended to provide access to amenities proposed in the Master Plan. Figures 2-4, 2-5, 2-6, and 2-7 illustrate existing trail and road segments, proposed trails alignments, and trail construction phases.

Trail Use

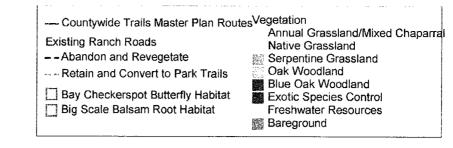
There are eleven multi-use trails proposed for the park. Additionally, there are two trails for bicycle and pedestrian use, five trails for pedestrian use only. Additional pathways to future camping, picnic and other proposed Master Plan amenities may be needed but are not identified as a part of the Park Trails Plan. These minor trails will be designed as a part of phased implementation.

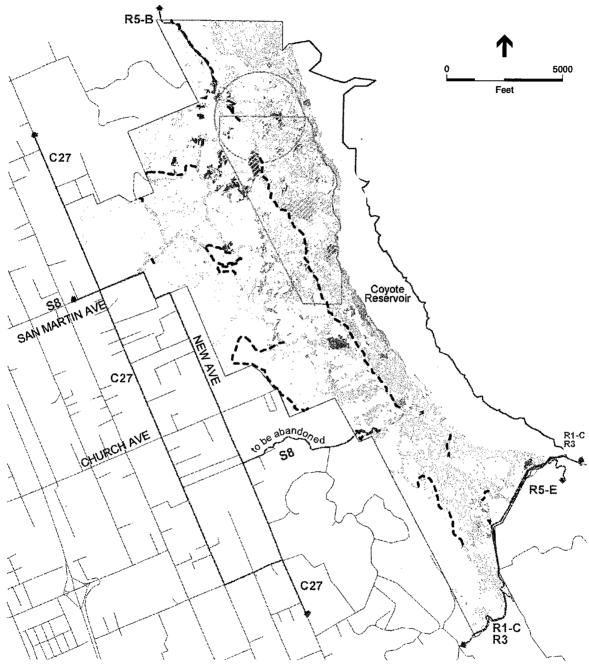
There are a total of approximately 30 miles of trails proposed for the park: 21 miles of multiuse trails, 7.2 miles of pedestrian only trails, and 1.75 miles of bicycle/pedestrian trails.

Access

Equestrians are allowed on most trails in the park, and on trails leading to equestrian staging and/or equestrian camping as proposed in the Master Plan. A multi-use loop trail is proposed around the West Flat Area. This loop trail is proposed to combine a paved surface for year-round bicycle/pedestrian use with a soft-surface shoulder for equestrian use. Multi-use trails may be accessible to horse-drawn carts by permit. Since equestrians are not allowed to be near the lake shore due to water quality issues, no equestrians are allowed on the spur trails that provide access to the lake.

Bicycles are allowed on most trails in the park, and on the trail that runs parallel and to the west of the paved road in the existing County Park. This two-plus mile trail in the existing park links the proposed trail system and new amenities to existing camping facilities and the boat launch area. Equestrians are allowed on the northern portion of this trail, but not the southern portion, due to steep terrain and narrow trail width.

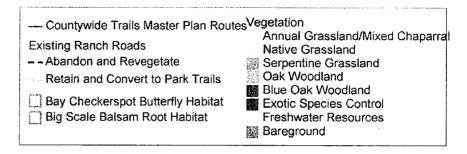


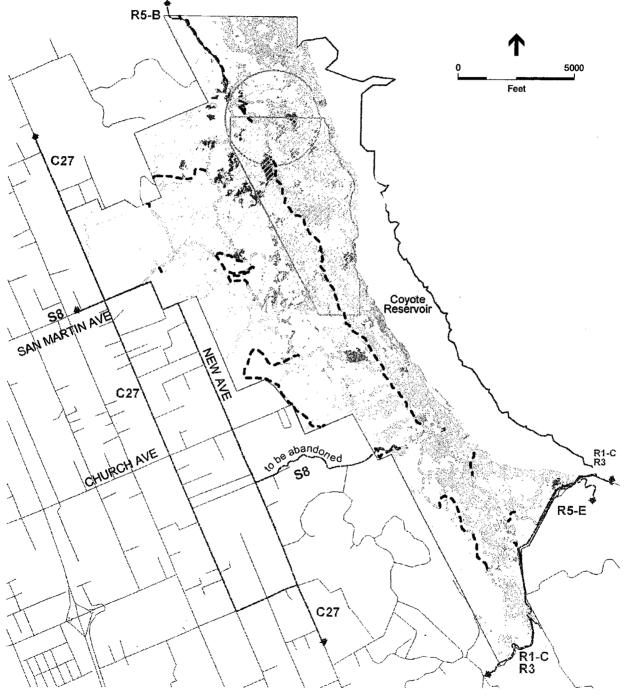


SOURCE: Bellinger Foster Steinmetz Landscape Architecture

Coyote Lake - Harvey Bear Ranch County Park Master Plan EIR / 201017

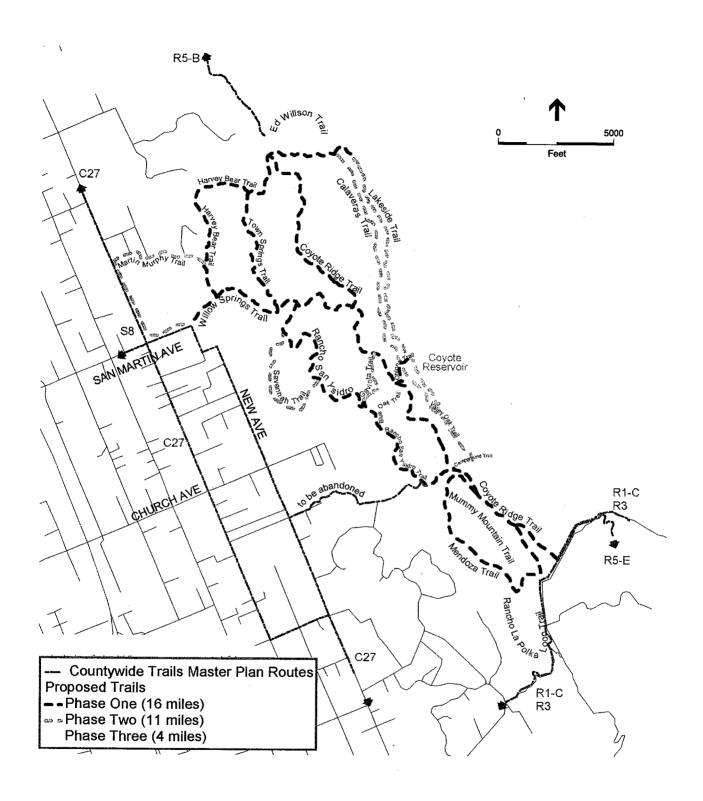
Figure 2-5
Ranch Road NetworkSegments to Retain and Abandon (Proposed)





SOURCE: Bellinger Foster Steinmetz Landscape Architecture

Coyote Lake - Harvey Bear Ranch County Park Master Plan EIR / 201017



There are five pedestrian-only trails to provide access to remote locations of the park or connections to other trail segments. These trails are proposed as single-track trails, due to steep terrain and potential impact to sensitive habitats.

Specific interpretive trail elements are not included in the Trails Plan but will be coordinated by the Parks Department Interpretive Program, as a part of phased implementation.

Subregional Trail Connection to be Abandoned

The Countywide Trails Master Plan shows a portion of the San Martin Cross Valley Trail (S-8) to connect to the park south of the Proposed West Flat Area entrance at San Martin Avenue. Since all park access is proposed at controlled entry points, and the intent of the trail connection will be fulfilled at the San Martin Avenue entrance, this proposed trail spur is recommended to be abandoned (see Figure 2-5).

Seasonal Closures

Some trails may need to be closed seasonally, due to soil conditions, severe weather, and potential impacts to sensitive habitats. Trails closures will be assessed seasonally as part of regular natural resources monitoring proposed in the Natural Resources Management Plan.

Grazing Coordination

Fences and water troughs for grazing cattle may be moved from the existing locations, according to the Natural Resources Management Plan. The location of new fencing, gates, and water troughs should not be near trail junctions, in order to minimize potential conflicts between public use and cattle grazing. This effort should be coordinated with the Natural Resources Management Plan.

Trail Phasing

There are three phases proposed for constructing trails in the park based on trail priorities and ease of implementation. Available funding will be a major consideration in determining when trails are implemented. The first phase focuses on implementing the Bay Area Ridge Trail within the park, providing basic public access from the valley floor to the ridgeline, and realigning ranch roads where needed to enhance public safety and protect sensitive environmental resources. Phase One trails also connect staging and camping areas with the trail system, and provide two loops (two at the northern portion of the park, one in the middle of the trail system, and one at the southern end). All of these trails are multi-use except two segments that connect the lake view trail alignment with the existing boat launch area and dam. These segments are for pedestrian and bicycle use. Some of the Phase One trails or portions of these trails will utilize existing ranch road alignments, which make them easier to implement. Trail segments that are proposed to be abandoned will be removed in Phase One.

Phase Two trails are those that may take longer to construct, as most of these trails are reroutes or new construction. Two of these trails are limited use, one for pedestrian use only and one for pedestrians and bicyclists. Four Phase Two trails are multi-use. While Phase Two trails will enhance the park user's experience, they are not essential to basic park operations and access.

Phase Three trails are limited-use trails—four pedestrian-only trails and one trail for bicycle and pedestrian use that connects to the proposed amphitheater. These trails are shorter, internal connector trails, and provide pedestrian-only (or pedestrian and bicyclist) connections to other trail segments. Phase Three trails are proposed as single-track trails.

Related site improvements will be developed concurrently with phased trail implementation, including signage, gates, fencing, staging areas, water (for people and horses), and restrooms (portable and/or permanent).

HISTORIC PRESERVATION AND INTERPRETATION

Restoration and/or protection of historic features is proposed for historic resources in all areas of the Park. Interpretation of historic sites is proposed for all areas where interpretation will not impede protection of the historic resource.

NATURAL RESOURCE MANAGEMENT

A separate Natural Resource Management Plan was prepared concurrent with the Master Plan. While the Master Plan proposes uses and facilities for the park, the Natural Resource Management Plan describes how the park's natural resources should be protected and enhanced over time, in conjunction with proposed uses and improvements as noted in the Master Plan. As these plans were prepared concurrently, placement of recreational facilities is consistent with the Natural Resource Management Plan. When implemented in conjunction with each other, both plans will ensure that recreational and resource management activities are complementary, not conflicting.

The Natural Resource Management Plan provides management and monitoring guidelines for a wide range of applications, including the following:

Grazing

The objective of grazing is to manage and promote perennial grass seedlings and/or relict native grass stands of the Park. Grazing may be used to reduce yellow star thistle and other broadleaf weed infestations. Grazing may also be used to reduce the standing dead biomass at the end of each growing season so that wildfire risks are minimized.

Prescribed Fire

Some of the benefits of fire are that it can be timed to prevent seed maturation in annual exotic pest plants, can help achieve biomass management objectives, and can invigorate new growth in woody shrubs, thereby enhancing browse for deer and other foragers.

Careful consideration must be made before fire is used in a particular management area. The Natural Resource Management Plan does not recommend the use of fire until detailed planning has been conducted and reviewed, but guidelines for development of a prescribed fire plan and monitoring methods are presented.

Grassland Restoration

Guidelines for collecting grass seed, controlling weeds, and planting seed are presented in the Natural Resources Management Plan. Monitoring methods and success criteria are outlined for various grassland restoration and enhancement techniques (e.g. seeding, grazing, and burning).

Oak Woodland Restoration

Methods for collecting, processing, and planting acorns are provided. The Natural Resource Management Plan also outlines monitoring methods and success criteria and provides a timetable for restoration and monitoring activities.

Protection and Enhancement of Freshwater Resources

Planting native riparian and marsh vegetation around stock ponds will greatly increase habitat value for birds and amphibians. Methods for stock pond revegetation are provided including appropriate species, timing, and location. Water quality and riparian/wetland vegetation should be monitored regularly to: 1) assess habitat quality for aquatic organisms; and 2) assure that recreational use and management activities within the Park are not degrading freshwater resources.

Erosion Control

Erosion may lead to impaired water quality, destruction of native vegetation, and loss of valuable wildlife habitat. In addition, erosion may create safety hazards for Park staff and visitors. Erosion features should be repaired and restored, and proper management practices should be implemented to prevent future erosion. Several erosion control techniques as well as monitoring guidelines are provided.

Exotic Species Control

Invasive exotic plant species can be a major concern in managing relict native habitats. Basic precautions used to prevent introducing or spreading noxious weeds are discussed. Weed control methods, monitoring methods, and success criteria are also provided.

Sensitive Species Management

Specific management and monitoring actions are discussed to protect sensitive species and their habitat. Guidelines are provided for species known to occur in the Park as well as those with potential to occur in the Park. Avoidance and mitigation measures are provided for trail construction activities where appropriate.

Trails

Trail construction and maintenance guidelines associated with the Park Trails Plan are discussed, including restoration of abandoned roads. Methods for reducing conflicts between grazing and visitor use are also provided.

PROJECT PHASING

The Master Plan establishes the County's vision for improvement and management of the Park for the next 20 years. Implementation of Phase 1 and on-going projects are expected to begin upon completion of the environmental review process. In particular, visitor access to the Bear Ranch portion of the Park using the existing system of ranch roads is considered the highest priority. Action would begin immediately to prepare access locations and basic staging facilities, basic trail signage and guide maps, and ranger supervision. Other Phase 1 projects requiring additional planning, funding and implementation are expected to occur over the next two years.

PHASE 1 PROGRAM ELEMENTS

Phase 1 includes those improvements needed to open the Park to public use and to provide basic improvements to the existing Coyote Lake Campground. Phase 1 should be completed within three years of Master Plan approval. The following improvements are included in Phase 1:

The following Phase 1 and on-going projects are reviewed at a project-level in this report:

- Interim Park entrance at West Flat area
- Picnic areas in Western Flat area
- Trail staging areas at West Flat area and Mendoza Ranch
- Overflow Parking/equestrian camping in West Flat Area
- Phase 1 trails, gates and fencing, and trails naming and signage, West Flat Area and Mendoza Ranch Area,
- Implementation of the Natural Resource Management Plan
- Hang-gliding launch and emergency landing site in northern ridge area, and landing area adjacent to Roop Road
- Campground improvements: addition of showers and reduction of campground density
- Lakeside pedestrian trail and fishing improvements
- Self-launch areas for kayaks/non-motorized boats
- Historical/Cultural Preservation/Interpretation
- Use of southern pond for annual Fishability Days event

Phase 2 and Phase 3 consists of longer-term projects, which are presented at a conceptual level in the Master Plan. These actions will require unspecified time to develop detailed plans and may require subsequent environmental analysis to satisfy CEQA or other environmental compliance requirements. Some of these projects are likely to occur begin within several years, but others may not be undertaken until later in the 20-year planning window.

PHASE 2 AND PHASE 3 PROGRAM ELEMENTS

Phase 2 focuses on some of the more active recreational facilities in the West Flat Area. Ideally, if funding permits, Phase 2 projects should be completed in one phase; however, the realities of funding may require that Phase 2 be divided into multiple phases. Completion on Phase 2 will be contingent on funding availability, but a goal should be established to completing Phase 2 within 5 years of Master Plan approval.

Phase 3 focuses on projects that may have a longer timeline due to funding availability or where implementation should be based on future demand that is not yet demonstrated. Some Phase 3 projects (such as the Environmental Education Center and youth campground) may become part of Phase 2 if funding becomes available. Completion of Phase 3 will be contingent on funding availability and/or demand. No timeline given, but implementation may take 10 years or more.

The following Phase 2 and Phase 3 actions are reviewed at a program-level in this report:

- Bicvcle park
- Dog off-leash area
- Equestrian/agricultural events center
- Events pavilion
- Golf course
- Fishing pond
- Historic restoration and interpretation
- Maintenance facilities at west Flat and Lakeside areas
- Park Entrance (West Flat final configuration to replace interim plan; new entrance at Mendoza Ranch area)
- Ranger office
- Completion of staging areas
- Phase 2 and Phase 3 trails as described in the Trails Plan
- Informal lawn play area
- Implementation of the Natural Resource Management Plan
- Campground amphitheater
- New Lakeside campground (based on demand)
- Improvements to existing Lakeside entrance area, visitor center and maintenance yard
- Historical/Cultural Preservation/Interpretation
- Picnic area improvements and new group picnic area
- Water play area
- Youth campground
- Hang-gliding landing site Mendoza Ranch area
- Environmental education center
- Lakeside roadway safety improvements

MITIGATION MEASURES INCLUDED IN THE PROJECT

To ensure that implementation of the Master Plan protects natural, cultural, and social resources, a consistent set of mitigation measures would be applied during implementation of specific projects and program elements to avoid, minimize, and mitigate adverse impacts. Mitigation measures included in the Master Plan include those listed below, in addition to those presented in Chapter 3.

DESIGN GUIDELINES

Projects shall avoid or minimize impacts to natural, cultural, and social resources and shall be designed to work in harmony with the surroundings. Projects should be sustainable whenever practicable, by recycling or reusing materials, by minimizing materials, and by minimizing energy consumption.

ENTRANCES

Park entrances are limited to three locations: the existing Coyote Lake Park entrance off of Roop Road, a new entrance to the Mendoza Area also off of Roop Road, and a new entrance to the West Flat Area from San Martin Avenue. While street-adjacent trails will be provided in some areas, these trails should direct Park access to the major entrance points listed above. Other trail entrances are discouraged in order to minimize parking for trail access and Park use in adjacent residential areas.

The entrances to the West Flat Area from San Martin and to the Mendoza Area from Roop Road should be designed to enhance the ranchland theme. Traditional ranch posts and beams could be placed at these entrances. (If this type of entrance feature is used, it should have sufficient clearance for the large trucks required for grazing operations and emergency response.) The entrance road from San Martin Avenue should be re-aligned to be at right angles with San Martin Avenue and to provide safer sight lines at the entrance intersection. Final location of the entrance intersection should be coordinated with adjacent properties and driveways to maximize safety and minimize neighborhood impact.

Consider planting an allee of trees along the San Martin Avenue entrance, selecting tree species that would enhance the ranchland character theme.

Parks Department standard kiosks may be used at the entrances, although façade enhancements may be used (such as stone bases or wood siding) that is consistent with the ranchland theme.

ARCHITECTURE

In the West Flat and Mendoza areas, architecture of new facilities should enhance the existing rustic ranchland character. In the West Flat area, the existing barns should remain the dominant structures, with no other structure exceeding the barns in height. Appropriate materials for the clubhouse and events pavilion include wood, stone and plaster. New structures should include arbors, porches and patios to blend indoor and outdoor spaces. New architectural features in the Lakeside Area should blend with the existing architectural styles.

FENCING

Fencing should be consistent with the ranch character. Split rail, corral-style, and wood posts with barbed wire all are appropriate styles. Chain link fencing should not be used except in areas that are not readily visible to the public, such as maintenance areas. Pig fencing may be needed in

some areas. Typically, pig fencing is buried 12-18 inches in the ground to prevent burrowing under the fence. Wire fencing may be used and attached to split rail or corral style fence to blend with other fencing.

ROADS

Roads should be designed to be as narrow as possible while meeting established safety standards. Wherever feasible, follow existing roadway alignments. Roads with regular use (for example, entrance roads and roads leading to major attractions) should have asphalt paving, while spur or secondary roads may remain unpaved using compacted base material. Roads should have an unpaved shoulder where feasible, although some areas may require a curb, for example in an area where a trail runs parallel to a road. All ranch roads along the ridgeline will be closed to public motorized vehicular use and will be converted to trail use or abandoned as described in the Trails Plan. The roads in the West Flat Area should be designed to accommodate large trucks needed for grazing operations.

STAGING AREAS

Trail and access staging areas may be paved with asphalt or unpaved with road base material. The most heavily used staging areas should be paved. Staging areas will comply with ADA accessibility guidelines. Overflow paving areas should be grass that can be mowed seasonally. The West Flat Area should be designed to accommodate a future bus stop for public transit.

BEST MANAGEMENT PRACTICES

The County (and its contractors) shall implement the following best management practices, as appropriate, prior to, during, and/or after project implementation. These BMPs are adapted from the *California Storm Water Best Management Practice Handbooks* (Stormwater Quality Task Force, 1993). Specific tasks would include, but are not limited to, the following:

- Inspect the project to ensure that impacts stay within the parameters of the project and do not
 escalate beyond the scope of the Environmental Impact Report, and conforms with other
 applicable permits or project conditions.
- Implement compliance monitoring to ensure the project remains within the parameters of California Environmental Quality Act and other applicable permits or project conditions. Compliance monitoring would ensure adherence to mitigation measures and would include reporting protocols.
- Implement natural resource protection measures. Standard measures include construction scheduling, biological monitoring, erosion and sediment control, use of fencing or other means to protect sensitive resources adjacent to the work area, and revegetation. The measures include specific monitoring by resource specialists as well as treatment and reporting procedures.
- Implement the necessary cultural and historic resource protection measures. Measures could include monitoring of construction in sensitive areas.

- Confine work areas and equipment to the smallest area necessary.
- Steam-clean heavy equipment prior to its entry into the Park to prevent importation of nonnative plant species, and repair all petroleum leaks prior to work near the wetlands or waterways. Tighten hydraulic hoses and ensure they are in good condition.
- To minimize the possibility of hazardous materials seeping into soil or water, check equipment frequently to identify and repair any leaks, as directed in the spill prevention and countermeasure plan. Standard measures include hazardous materials storage and handling procedures; spill containment, cleanup, and reporting procedures; and limitation of refueling and other hazardous activities to upland/nonsensitive sites. Provide an adequate hydrocarbon spill containment system (e.g., floatable absorption boom, absorption materials, etc.) on site, in case of unexpected spills in the project area. Ensure equipment is equipped with a hazardous spill containment kit. Ensure that personnel trained in the use of hazardous spill containment kits are on site at all times during construction activities.
- Store all construction equipment within delineated work limits.
- Implement measures to reduce effects of construction on visitor safety and experience. Safeguard visitors, contractors, and Park personnel from construction activities. Implement a barrier plan indicating locations and types of barricades to protect public health and safety.
- Provide information about recreational closures and the location, timing, and duration of
 work activity to visitors as they enter the Park. Flag and/or fence off work areas to maintain
 visitor safety during both work and nonwork hours.
- Implement an interpretation and education program. Continue directional signs and education programs to promote understanding among Park visitors.
- Implement a traffic control plan, as warranted. Include strategies to maintain safe and efficient traffic flow during the project work period.
- Ensure an emergency notification program is in place. Standard measures include notification of utilities and emergency response units prior to demolition activities. Identify locations of existing utilities prior to removal activity to prevent damage to utilities within the project area. The Underground Services Alert and Park maintenance staff shall be informed 72 hours prior to any ground disturbance. Demolition shall not proceed until the process of locating existing utilities is completed (wastewater, electric, and telephone lines). An emergency response plan shall be required of the contractor, such as evacuation of personnel, equipment, and materials, etc.
- Avoid damage to natural surroundings in and around the work limits. Provide temporary
 barriers to protect existing trees, plants, and root zones, if necessary, as determined by
 vegetation management staff. Trees and other vegetation shall not be removed, injured, or
 destroyed without prior written approval. Ropes, cables, or fencing shall not be fastened to
 trees. All existing resource protection fencing (post and rope) shall be left in place and
 protected from heavy equipment.
- Remove all tools, equipment, barricades, signs, surplus materials, and rubbish from the
 project work limits upon project completion. Repair any asphalt surfaces that are damaged
 due to work on the project to original condition. Remove all debris from the project site,
 including all visible concrete, timber, and metal pieces. Grade disturbed areas and rake them
 smooth to eliminate tire tracks and tripping hazards.

- Locate, contain, and stabilize excavated and stored materials within the upland staging areas and prevent re-entry into wetland or water-associated habitats.
- Implement standard noise abatement measures during work. Standard noise abatement measures include the following elements: a schedule that minimizes impacts to adjacent noise-sensitive uses, use of the best available noise control techniques wherever feasible, use of hydraulically or electrically powered impact tools when feasible, and location of stationary noise sources as far from sensitive uses as possible (see Chapter 3). Ensure all construction equipment is equipped with mufflers kept in proper operating conditions, and, when possible, shut off equipment rather than allowing it to idle.
- If deemed necessary, demolition work on weekends or holidays may be authorized, with prior written approval of the County. To the extent possible, perform all on-site noisy work above 76 dBA (such as the operation of heavy equipment) between the hours of 8:00 a.m. and 5:00 p.m. to minimize disruption to nearby Park users.
- Use silt fences, sedimentation basins, etc. in work areas to reduce erosion, surface scouring, and discharge to water bodies, as defined in the erosion control plan prepared for this project.
- Delineate wetlands and apply protection measures during construction. Wetlands shall be
 delineated by qualified staff or wetland specialists and clearly marked prior to work. Perform
 activities in a cautious manner to prevent damage caused by equipment, erosion, siltation, etc.
- Implement a dust abatement program. Contractors shall implement the following measures:
 - Water all active work areas, access roads and paths, parking areas, and staging areas at least twice daily (use of dust abatement products would not be allowed). Ensure that applied water does not enter park drainage ways.
 - Cover all trucks hauling dam debris and other loose materials that could spill onto paved surfaces, or require all trucks to maintain adequate freeboard.
 - All paved areas that are subject to vehicle and pedestrian traffic shall be kept clean of debris and soils. Sweeping of these areas shall be implemented as necessary.
 - Cover all stockpiles.
 - Limit traffic speeds on unpaved roads and paths and around the project site.
- Implement vehicle emissions controls. Contractors shall implement the following measures:
 - To the extent possible, use California on-road diesel fuel for all diesel-powered equipment.
 - Use equipment that is properly tuned and maintained in accordance with manufacturers' specifications.
 - Avoid unnecessary emissions. Engines of trucks and vehicles in loading and unloading areas shall be turned off when not in use.
- Implement a noxious weed abatement program. Standard measures include, as appropriate, the following elements: ensure that vehicles and equipment arrive onsite free of mud or seed-bearing material, certify all seeds and straw material as weed-free, identify areas of noxious weeds before dam removal, treat noxious weeds or noxious weed topsoil prior to work (e.g., topsoil segregation and removal), and revegetate with appropriate native species.

- Cover exposed soil with a combination of locally acquired native duff and forest litter from adjacent riparian sites to provide immediate groundcover and facilitate natural revegetation.
- Develop and implement a monitoring plan to ensure successful revegetation, maintain plantings, and replace unsuccessful plantings.
- Use native or seed-free mulch to minimize surface erosion and introduction of non-native plants.
- Confine all construction operations to specified project work limits. Install temporary barriers
 to protect natural surroundings (including trees, plants, and root zones) from damage. Avoid
 fastening ropes, cables, or fences to trees.
- As much as possible, removed plants and materials (cuttings) shall be salvaged and stored on site for revegetation.
- Educate workers on the dangers of intentional or unintentional feeding of Park wildlife, and on inadvertent harassment through observation or pursuit.
- To avoid conflicts with nesting birds, conduct activities outside the breeding season (typically from March to August).
- Remove trees or structures with unoccupied nests (stick nests or cavities) prior to March 1, or following the nesting season. Alternatively, if activities take place during the breeding season, a qualified biologist shall conduct a pre-work survey for individuals no more than two weeks prior to construction in March through August. If any special-status species is observed nesting, a determination shall be made as to whether or not the proposed action will impact the active nest or disrupt reproductive behavior. If it is determined that the action will not impact an active nest or disrupt breeding behavior, work shall proceed without any restriction or mitigation measure.
- Ensure excavation sites (trenches or pits) have suitable ramps to allow small mammals to exit these areas.
- A qualified biologist shall be available to inspect all excavations before refilling occurs, ensuring that special-status species are passively relocated to avoid incidental take.
- Erect exclosure fencing prior to activities to ensure that no special-status species are within the work area.

LAND USE, PLANS AND POLICIES

SETTING

REGIONAL OVERVIEW

Agricultural, low density residential and recreational uses dominate the surrounding areas to the west of the Park. Open space dominates the lands east of the Park, including the Palassou Scenic Lands, owned by the Santa Clara County Open Space Authority, and Henry Coe State Park. Santa Clara County Open Space Authority, in cooperation with the Nature Conservancy, has acquired 9,000 acres directly east of the lake since the 1992 Master Plan.

Several County land use zones apply to lands adjacent Park. Land located west of the Bear Ranch is zoned Rural Residential¹ (RR), with the exception of a small area of Hillside² (H) zone land near its northwest corner. Lands bordering the Mendoza Ranch are zoned Hillside (H). The primary zoning designation of lands to the east of the Park is Ranchland³ (R). Large areas of nearby land not contiguous to the Park are reserved for agriculture⁴. There are no current Williamson Act contracts involving nearby land that would in any way affect development of the Park. The remaining significant land use in the vicinity of the Park is zoned (P) indicating an existing Regional Park.

PARK SETTING

Park Land Use

Coyote Lake-Harvey Bear Ranch County Park was recently expanded to 4,448 acres by the addition of 2,940 acres of the former Harvey Bear Ranch and 711 acres of the Mendoza Ranch to the 796-acre Park formerly named Coyote Lake Park. The Park is an expanse of public land that includes most of the western side of the valley adjoining Coyote Lake, the ridge to its west, and portions of the valley beyond. The original 796-acre Coyote Lake Park is currently in use and is

Rural Residential land is considered outside of city service areas and allows a minimum parcel size of five acres. Primary uses allowed include agriculture, open space and low density residential of five to twenty acres per dwelling, depending on the slope of the land (G.P. Land Use Policy R-LU 58).

Hillside zones are described in the General Plan as "Mountainous lands and foothills unsuitable and/or unplanned for annexation and urban development. Lands so designated shall be preserved largely in natural resources-related and open space uses in order to: a. support and enhance rural character; b. protect and promote wise management of natural resources; c. avoid risks associated with natural hazards characteristic of those areas; and d. protect the quality of reservoir watersheds critical to the region's water supply."(General Plan Land Use Policy R-LU 16).

Ranchlands are defined in the General Plan as "Lands predominantly used as ranches in rural unincorporated areas of the county, remote from urbanized areas and generally less accessible than other mountain lands. Important resources include watersheds for regional water supply, grazing lands, mineral resources, forests and wildlife habitat, rare or locally unique plant or animal communities, historic and archeological sites, and recreational and scenic areas of importance that also serve to define the setting for the urban areas" (G.P. Land Use Policy R-LU 35).

Zoning designations are Agriculture-Large Scale (AL), indicating minimum parcel size of no less than 40 acres, and Agriculture-Medium Scale (AM) with parcel sizes no less than 20 acres. These lands are limited to agriculture and ancillary uses because they are favored with a combination of "the finest soils, dependable growing climate, and adequate water supply" (G.P. Land Use Policy R-LU 8).

open to the public (see Figure 3-7). The Harvey Bear Ranch and Mendoza Ranch properties have historically been used for grazing, and continue to be grazed under leases administered by the County. The Bear and Mendoza Ranch areas do not yet have public access, pending completion of the Master Plan and adoption of this environmental document.

The Park is accessible from the south by way of Roop Road. Roop Road intersects with Coyote Reservoir Road, which runs along the western length of Coyote Lake. A series of ranch roads (unimproved dirt roads) wind through the Park are used by Park staff for access, but are not accessible to public vehicles.

Coyote Lake is a 625-acre lake created by a dam on Coyote Creek. The lake, the dam, and all land below the elevation of 818 feet (or 15 vertical feet above the crest of the dam) is owned by the Santa Clara Valley Water District (SCVWD) and leased to the County for recreational purposes. Easements provide rights-of-way for water pipelines and power lines and include a right-of-way for two water pipelines and overhead transmission lines.

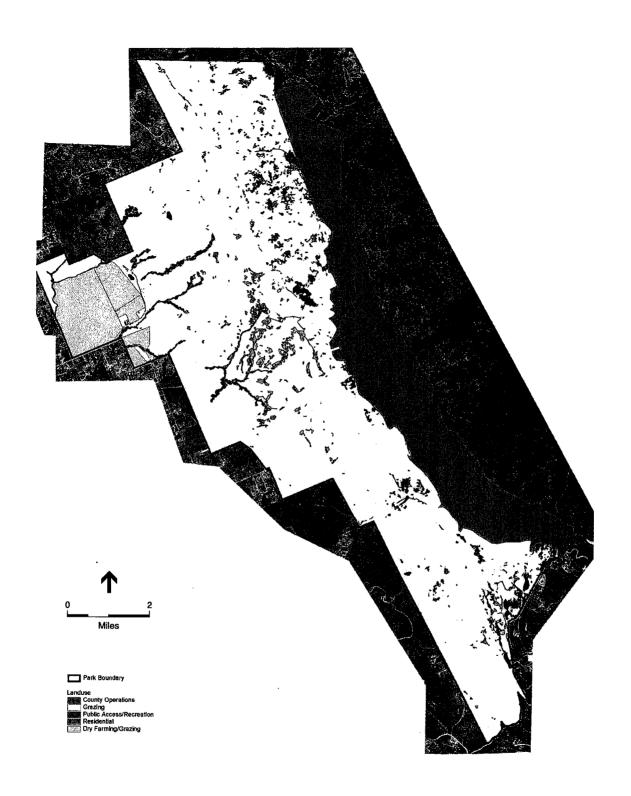
The Park is included in plans for both regional and countywide trail systems. Regional trails extend beyond county boundaries, and are considered to be of national, state, or regional significance. Best known is the Bay Area Ridge Trail, following the mountains surrounding San Francisco Bay at or near their ridgelines that will be approximately 400 miles in length when completed. It will connect the mountains on either side of the southern end of the Bay by an east-west route linking Mount Madonna County Park with Coyote Lake-Harvey Bear Ranch County Park. County and connector trail routes, either existing or proposed, link the Park with other nearby parks, communities, and major population centers of the South Bay. Development of trails within the Park is controlled by the County and seeks to combine trail use in the Park with connections to regional and countywide trails.

County General Plan and Zoning Designations

County zoning for all portions of the Park is currently designated as Regional Park (P). The Regional Parks designation is applied to Park lands of the County, Cities, State of California and United States government agencies which serve a region-wide population (General Plan Land Use Policy R-LU 51). As of July 2002, the land use designations of the two large parcels acquired by the County for Park expansion—Harvey Bear Ranch and Mendoza Ranch—were changed to Regional Park in the County General Plan's land use designation map (County of Santa Clara Planning Office, 2002).

Williamson Act Lands

The California Land Conservation Act of 1965 - commonly referred to as the Williamson Act - enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive property tax assessments which are much lower than normal because they are based upon farming and open space uses as opposed to full market value. Local governments receive an



annual subvention of forgone property tax revenues from the state via the Open Space Subvention Act of 1971.

The majority of the Harvey Bear Ranch and Mendoza Ranch properties were preserved as Williamson Act lands when in private ownership. With the recent rezoning of these lands to the Regional Park designation, the Williamson Act contracts are no longer necessary to preserve the open space and agricultural uses.

REGULATORY CONTEXT

County of Santa Clara General Plan and Zoning Ordinance

The Park is located in unincorporated Santa Clara County. The Santa Clara County General Plan is functionally organized by area, and includes separate sections for Countywide Issues and Policies, Rural Unincorporated Area Issues and Policies, Urban Unincorporated Area Issues and Policies, and the South County Joint Area Plan. Countywide Issues and Policies addresses issues within the County without regard to specific political boundaries, and contains the following eight elements: Growth and Development, Economic Well-Being, Social Well-Being, Housing, Transportation, Parks and Recreation, Resource Conservation (including Mineral Resources, Heritage Resources, Scenic Resources, Solid Waste Management, and Energy Resources), Health and Safety (including Natural Hazards, Aviation Safety, Health and Safety Facilities Planning, and Wastewater Disposal), and Governance.

The South County Joint Area Plan contains policies that have been jointly developed and adopted by the County and the Cities of Morgan Hill and Gilroy, and apply to both incorporated and unincorporated areas within the South County. The South County Joint Area Plan is a mutual statement of policies for community development and environmental management, intended to achieve harmony and cooperation among the three South County jurisdictions, and consistency between their adopted policies. The western portion of the West Flat Area falls within the San Martin Planning Area. The San Martin Planning Area is viewed as a distinct entity, containing unique rural characteristics (General Plan Land Use Policy R-LU 114).

The Santa Clara County Revised Zoning Ordinance was originally adopted in 1937, with the latest revision in 2003. The Santa Clara County Zoning Ordinance implements the Santa Clara County General Plan and manages the future growth of the unincorporated areas within the County of Santa Clara in accordance with that plan.

Regional Plans and Policies

Coyote Lake Park Master Plan

This Master Plan will supersede the 1992 draft Master Plan. for development of Coyote Lake Park. The plan was developed by the County in 1992, but was never adopted pending completion of the Santa Clara Valley Water District Comprehensive Reservoir Watershed Management Plan (February, 2002). Coyote Watershed Stream Stewardship Plan Santa Clara Valley Water District, (2002).

Habitat Conservation and Natural Community Conservation Plans

A Habitat Conservation Plan (HCP) is a land use plan that allows non-federal landowners to obtain an "incidental take permit" from U.S. Fish and Wildlife Service for species that are listed as threatened or endangered under the Federal Endangered Species Act in return for conservation commitments. Incidental take permits allow landowners to carry out specified economic activities on their land that destroy habitats or otherwise harm, or "take," threatened or endangered species. Prior to approval, a determination is made that the landowner's activities will not reduce the likelihood of species survival and recovery and that the adverse impacts of those activities will be mitigated to the maximum extent practicable. Additionally, the landowner needs to ensure that there will be adequate funding to carry out the HCP.

The Natural Community Conservation Plans (NCCP) program, administered by California Department of Fish and Game (CDFG), consists of regional or ecosystem-based conservation planning for the protection of biological diversity. Through partnerships with other agencies, municipalities and private landowners, an NCCP identifies and provides for the regional protection of plants, wildlife and their habitats, while allowing compatible and appropriate economic activity.

There are no habitat conservation plans HCPs or NCCPs that govern use of the project site or vicinity.

Additional Laws, Regulations, Ordinances, and Policies

Additional laws, regulations, ordinances, and policies are summarized in Appendix C.

IMPACTS AND MITIGATION MEASURES

SIGNIFICANCE CRITERIA

According to Appendix G of the *CEQA Guidelines*, a project may be deemed to have a significant impact on the environment with regard to land use or agriculture resources if it will:

- conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect.
- physically divide an established community;
- conflict with any habitat conservation plan or natural community plan;
- 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:
- conflict with existing zoning for agricultural use, or a Williamson Act contract; or
- involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use.

A project would also be considered to have a significant impact on the environment if it would cause physical changes in the environment that would be substantially incompatible with existing land uses.

Master Plan Consistency with Applicable Plans and Policies

Conflicts with applicable plans and policies do not inherently result in a significant effect on the environment within the context of CEQA. As stated in Section 15358(b) of the CEQA Guidelines, "Effects analyzed under CEQA must be related to a physical change." Section 15125(d) states that EIRs shall discuss any inconsistencies between the proposed project and applicable general plans in the setting section of the document (not under the impacts section).

Further, Appendix G of the CEQA Guidelines (Environmental Checklist Form) makes explicit the focus on *environmental* policies and plans, asking whether the project would "conflict with any applicable land use plan, policy, or regulation . . . adopted for the purposes of avoiding or mitigating an environmental effect" (emphasis added). Even a response in the affirmative, however, does not necessarily indicate the project would have a significant effect, unless a physical change would occur. To the extent that physical impacts may result from such conflicts, such physical impacts are analyzed in the appropriate sections of this EIR.

The proposed Master Plan would is consistent with the policies and land use designations contained in the County General Plan, as described above. There is no Habitat Conservation Plan (HCP) or Natural Community Conservation Plan (NCCP) in place that applies to the Park. The proposed project would therefore not conflict with any applicable HCP or NCCP and would not result in a significant adverse impact under CEQA with respect to an HCP or NCCP.

Land Use Compatibility

No land use conflicts between the Park and adjacent lands are anticipated. Short-term construction related effects related to the development of facilities prescribed by the Master Plan are addressed in the Transportation and Circulation Section. The Master Plan would in no way physically divide nearby communities. Although portions of the Harvey Bear Ranch and Mendoza Ranch properties were preserved as Williamson Act lands, the proposed Master Plan would continue grazing for resource protection and to maintain the rural character and would be generally be consistent with the purposes of this Act.

Summary

Based on the CEQA criteria identified above, implementation of the Mater Plan would not have a significant adverse land use impact.

REFERENCES - Land Use, Plans and Policies

- County of Santa Clara Planning Office, *Land Use Plan*, July 2002. Available in PDF format at http://www.sccplanning.org/planning/content/MapsGis/landuse map.pdf.
- County of Santa Clara Planning Office, Santa Clara County Revised Zoning Ordinance, March 1, 2003. http://www.sccplanning.org/planning/content/PlansPolicy/RevisedZOR 020303.pdf
- County of Santa Clara Planning Office, Santa Clara County General Plan: Charting a Course for the County's Future, 1995-2010, Adopted December 20, 1994.
- California Department of Conservation, Santa Clara County Important Farmland Map.
- Santa Clara Valley Water District, 2002. <u>Santa Clara Valley Water District Comprehensive Reservoir Watershed Management Plan (February, 2002). Coyote Watershed Stream Stewardship Plan.</u> First Compilation, February. <u>http://www.valleywater.org/_WMI/Related_report/index.shtm</u>

NOISE

INTRODUCTION

This section evaluates the potential for operations under the Coyote Lake — Harvey Bear Ranch County Park Master Plan and related construction activities to expose adjacent and nearby residences to unacceptably high noise levels or to create an incompatible noise environment for existing uses. This analysis also considers the effect that project and cumulative increases in traffic would have on local roadside noise levels. In addition, this section considers the compatibility of the site for the proposed future uses under the Master Plan in the context of applicable noise/land use compatibility standards. This analysis reviews potential noise impacts of the Master Plan at the programmatic level, and also analyzes the noise impacts of the following components at the project-level: 1) installation of trails, gates, fencing, staging areas, and signage in the Western Flat and Mendoza Area; 2) campground improvements in the Lakeside Area;

- 3) establishment of hang-gliding launch and landing sites in the Slopes and Ridge Area;
- 4) establishment of equestrian camping at existing overflow parking in the West Flat Area;
- 5) installation of boat self-launch area for kayaks/non-motorized boats in the Lakeside Area; and
- 6) use of pond near Mendoza Ranch for annual Fishability Days event.

SETTING

NOISE PRINCIPLES

Sound is mechanical energy transmitted by pressure waves through a medium such as air. Noise is defined as unwanted sound. Sound is characterized by various parameters that include the rate of oscillation of sound waves (frequency), the speed of propagation, and the pressure level or energy content (amplitude). In particular, the sound pressure level has become the most common descriptor used to characterize the loudness of an ambient sound level. Sound pressure level is measured in decibels (dB), with zero dB corresponding roughly to the threshold of human hearing, and 120 to 140 dB corresponding to the threshold of pain.

The typical human ear is not equally sensitive to all frequencies of the audible sound spectrum. As a consequence, when assessing potential noise impacts, sound is measured using an electronic filter that de-emphasizes the frequencies below 1,000 Hz and above 5,000 Hz in a manner corresponding to the human ear's decreased sensitivity to low and extremely high frequencies instead of the frequency mid-range. This method of frequency weighting is referred to as A-weighting and is expressed in units of A-weighted decibels (dBA). A-weighting is typically applied to community noise measurements. Some representative noise sources and their corresponding noise levels (in dBA) are shown in Figure 3-8.

Coyote Lake - Harvey Bear Ranch County Park Master Plan EIR / 201017

SOURCE: Caltrans Transportation Laboratory Noise Manual, 1982; and Modification by Environmental Science Associates

Figure 3-8

Effects of Noise on People

Noise Exposure and Community Noise

An individual's noise exposure is a measure of the noise experienced by the individual over a period of time. A noise level is a measure of noise at a given instant in time. However, noise levels rarely persist consistently over a long period of time. Rather, community noise varies continuously with time with respect to the contributing sound sources of the community noise environment. Community noise is primarily the product of many distant noise sources, which constitute a relatively stable background noise exposure, with the individual contributors unidentifiable. The background noise level changes throughout a typical day, but does so gradually, corresponding with the addition and subtraction of distant noise sources such as traffic and atmospheric conditions. What makes community noise constantly variable throughout a day, besides the slowly changing background noise, is the addition of short duration single event noise sources (e.g., aircraft flyovers, motor vehicles, sirens), which are readily identifiable to the individual.

These successive additions of sound to the community noise environment varies the community noise level from instant to instant and, thus, illustrates the need for a measurement of noise exposure over a period of time to legitimately characterize a community noise environment and evaluate cumulative noise impacts. This time-varying characteristic of environmental noise is described using statistical noise descriptors. The most frequently used noise descriptors are summarized below:

- L_{eq} : The equivalent sound level is used to describe noise over a specified period of time, typically one hour, in terms of a single numerical value. The L_{eq} is the average noise exposure level for the given time period.
- L_{max}: The instantaneous maximum noise level measured during the measurement period of interest.
- Ldn: The energy average of the A-weighted sound levels occurring during a 24-hour period, and which accounts for the greater sensitivity of most people to nighttime noise by weighting noise levels at night ("penalizing" nighttime noises). Noise between 10:00 p.m. and 7:00 a.m. is weighted (penalized) by adding 10 dBA to take into account the greater annoyance of nighttime noises. This measure is also referred to as DNL.

Effects of Noise on People

Sound becomes unwanted when it interferes with normal activities, when it causes actual physical harm, or when it has adverse effects on health. The effects of noise on people can be placed into three categories:

- subjective effects of annoyance, nuisance, dissatisfaction;
- interference with activities such as speech, sleep, learning; and
- physiological effects such as hearing loss or sudden startling.

Environmental noise typically produces effects in the first two categories. Workers in industrial plants generally experience noise in the last category. There is no complete satisfactory way to measure the subjective effects of noise, or the corresponding reactions of annoyance and

dissatisfaction. A wide variation exists in the individual thresholds of annoyance, and different tolerances to noise tend to develop based on an individual's past experiences with noise.

Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted: the so called "ambient noise" level. In general, the greater a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by those hearing it. With regard to increases in A-weighted noise level, the following relationships occur:

- except in carefully controlled laboratory experiments, a change of 1 dBA cannot be perceived;
- outside of the laboratory, a 3-dBA change is considered a just-perceivable difference;
- a change in level of at least 5 dBA is required before any noticeable change in human response would be expected; and
- a 10-dBA change is subjectively heard as approximately a doubling in loudness, and can cause adverse response

These relationships occur in part because of the logarithmic nature of sound and the decibel system. The human ear perceives sound in a non-linear fashion; hence the decibel scale was developed. Because the decibel scale is based on logarithms, two noise sources do not combine in a simple additive fashion, rather logarithmically. For example, if two identical noise sources produce noise levels of 50 dBA, the combined sound level would be 53 dBA, not 100 dBA.

Noise Attenuation

Stationary point sources of noise, including stationary mobile sources such as idling vehicles, attenuate (lessen) at a rate between 6 dBA for hard sites and 7.5 dBA for soft sites for each doubling of distance from the reference measurement. Hard sites are those with a reflective surface between the source and the receiver such as parking lots or smooth bodies of water. No excess ground attenuation is assumed for hard sites and the changes in noise levels with distance (drop-off rate) is simply the geometric spreading of the noise from the source. Soft sites have an absorptive ground surface such as soft dirt, grass or scattered bushes and trees. In addition to geometric spreading an, excess ground attenuation value of 1.5 dBA (per doubling distance) is normally assumed for soft sites. Line sources (such at traffic noise from vehicles) attenuate at a rate between 3 dBA for hard sites and 4.5 dBA for soft sites for each doubling of distance from the reference measurement (Caltrans 1998).

LOCAL NOISE ENVIRONMENT

Sensitive Receptors

Some land uses are considered more sensitive to ambient noise levels than others because of the amount of noise exposure (in terms of both exposure duration and insulation from noise) and the types of activities typically involved. Residences, hotels, schools, and hospitals are generally

more sensitive to noise than commercial and industrial land uses. There are no sensitive receptors to noise within the park; however, the residences located along access routes to the park are considered sensitive receptors to noise, including single-family homes along E. San Martin Ave., Foothill Ave., New Ave., and Roop Road.

Noise Sources

The greatest noise sources in the park are motorized watercraft on Coyote Lake and vehicles traveling on Coyote Lake Road. Sound levels are lower on recreational trails and in open spaces away from Coyote Lake.

The primary sources of noise surrounding the park are motor vehicle traffic, planes flying overhead, and natural sounds such as birds and trees rustling in the wind. Ambient noise levels in the residential areas west of the park are primarily influenced by vehicle travel on local roadways (e.g., E. San Martin, New, and Foothill Avenues, and Roop Road), especially during daytime. Traffic activity generally produces an average sound level that remains fairly constant with time.

Short-term sound-level measurements were obtained on Friday, May 23 at four locations in the vicinity of the park (just before Memorial Day weekend). Each measurement was taken in the afternoon with a Metrosonics sound level meter (Model 308-b). Table 3-8 displays the average sound level, maximum sound level, and location of each measurement.

In addition, a three-day measurement was taken near 2330 Roop Road to measure sound levels generated by traffic on the park's main access route during the holiday weekend. The sound level meter was set up 25 feet from the centerline of Roop Road. Table 3-9 summarizes the data into three 24-hour Ldn measurements and shows the attenuated noise levels at distances of 50 and 100 feet.

REGULATORY CONTEXT

Federal, state, and local agencies regulate different aspects of environmental noise. Federal and state agencies generally set noise standards for mobile sources such as aircraft and motor vehicles, while regulation of stationary sources is left to local agencies.

Local regulation of noise involves implementation of general plan policies and noise ordinance standards. Local general plans identify general principles intended to guide and influence development plans, and noise ordinances set forth the specific standards and procedures for addressing particular noise sources and activities. General plans recognize that different types of land uses have different sensitivities toward their noise environment. Local noise ordinances typically set forth standards related to construction activities, nuisance-type noise sources, and industrial property-line noise levels.

TABLE 3-8 SOUND-LEVEL MEASUREMENTS IN THE VICINITY OF COYOTE LAKE HARVEY BEAR RANCH COUNTY PARK

Number	Location	Distance from nearby noise source	Time	Description of Sound / Noise Sources	Vehicles passing	Leq ¹ dBA	Lmax² dBA
1	Day Use/Picnic Area just North of Boat Launch at Coyote Lake	240 feet from Coyote Lake shoreline	12:00 noon	Jet skis, power boats, yelling, conversation, birds, planes overhead	Approx. 15 motorized water craft operating in water	53.9	63.6
2	1235 E. San Martin Ave. (north side of road)	50 feet from road centerline	1:05 pm	traffic, birds, planes overhead, water sprinkler in distance	78 vehicles	65.8	80.7
3	13135 New Ave. (across street, on east side of road)	20 feet from road centerline	1:50 pm	Traffic, birds, grass in wind, planes overhead	14 vehicles	64.6	83.6
4	200 feet north of 13685 Foothill Ave. (on west side of road)	25 feet from road centerline	2:15 pm	Wind rusting grass, birds, traffic, planes overhead	20 vehicles	67.8	86.8

SOURCE: Environmental Science Associates.

TABLE 3-9 SUMMARY OF LONG-TERM NOISE MEASUREMENT ON ROOP ROAD OVER HOLIDAY WEEKEND

Time Period	Ldn at 25 feet	Ldn at 50 feet ¹	Ldn at 100 feet ¹
4:00 pm Friday May 23 to 4:00 pm Saturday May 24	68.2	63.7	59.2
4:00 pm Saturday May 24 to 4:00 pm Sunday May 25	67.4	62.9	58.4
4:00 pm Sunday May 25 to 4:00 pm Monday May 26	67.3	62.8	58.3
Average Ldn	67.6	63.1	58.6

An attenuation rate of 4.5 dBA was assumed because traffic is considered a line source and grass and other vegetation along Roop Road create a soft noise environment.

SOURCE: Environmental Science Associates.

Average sound during a 10- or 15-minute duration Lmax = maximum sound level recorded during a noise event

Santa Clara County General Plan

The Santa Clara County General Plan contains noise policies that establish acceptable noise levels for different land uses, as shown in Table 3-10, *Noise Compatibility Standards for Land Use in Santa Clara County*.

TABLE 3-10
NOISE COMPATIBILITY STANDARDS FOR LAND USE IN SANTA CLARA COUNTY

Exterior N	nica Compatibility	a		
Exterior Noise Compatibility Standards (Noise Level – Ldn Value in Decibels) ²				
Satisfactory	Cautionary	Critical		
less than 55	55 to 65	more than 65		
less than 55	55 to 70	more than 70		
less than 65	65 to 75	more than 75		
less than 70	70 to 75	more than 75		
		•		
less than 60	60 to 65	more than 65		
less than 60	60 to 65	more than 65		
less than 60	60 to 70	more than 70		
less than 65	more than 65			
less than 55	more than 55			
	less than 55 less than 55 less than 65 less than 70 less than 60 less than 60 less than 60	Satisfactory Cautionary less than 55 55 to 65 less than 55 55 to 70 less than 65 65 to 75 less than 70 70 to 75 less than 60 60 to 65 less than 60 60 to 65 less than 60 60 to 70 less than 65 more than 65		

a Levels of Acceptability are defined as follows:

SOURCE: Santa Clara County, Santa Clara County General Plan, adopted 1994.

Noise levels below 55 Ldn are considered satisfactory for rural residential uses, including the residences near the western side of the expanded park along E. San Martin, New, and Foothill Avenues. This standard also applies to the residences along the western portion of Roop Road, which presently serves as the primary access route to the park.

<u>Satisfactory</u> noise levels are those which pose no serious threat to the proposed land use. The ambient noise level at the site is compatible with the land use category of the proposed project and will not create annoyance and/or activity interference. Standard construction techniques will be adequate.

<u>Cautionary</u> noise levels are those which could potentially pose a threat to the proposed land use. The ambient noise level is great enough to require study on the compatibility of the proposed project. Normal building methods may not be adequate to protect the use.

<u>Critical</u> noise levels are those which probably pose a threat to the proposed land use. The ambient noise level is severe. The situation requires rigorous analysis of the compatibility of the proposed project with the ambient noise level at the site. This analysis should include both exterior and interior impacts. Simple solutions to noise attenuation may not be adequate and uses should be allowed only if they have been designed for noise reduction by a professional who is competent in sound reduction.

b For open space use, there are no critical levels listed. Homes in agricultural areas are not subject to the "Residential" standards. Public buildings in parks and open space areas shall meet noise standards as listed under "Public or Semi-Public facilities." For open space use, the maximum level of noise which a new land use may impose on neighboring open space shall be the upper limit of the "Satisfactory Noise Level."

According to Table 3-10, the satisfactory and cautionary noise thresholds for public buildings and facilities within Coyote Lake Harvey Bear Ranch County Park are 60 Ldn and 70 Ldn, respectively. For open space areas of the park, the satisfactory noise threshold is 55 Ldn, while there is no critical noise levels listed.

The Santa Clara County General Plan identifies specific noise policies for evaluating noise impacts on new development projects and noise impacts on existing development. Applicable noise strategies and policies include:

Strategies:

Strategy #1: Prevent or minimize noise conflicts.

Strategy #2: Provide adequate sound buffers.

Policies and Implementation:

C-HS 25: Noise impacts from public and private projects should be mitigated.

C-HS(i) 23: Project design review should assess noise impacts on surrounding land uses.

C-HS(i) 24: Where necessary, construct sound walls or other noise mitigations.

C-HS(i) 25: Prohibit construction in areas which exceed applicable interior and exterior standards, unless suitable mitigation measures can be implemented.

C-HS(i) 27: Take noise compatibility impacts into account in developing local land use plans.

C-HS 26: New development in areas of noise impact areas (areas subject to sound levels of 55 Ldn or greater) should be approved, denied, or conditioned so as to achieve a satisfactory noise level for those who will use or occupy the facility (as defined in Table 3-10 above).

C-HS(i) 28: Take noise compatibility impacts into account in developing local land use plans. Incorporate acoustic site planning into the design of new development, particularly large scale, mixed use, or master planned development, through measures which may include separation of noise sensitive buildings from noise generating sources, use of natural topography and intervening structures to shield noise sensitive land uses, and adequate sound proofing within the receiving structure.

Santa Clara County Noise and Vibration Ordinance

The Santa Clara County Noise and Vibration Ordinance (Santa Clara County Ordinance Code Section B11-190-199) states maximum exterior sound levels for various receiving land uses regardless of zoning district. The maximum exterior sound level (not to be exceeded more than 30 minutes in an hour) for one- or two-family residential land use is 55 dBA during the hours of 7:00 a.m. to 10:00 p.m., and 45 dBA between 10:00 p.m. and 7:00 a.m. the next day. The ordinance also prohibits construction related noise between weekday and Saturday hours of 7:00 p.m. and 7:00 a.m., or at any time of Sundays or holidays, such that the sound creates a noise disturbance

across a residential or commercial real property line. Moreover, the ordinance states that construction activities lasting 10 days or longer shall not cause noise levels to exceed 60 dBA between weekday and Saturday hours of 7:00 a.m. and 7:00 p.m., and 50 dBA between the hours of 7:00 p.m. and 7:00 a.m. and all day Sunday (Ord. No. NS-517.18, 9-22-81).

IMPACTS AND MITIGATION MEASURES

SIGNIFICANCE CRITERIA

Consistent with the CEQA *Guidelines*, the proposed project would result in a significant impact on the environment if it would:

- Expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- Expose persons to or generate excessive groundborne vibration or groundborne noise levels;
- Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;
- Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;
- 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, expose people residing or working in the project area to excessive noise levels; or
- For a project within the vicinity of a private airstrip, expose people residing or working in the project area to excessive noise levels.

Table 3-11 was developed by the Federal Interagency Committee on Noise (FICON) to provide guidance in the assessment of changes in ambient noise levels resulting from projects at airports. Their recommendations are based on studies that relate aircraft noise levels to the percentage of persons highly annoyed by the noise. Although the FICON recommendations were developed for aircraft noise impacts, they are considered to be applicable to traffic noise level increases as well. For this analysis, impacts are significant if the cumulative noise level increases meet or exceed the significant impact standards set forth in Table 3-11. Peak-hour average noise levels (Leq), based on modeling results, will be used to estimate the Ldn. Peak-hour average noise levels (Leq) are typically within 2 dBA of the Ldn (Caltrans, 1998). The existing long-term noise measurement recorded higher peak-hour Leqs everyday, as compared to the Ldn.

Temporary impacts during construction are considered significant if they would be substantially greater than existing ambient noise levels, would substantially interfere with affected land uses, would continue for a substantial time period, or would affect noise-sensitive uses during the nighttime.

TABLE 3-11 SIGNIFICANCE OF CHANGE IN CUMULATIVE NOISE EXPOSURE

Ambient Noise Level without Project (Ldn)	Significant Impact	
Less than 60 dBA	+/- 5.0 dBA or more	
60-65 dBA	+/- 3.0 dBA or more	
65+ dBA	+/- 1.5 dBA or more	

Ldn = day-night average noise level

SOURCE: Federal Interagency Committee on Noise (FICON), 1992, as applied by Environmental Science Associates, 2003.

None of the activities proposed under the Coyote Lake – Harvey Bear Ranch County Park Master Plan will generate groundborne vibration or groundborne noise as construction of park facilities will not involve pile driving.

No portions of Coyote Lake – Harvey Bear Ranch County Park are located within the land use referral boundary of nearby South County Airport as established by the Santa Clara County Airport Land Use Commission, and the park is not located within the vicinity of a private air strip. Thus, staff and visitors in the park will not be exposed to excessive noise related to airport activity.

Noise associated with operational activities (non-transportation) under implementation of the Master Plan would not substantially increase ambient noise levels at nearby sensitive receptors. The sensitive receptors closest to the park consist of the homes near the West Flat Area along Foothill, E. San Martin, and New Avenues. Activity at the bicycle park, dog off-leash area, golf course, events center, picnic site, fishing pond, turf area, equestrian campground, and agricultural/equestrian/education center may generate short spurts of noise. Such noise, however, is not expected to occur during nighttime hours when sleep disturbance may occur. Moreover, some of the facilities, such as the bicycle park, would be located away from the West Flat Area entrance and therefore considerably distant from nearby residences.

IMPACT STATEMENTS AND MITIGATION MEASURES

Impact Noise-1: Development of park facilities in the West Flat Area would result in temporary noise impacts during project construction. This would be a potentially significant noise impact.

Construction activity noise levels in the West Flat Area would fluctuate depending on the particular type, number, and duration of uses of various pieces of construction equipment. Construction-related material haul trips would raise ambient noise levels along haul routes, depending on the number of haul trips made and types of vehicles used. In addition, certain types

of construction equipment generate impulsive noises (such as pile driving), which can be particularly annoying. Table 3-12 shows typical noise levels during different construction stages. Table 3-13 shows typical noise levels produced by various types of construction equipment.

TABLE 3-12
TYPICAL CONSTRUCTION NOISE LEVELS

Construction Phase	Noise Level (dBA, Leq) ^a
Ground Clearing	84
Excavation	89
Foundations	78
Erection	85
Finishing	89

Average noise levels correspond to a distance of 50 feet from the noisiest piece of equipment associated with a given phase of construction and 200 feet from the rest of the equipment associated with that phase.

SOURCE: U.S. Environmental Protection Agency, Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances, 1971.

TABLE 3-13
TYPICAL NOISE LEVELS FROM CONSTRUCTION EQUIPMENT

Construction Equipment	Noise Level (dBA, Leq at 50 feet)
Dump Truck	88
Portable Air Compressor	81
Concrete Mixer (Truck)	85
Scraper	88
Jack Hammer	88
Dozer	87
Paver	89
Generator	76
Pile Driver	101
Backhoe	85

Construction of the facilities proposed under the Coyote Lake – Harvey Bear Ranch County Park Master Plan would generate significant amounts of noise corresponding to the appropriate phase of building construction and the noise generating equipment used during those phases. The closest sensitive receptors would be those described in the setting section. Residences that would be exposed to the highest noise levels during project construction due to their proximity to the

West Flat Area include the homes on E. San Martin Ave. east of Foothill Ave., houses on the north end of New Ave., and the homes along Foothill Ave. between Maple and E. San Martin Avenues. Other residences in the project vicinity would be exposed to construction noise at incrementally lower levels.

Noise from construction activities generally attenuates at a rate of 6 to 7.5 dBA per doubling of distance. The closest residence to the West Flat Area is at 13245 New Ave., near the intersection of E. San Martin Ave., and is approximately 50 feet from the new park boundary. Residences adjacent to Foothill Ave. could be as close as 100 feet from the new park boundary. The closest residences would experience noise levels of 89 Leq during excavation and finishing activities, the loudest of the non-impact construction phases that would occur within close proximity of residences, if excavation and finishing activities occur on the park boundary. No pile driving would be required for the proposed projects. Construction of park facilities in the West Flat Area would be phased over a 2- to 10-year period and construction noise would be intermittent over this period. Long-term exposure to construction noise by individual residences would be lessened over time as project buildings were constructed and provided shielding between on-going construction during the latter phases of development and nearby residences.

The Santa Clara County Noise and Vibration Ordinance prohibits construction related noise between weekday and Saturday hours of 7:00 p.m. and 7:00 a.m., or at any time of Sundays or holidays, such that the sound creates a noise disturbance across a residential or commercial real property line. Moreover, the ordinance states that construction activities lasting 10 days or longer shall not cause noise levels to exceed 60 dBA between weekday and Saturday hours of 7:00 a.m. and 7:00 p.m., and 50 dBA between the hours of 7:00 p.m. and 7:00 a.m. and all day Sunday. Since construction activities in the West Flat Area would substantially increase ambient noise levels at noise-sensitive locations, albeit temporarily, construction noise would still be considered substantially disruptive to nearby residences and therefore would be considered a significant impact.

The remainder of the construction sites is located within the Park (in the Lake Side Area, the Slopes and Ridge Area, and the Mendoza Area) are located at least a mile from the nearest sensitive receptors. Due to the distance of residences, and the intervening topography and vegetation, potential adverse noise effects on sensitive residential uses associated with development of the proposed facilities would be considered less than significant.

Mitigation Measure Noise-1a: The County will incorporate the following measures into contract specifications:

- Construction activities shall be limited to between 7:00 a.m. and 7:00 p.m. Monday through Saturday to be consistent with the Santa Clara County Noise and Vibration Ordinance and to avoid noise-sensitive hours of the day. Construction activities shall be prohibited on Sundays and holidays.
- Construction equipment noise shall be minimized during project construction by muffling and shielding intakes and exhaust on construction equipment (per the manufacturer's specifications) and by shrouding or shielding impact tools.

• Construction contractors shall locate fixed construction equipment (such as compressors and generators) and construction staging areas as far as possible from adjacent residences.

Mitigation Measure Noise-1b: To further address the nuisance impact of project construction, construction contractors shall implement the following:

- Signs will be posted at the construction site that include permitted construction days and hours, a day and evening contact number for the job site, and a contact number with the Santa Clara County in the event of problems.
- An onsite complaint and enforcement manager will be posted to respond to and track complaints and questions related to noise.

Impact Significance Aft	er Mitigation:	Less	Inan	Significant.

Impact Noise-2: Traffic associated with operation of the park under the Master Plan would result in an increase in ambient noise levels on nearby roadways used to access the park. This would be less-than-significant noise impact.

Based on the traffic analysis prepared for this report, the proposed project would generate approximately 1,687 additional daily vehicle trips on an average weekend at full build out. These trips would be distributed over the local street network and would affect roadside noise levels.

To assess the impact of project traffic on roadside noise levels, noise level projections were made using the Federal Highway Administration's (FHWA) Noise Prediction Model for those road segments that would experience the greatest increase in traffic volume (as determined in the traffic section of this report) and/or that would pass through areas where residential uses are located. The results of the modeling effort are shown in Table 3-14. For the modeling effort, average weekend peak-hour traffic volumes were used because the park is expected to experience the greatest increase in the number visitors on weekends. The traffic volumes used in the model peak-hour traffic volumes on an average weekend. Estimated noise levels shown in Table 3-14 correspond to a distance of approximately 50 feet from the centerline of applicable roadway segments.

As seen in Table 3-14, when the significance criteria from Table 3-11 are applied to the comparison of the "Existing" conditions to the "Existing Plus Phase 1" scenario, all roadway segments are less than significant. Moreover, when the significance criteria from Table 3-11 are applied to the comparison of the "Cumulative Plus Full Buildout" scenario to the "Cumulative without Park Build Out" scenario, all roadway segments are less than significant.

Mitigation: None required.

Impact Significance After Mitigation: Less Than Significant.

TABLE 3-14
EXISTING AND PROJECTED WEEKEND PEAK-HOUR TRAFFIC NOISE LEVELS
ALONG ROADWAYS IN THE PARK VICINITY

	Peak-Hour Noise Level, dBA, Leq ^{a,b}					
Roadway Segment	Existing	Existing Plus Phase 1	Cumulative without Park Build Out	Cumulative Plus Full Build Out of Park		Cumulatively Significant (Yes/No)?
New Ave. north of Roop Rd. (at 45 mph)	61.6	61.7	62.5	63.2	3.0	No
New Ave. south of Roop Rd. (at 45 mph)	62.2	62.5	63.9	64.7	3.0	No
New Ave. north of Leavesley (at 45 mph)	62.5	62.8	65.1	65.7	3.0 and 1.5	No
Roop Rd. east of New Ave. (at 30 mph)	54.0	54.6	55.8	57.8	5.0	No
E. San Martin Ave. east of Hwy 101 Northbound (at 45 mph)	66.0	66.6	66.4	67.2	1.5	No

Noise levels were calculated using the FHWA Traffic Noise Prediction Model for weekend peak-hour conditions.
 Noise levels were calculated at roughly 50 feet from the centerline of the roadway.

SOURCE: Environmental Science Associates, 2003

REFERENCES - Noise

California Department of Transportation (Caltrans), Technical Noise Supplement, October 1998.

City of Sunnyvale, Marketplace Center Draft EIR, October 1996.

County of Santa Clara, Santa Clara County General Plan, adopted 1994.

Cunniff, Patrick, Environmental Noise Pollution, 1977.

Federal Interagency Committee on Noise (FICON), Federal Agency Review of Selected Airport Noise Analysis Issues, 1992.

Town of Paradise, Skyway Plaza Shopping Center EIR, September 2002.

U.S. Environmental Protection Agency, Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances, 1971.

For each of the roadway segments, the analysis assumes the average vehicle speed to be 30 mph on Roop Rd. and 45 mph on other road segments, and a vehicle mix consisting of 98 percent automobiles and 2 percent medium trucks.

PUBLIC SERVICES

SETTING

This section describes the types and extent of public services and utilities relevant to the Park, including police protection, fire prevention and emergency medical services, water supply and distribution, sanitary sewer service, solid waste disposal, and electricity and natural gas. Potential impacts to storm drainage infrastructure are addressed in the Hydrology, Floodplains and Water Quality section of this EIR.

POLICE SERVICES

The Santa Clara County Sheriff's Office (Sheriff's Office) serves the unincorporated areas of the County (population of approximately 197,000 people) and includes the Park. Currently, the Sheriff's Office has 635 full-time, sworn staff (e.g., Sheriffs or Deputy Sheriffs). In addition to the full-time sworn staff, the Sheriff's Office has 65 Reserve Deputy Sheriffs. To support the entire operation, the Sheriff's Office employs 223 non-sworn, civilian staff.

The Santa Clara County Department of Parks and Recreation maintains contracts with the County Sheriff's Office for law enforcement services in all the county parks, including Coyote Lake-Harvey Bear Ranch Park. During peak season, six deputies are assigned to patrol the County parks and, during the off season, four deputies are assigned to patrol at all the county parks (Langley, 2003). The Sheriff station nearest the Park is located in San Martin. The Santa Clara County Department of Parks and Recreation recently provided all deputies of the Parks Division keys to all the gates to the ranch roads on the West Flat Area of the park (Langley, 2003).

Response times to emergency calls from the Park vary widely due to circumstances and access, and are not recorded by the Sheriff's Office. Because it may take the nearest Sheriff Deputy 25-35 minutes to respond to a call if he or she is patrolling elsewhere, first response is determined by a "blanket broadcast" that informs the local fire and police departments as well as the Sheriff's Office and the Park's ranger staff. Often the Park ranger provides the first response to an emergency call.

FIRE PREVENTION AND EMERGENCY MEDICAL SERVICE

Fire protection and emergency medical response to the Park are provided by the California Department of Forestry and Fire Protection (CDF) Santa Clara Unit and the South Santa Clara County Fire Protection District (SSCCFPD). While both agencies are administered and staffed by CDF personnel, the County supplies the equipment for SSCCFPD.

CDF is primarily responsible for addressing wildfires in designated State Responsibility Areas (SRA) and SSCCFPD is equipped primarily to address fires in Local Responsibility Areas (LRAs). Both agencies, however, mutually assist each other in fire and medical emergencies. While most of the park lies in SRA, two portions are considered LRA: the west area of the West

Flat Area along Foothill Avenue and north of the intersection of New Avenue and San Martin Avenue, and the area north of the Coyote Lake Dam (Evans, 2003).

The CDF fire stations closest to the park are Coyote Fire Station and Masten Fire Station (Evans 2003). Coyote Fire Station is located east of the park at the intersection of Gilroy Hot Springs Road and Canada Road. The Coyote Fire Station is only open during wildfire season (roughly June through October) and consists of three personnel, one engine, and a basic life support system unit (BLS) (Evans 2003). During on-duty months, Coyote Fire Station crew are often addressing other instances far from the park, and therefore are not available to respond to emergency calls in the park (Evans 2003). Masten Fire Station, located on Masten Avenue off of Highway 101 in Gilroy, is open year-round and is staffed with three personnel, one engine, and an advanced life system (ALS). When available, first response to emergency calls in the Lakeside Area of the park would come from Coyote Fire Station, with a response time of approximately 10 minutes (Van Wormer 2003). When the Coyote Fire Station is not in operation during the off-season, emergency calls from all areas of the park are responded to by the Masten Fire Station and the SSCCFPD. The nearest SSCCFPD station is located in Morgan Hill and has a bulldozer and two fire engines.

Additional CDF backup can come from Pacheco and Almaden Fire Stations. CDF hand crews are based in 41 conservation camps throughout California but none are located in Santa Clara County. The nearest Conservation Camps are in Ben Lomand, Soledad (Gabilan), and Susuin City (Delta) and are staffed by the California Department of Corrections and the California Youth Authority (CDF 2003). The nearest air attack planes are located in Hollister and the nearest CDF helicopters are in Paicines (Bear Valley Helitack) (Van Wormer, 2003; Evans, 2003).

Currently, water supply for fire fighting in both the Harvey-Bear Ranch or Mendoza Ranch areas relies on vehicle transport, whether via water tenders, an engine shuttle, or air attack planes and/or helicopters. Helicopters could dip their buckets into Coyote Lake but are not capable of operating at night. Bulldozers would be dispatched for wildfires under medium and high burn conditions. For fires in the Lakeside Area, additional water could be drafted from Coyote Lake.

For medical emergencies, County Emergency Medical Services (EMS) fines CDF if its response time to a medical emergency call is inexcusably too long. A medical emergency call from Masten Fire Station, which has ALS, to the park entrance off of Roop Road must take less than 11 minutes and 59 seconds. This area is considered "rural area" by the EMS time limit system. The response time goal from the Masten Fire Station to the north side of the dam is 25 minutes; and area designated as a "hard-to-serve-area."

Fire Hazard Potential

The fire season in California usually begins in May or June, when vegetation has dried out due to lack of rain, and extends through to the first seasonal rains, typically in November. The time of greatest danger is usually during the late summer and early fall, when heat, wind patterns, and very low relative humidity create conditions are ideal for the spread of wildfire. During this period, daily alerts or warnings of high fire danger may be issued, cautioning the public to curtail

activities which could cause damaging wildfires (General Plan Health & Safety Element, pp. P-19).

Most of the mountainous areas of the County are classified as high or extreme fire hazard areas (General Plan Health & Safety Element, pp. P-22). With over 80-150 tons of fuel per acre in portions of rural Santa Clara County, the natural fire hazard is substantial; however in areas where livestock grazing occurs, grazing can serve to control the amount of fuel available to wildfires that occur in grasslands areas (General Plan Health & Safety Element, p. P-27). The estimated fuel load of grassland areas in the Park is approximately 15 tons per acres; 18-22 tons per acre on mixed woodland areas, and 40 tons per acre on chaparral areas (Evans, 2003). The prescribed burning program included in the Natural Resources Management Plan is designed to enhance resource values while reducing fire hazard within the Park (see Chapter 2, Project Description).

The Lakeside Area is accessible to firefighting equipment using the existing paved road, and the lake provides a source of water. In addition, Park rangers routinely patrol the Lakeside public use areas, where there are approximately 40 charcoal grills in picnic grounds and 74 campfire rings in the campground (Kloster, 2003).

Access by firefighting equipment in other parts of the Park, particularly the Slopes and Ridge Area, is more limited by distance from paved roads. Many segments of the existing properties' ranch roads may be impassable to fire fighting equipment due to substandard surfaces, tight corners, steep grades, or bridges of inadequate structural integrity. Private ranch roads are less likely to meet County standards for road construction, and even if they are passable, response times are generally longer due to the lower average speeds possible (General Plan Health & Safety Element, p. P-24).

The County of Santa Clara follows a *Fire Prevention Operational Procedure* developed in cooperation with CDF (Santa Clara County, 2001). These procedures address use of internal combustion engines and other mechanical equipment in dry grassland, brushland and forested areas susceptible to high fire danger. County park staff observes and implements these procedures in the management of Coyote Bear-Harvey Bear County Park as a first defense against fire hazards. The procedures include installation of spark arrestors on vehicles used in vegetated areas, maintenance of fire fighting equipment, avoiding certain activities, such as flail mowing or grading, during periods of high fire danger, and conducting annual inspections of equipment.

WATER SUPPLY

The Santa Clara Valley Water District (SCVWD) is the primary water resources agency for Santa Clara County. It acts not only as the county's water wholesaler, but also as its flood protection agency and is the steward for its streams and creeks, underground aquifers, and district-built reservoirs. The SCVWD supplies water to local water retail agencies, which in turn provides it to their customers. Nearly half of SCVWD's water comes from local sources, such as underground aquifers, and more than half is imported from the Sierra Nevada through pumping stations in the Sacramento-San Joaquin River Delta. The SCVWD sells both imported water and groundwater

sold to the 13 water retail agencies that supply most of the communities in Santa Clara County. The existing water supply for the Park comes from wells and surface water, which are subject to SCVWD permits.

Information about the Park's water supply system was obtained from Ted Kloster, Maintenance Lead for the park (Kloster, 2003). A well installed in June 1994 presently supplies all the water demand of the Lakeside area of the park. Located across the road from the boat launch parking lot, the well supplies all the restrooms, the picnic grounds, the campground, the park office, residence, and maintenance building via a network of 2-inch underground pipes. The network of 2-inch pipes is left over from when the park operated a water intake system that drew water from Coyote Lake. A four-inch pipeline was recently added to connect the water supply well to the Mendoza House and runs underground along Coyote Lake Road. Occasionally some of the water is used to irrigate the lawn around the park residence.

The well water is chlorinated and pumped to a 34,000 gallon above-ground storage tank located across Coyote Lake Road from the Fault Line Picnic Area. From that tank water is pumped to a 5,000 gallon above-ground pressure tank that pressurizes the water to 39-50 PSI. The well can produce 55 gallons per minute. This system provides sufficient and reliable water supply and water quality for the park, including peak summer weekends.

There is a separate well and old above-ground, 1,000-gallon water storage tank near the boat launch ramp that are no longer in use. Before connection to the well at Coyote Lake was established, Mendoza Ranch received its water supply from surface water because well drilling was very difficult on Mendoza Ranch due to high arsenic and mineral levels in the water. Mendoza Ranch also has a 10,000 gallon water tank (Kloster, 2003).

Harvey Bear Ranch presently receives its water supply from surface water and has an above ground storage tank. The nearest retail water main to Harvey Bear Ranch runs along San Martin Avenue, approximately one mile from the Harvey Bear House.

WASTEWATER

Information about the park's wastewater system was obtained from the park's Maintenance Lead (Kloster, 2003). The wastewater system in the park is made up of septic tanks and leach fields. Separate septic systems are connected to each bathroom and one lies between the park office and the maintenance building. Associated leach fields are located approximately 100 feet away form the septic tanks. The septic systems were installed in the 1970s, vary in size from 1,500 to 3,000 gallons, and continue to be reliable. The septic system at the bathroom near the boat launch consists of an underground holding tank near the bathroom from which wastewater is then pumped to a leach field across the road away from the lake. There are also septic systems at the Harvey Bear Ranch House and the Mendoza Ranch House. To accommodate peak visitor demand, the park places four Port-A-Potties for six months of the year near the dam area. There is no stormwater system in the park, except for drainages and culverts along Coyote Lake Road.

SOLID WASTE

The County contracts with South Valley Disposal and Recycling, Inc. to collect solid waste from the Park. The Park has one 20-cubic-yard drop box that is collected on a weekly basis during the summer and on an as-needed basis in winter. There are a few recycling bins in the Park and Park maintenance staff hauls away the materials on an as-needed basis (Kloster, 2003). The waste is hauled to the Pacheco Pass Landfill in Gilroy, which is owned and operated by Norcal Waste Systems. A Class III sanitary landfill, Pacheco Pass Landfill receives approximately 500 tons of solid waste per day (Norcal Waste Systems, 2003).

As of 1995, the projected remaining landfill capacity in Santa Clara County was 53 million tons and landfill capacity was projected to last through 2019 with 25% volume reduction in the waste stream, longer if mandated 50% reductions are obtained (Santa Clara County Planning Office, 1995). Progress towards meeting state-mandated reductions continues in the county as curbside recycling and other programs reach full implementation.

ENERGY

Information regarding energy consumption in the park was obtained from the park's Maintenance Lead (Kloster, 2003). Electric services are provided by Pacific Gas & Electric Company. Overhead electric lines enter the park and the Mendoza Ranch House from Roop Road and run along Coyote Lake Road all the way to the dam. Transformers in the park are located at the entrance, the water well, and near the old water treatment plant. On Harvey Bear Ranch, overhead electric lines run from San Martin Avenue to the house and the barns.

Propane is used for heating at the park office, residence, <u>and the</u> maintenance building, and the dam. An above-ground, 495-gallon propane tank is located between the Park office and maintenance building. Smaller propane tanks are located at the Park residence and the Mendoza Ranch House. The tanks are refilled approximately four times per year.

The Park maintains a duel, underground fuel tank located near the maintenance building, that is approximately 10 years old. The tank holds 750 gallons of gasoline and 250 gallons of diesel fuel. The fuel is used for park vehicles, maintenance equipment, and a diesel tractor; it is and not used by park visitors.

REGULATORY FRAMEWORK

POLICE SERVICES

Proposed projects under the Master Plan would be required to comply with applicable provisions of the Uniform Building Code related to the incorporation of security features in standard building design plans.

FIRE PREVENTION AND EMERGENCY SERVICES

California Public Resources Code (PRC) Sections 4125-4298 regulate fire protection services and stipulate fire prevention measures. Decisions affecting the use of land in SRAs must result in land uses that protect life, property, and natural resources from unreasonable fire risks associated with wildfires (PRC Section 4128.5(a)). CDF classifies lands within SRAs into fire hazard severity zones and determines which areas are considered fire hazard areas (PRC Section 4201-4205). Regulations concerning fire prevention measures in building and facility design are stipulated by PRC Section 4291-4298.

WATER SUPPLY

Santa Clara Valley Water District Integrated Water Resources Plan

In 1997, the SCVWD prepared a 20-year planning document outlining potential strategies to meet water demand in the Santa Clara Valley to the year 2020. The document, titled *Integrated Water Resources Plan*, included maximizing water recycling within the County as a key component. The preferred strategy for County-wide water recycling called for a minimum of 6,000 acre-feet and up to 31,000 acre-feet of recycled water capacity, contingent upon potential partnerships with wastewater treatment agencies in the County. Non-potable water recycling projects currently in operation within the SCVWD service area include the San Jose/Santa Clara Recycling Project, Sunnyvale Recycling Water Project, Palo Alto Recycling Project, and the SCRWA Recycling Project in Gilroy.

In 1993, the SCVWD's Board of Directors adopted a non-potable recycling policy which provides for the District's financial participation to encourage the development of non-potable recycling projects in the County. The District will provide financial assistance equivalent to the avoided cost of new water supplies for non-potable recycled water produced.

Santa Clara County General Plan

The Santa Clara County General Plan requires new development to demonstrate that adequate water quantity and quality can be met before it can obtain approval (General Plan Resource Conservation Policy R-RC 9).

County Ordinance Code

The following water conservation measures are required in un-incorporated areas (Santa Clara County Department of Environmental Health, 2003):

- Avoid irrigation of landscaping during daylight hours.
- Avoid using water to clean sidewalks, driveways, patios, or other hard-surface areas.
- Do not allow water to be wasted by flooding or runoff onto sidewalks, streets, or gutters.

- Use the automatic shutdown valve on the outlet end of the hose when washing cars, boats, trailers, or other vehicles.
- Repair broken or defective plumbing—leaky faucets, toilets, sprinkler and irrigation systems.

SOLID WASTE

State Assembly Bill (AB) 939 requires cities, counties, and regional state agencies to implement new waste diversion and reporting requirements. AB 939, enacted in 1989 as the Integrated Waste Management Act, requires each county's source reduction and recycling element to include an implementation schedule which shows both of the following: a 25 percent diversion of all solid waste from landfill disposal or transformation by January 1, 1995, through source reduction, recycling, and composting activities, followed by a 50 percent reduction to the waste stream by January 1, 2000. For the year 2001, the County achieved a 56% waste diversion rate for the unincorporated areas of the County (Rands 2003). Counties are required to adopt integrated waste management plans, implement programs to reduce the amount of waste they dispose, and have their waste diversion performance periodically reviewed by the Integrated Waste Management Board. Specifically, AB 939 obliges counties to develop and adopt an integrated waste management plan to meet solid waste diversion requirements.

The Recycling and Waste Reduction Commission of Santa Clara County serves as the AB 939 Local Task Force for Santa Clara County and addresses countywide solid waste planning issues and the Countywide Integrated Waste Management Plan, which was adopted in November of 1995.

The County's General Plan contains goals, policies, and implementation measures that address solid waste and recycling. The County strives to reach the solid waste diversion requirements mandated by AB 939 (General Plan Resource Conservation Policy C-RC 63). A four-part hierarchy of strategies has been adopted by the County of Santa Clara and the cities as the principal means by which to manage solid wastes and achieve waste reduction goals established by AB 939 (Santa Clara County Planning Office 1995):

- Strategy #1: Encourage Source Reduction and Refuse
- Strategy #2: Facilitate Recycling and Promote Composting
- Strategy #3: Explore Transformation Opportunities (e.g., waste to energy projects)
- Strategy #4: Plan for Adequate Landfill Capacity

The County also acknowledges the need for long term disposal capacity and strives to maintain 20 to 30 years of ongoing collective disposal capacity (General Plan Resource Conservation Policy C-RC 73).

ENERGY

The National Energy Strategy

The National Energy Strategy (NES) was developed by the U.S. Department of Energy in July 1989. The NES seeks to offer a balanced program of greater energy efficiency, use of alternative fuels, and the environmentally responsible development of all U.S. energy resources. The NES, expressly recognizing the connection between energy sources and air pollution, calls for reducing energy-related emissions to achieve and maintain the National Ambient Air Quality Standards for carbon monoxide and ozone, and incorporating air quality concerns into policies for energy supply and use. With respect to transportation, the NES seeks to reduce the amount of energy used to move people and goods by improving the overall efficiency of the transportation system itself, through such policies as promoting mass transit and ride sharing, and by establishing higher Corporate Average Fuel Efficiency (CAFE) standards for motor cars.

California Energy Plan

The California Energy Plan, prepared by the California Energy Commission (CEC) and mostly recently adopted in 1998, identifies the emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. Due to the restructuring of California's electricity market and subsequent energy crisis, the *California Energy Plan* emphasizes the new competition in electricity generation, in contrast to the discussion of the issues in the petroleum and natural gas sectors.

Building energy consumption is regulated in California under the California Code of Regulations Title 24 Building Energy Efficiency Standards. The efficiency standards apply to new construction of both residential and non-residential buildings, and regulate energy consumed for heating, cooling, ventilation, water heating, and lighting.

Transportation-related energy consumption is not subject to specific controls, although the federal government has mandated fuel economy standards for domestic passenger automobiles including production targets for zero-emission vehicles.

IMPACTS AND MITIGATION MEASURES

SIGNIFICANCE CRITERIA

Based on CEQA criteria, a project may be considered to have a significant impact on the environment if it would result in substantial adverse physical impacts resulting from the need to construct new or physically altered government facilities to accommodate the project (i.e., in order to maintain acceptable service ratios, response times, or other performance objectives), for any of the following public services:

- Fire protection
- Police protection
- Schools
- Other public facilities

The County has not formally adopted significance standards for utilities and public services impacts. Increase in demand for utilities or public services associated with implementation of the Master Plan would not in itself be considered a significant physical environmental impact. However, if such demand were to result in the expansion of existing facilities or construction of new facilities, and if construction or operation of these expanded or new facilities were to result in a significant effect on the physical environment, implementation of the Master Plan would be considered to have a significant utilities or public services impact.

IMPACTS AND MITIGATION MEASURES

Impact Public Services and Utilities-1: Construction activities under the Park Master Plan have the potential to ignite fires. Less Than Significant.

Project Components

Implementation of the proposed Master Plan would result in the construction and renovation of new or expanded park facilities. Sparks from construction activities, such as welding, use of power tools, and operation of heavy-duty equipment could ignite dry brush and wood structures. If such a fire occurred and spread to adjacent areas, damage to park property and wildlife habitat, and public health and safety risk could occur. The County's *Fire Prevention Operational Procedure* (Santa Clara County, 2001) establishes guidelines for allowable activities involving use of mechanical equipment in dry vegetation.

Program-Level Components

Specific information on program-level components would be developed as those facilities undergo planning, design, and subsequent environmental review. These facilities range from small improvements, such as picnic areas requiring limited grading and construction, to large-scale construction projects, including the golf course and events center. Plans would be reviewed at the time they are proposed for implementation to determine the potential for project-specific impacts and to identify appropriate mitigation measures. The County's *Fire Prevention Operational Procedure* would continue to be implemented as County policy, and provides the appropriate level of review and prevention for construction-related fire risk.

Mitigation Public Services and Utilities-1: Continuing compliance with the County's Fire Prevention Operational Procedure; no additional mitigation required.

Impact Significance	After	Mitigation:	Less	Than	Significant.

Impact Public Services and Utilties-2: The expansion of the trail system throughout the park may increase the potential for incidents to which emergency fire and medical services may need to respond. Less Than Significant with Mitigation Measures.

Project and Program-Level Components

Management of project and program-level park facilities would be subject to the same prevention and response policies and procedures that are currently implemented by park staff, including:

- Posting of signs at trailheads, campgrounds and picnic areas prohibiting smoking, and warning of the dangers of wildland fires and the legal consequences of starting them;
- Limiting park access in remote areas to daylight hours;
- Patrolling the park and making frequent visitor contact;
- Exercising discretion to close trails under extreme fire danger conditions;
- Maintaining current communication and emergency reporting systems.

Currently, and following implementation of the project and program-level Master Plan components, emergency response vehicles are able to access remote areas from the West Flat Area of Harvey Bear Ranch on San Martin Avenue, from controlled access points off New Avenue, and from the Mendoza Ranch Area. Additional access is available from the Lakeside Area via existing routes off Coyote Lake Road. Access and response times from these locations will not be affected. Some parts of the park are only accessible by foot or helicopter, though medical rescue by helicopter and helicopter fire attack are not possible at night (Evans 2003). Emergency response procedures are in place through cooperative agreements between CDF and SSCCFPD and designation of State Responsibility Areas and Local Responsibility Areas. These area designations are not proposed to change.

Increased access to park's remote open space by larger numbers of visitors could result in an incremental increase in the number of medical emergencies and unintentional fires. This would be and adverse impact, but current procedures involving Park Ranger staff and the two designated emergency response agencies would remain in place to ensure that the risks to life and property or potential for catastrophic wildfire do not increase significantly. Additional coordination between the Park and the emergency response agencies may be determined to be necessary as programlevel facilities begin to be developed. Implementation of Mitigation Measure Public Services and Utilities-2 would reduce this potential impact to a less than significant.

Mitigation Measure Public Services and Utilities-2: The County Department of Parks and Recreation, the County Fire Marshall, CDF, and SSCCFPD shall review current policies and procedures as to how wildfires will be addressed on and near the Park as program-level components of the Master Plan are developed, and shall incorporate revisions or changes into subsequent environmental reviews that may be required for those developments.

Impact Significance After Mitigation:	Less Than Significant.

Impact Public Services and Utilties-3: Facilities planned under the Park Master Plan may not include adequate fire prevention measures in their design, have adequate water supply and water flow for firefighting purposes, and accessibility for emergency response vehicles. Less Than Significant with Mitigation Measures.

With regard to the development of new facilities in the park, potential fire protection services impacts could occur if these facilities are not designed properly and proper access and water flow are not provided. Implementation of Mitigation Measures Public Services and Utilities-3, would reduce the potential impact to less than significant. For example, development of the Agricultural/Equestrian Education Center in the West Flat Area would require the establishment of additional water supply and water flow for fire fighting purposes. Because individual project information, such as locations of specific facilities and development of project-specific management plans, is not yet known, specific facilities and plans would be reviewed at the time they are proposed for implementation to determine the potential for project-specific impacts and to identify appropriate mitigation measures.

Mitigation Measure Public Services and Utilties-3: Potential fire protection services impacts should be reviewed at the project-level for specific facilities proposed under the Master Plan.

Mitigation measures considered will include, but not be limited to:

- Individual actions shall comply with all applicable State and local codes and ordinances. Requirements may relate to automatic fire extinguishing systems and smoke detectors.
- All building and facility design plans shall be reviewed by the County Fire Marshall.
- Roofs of new structures shall have a Class A rating to mitigate problems that may arise as a result of grassland-urban interface. For instance, fertilizer at the golf course should be stored in a concrete building with a roof made of metal or other flame-resistant material.
- Requirements for emergency vehicle access shall be incorporated into project design, including access to physical structures and fire hydrants or water supply tanks. Such requirements include road grade and lane width, paving of access roads, curb painting, emergency breakaway gates, vertical clearance, turning radii, turn-around areas, and signage.
- Adequate water supply for firefighting and water flow must be incorporated into the design of buildings and facilities in the park, and approved by the County Fire Marshall. Ensuring adequate water supply for firefighting purposes may entail the implementation of fire hydrants and/or installation of large pressurized water storage tanks. In the West Flat Area, the new fishing pond and ponds that are part of the golf course can be planned such that they can serve as the water supply for fire emergencies. The water supply system shall be in place prior to construction of any facilities.
- Emergency vehicle access shall be maintained at all times during construction phases.
- Access for fire fighting apparatus and personnel to and into all structures shall be required.

Implementation of the requirements described above would reduce the potential program-level fire protection services impacts associated with the implementation of the Park Master Plan. However, the Department would require examination of many specific facilities included in the Park Master Plan at the time they are proposed for implementation to determine if further environmental review at a more detailed project-specific and site-specific level were necessary.

Impact Significance After Mitigation: Less Than Significant.

Impact Public Services and Utilties-4: Implementation of the Master Plan may increase water demand. Less Than Significant with Mitigation Measures.

Project-Level Components

As part of the proposed improvements to the Lakeside Campground, the Master Plan proposes to add shower facilities, which would increase the demand for water in the Lakeside Area. Operation of the shower facility could result in the need for a new system or water supply.

Other than installing showers at the Lake Side Campground, all plans and projects proposed under Phase 1 of the Master Plan would not affect the water supply system. These projects include implementation of Phase 1 of the Trail Plan, the hang-gliding launch and emergency landing site, an overflow parking, the self-launch area for non-motorized boats at Coyote Lake, and use of the southern pond for an annual Fishability Days event. It is assumed that water supply facilities would not be included in these projects. Thus, use of these facilities does not directly result in increased water use. Although these projects may attract additional visitation to the Park, the associated increase in water demand is not expected to be substantial enough to exceed the Park's existing water supply.

Program-Level Components

Many projects proposed under Phases 2 and 3 of the Master Plan would require additional water supply and have a significant impact on the Park's existing water supply system. These projects include the golf course, events pavilion, the equestrian/agricultural events center, additional picnic areas in the Lake Side and Mendoza Ranch areas, the environmental education center, a new Lakeside campground, and the youth campground.

Mitigation Measure Public Services and Utilties-4a: The County shall ensure an adequate water supply for Phase 1 projects.

Mitigation measures should include, but not be limited to:

- Install low-flow shower heads.
- Enforce time limits on shower use.

Conduct a study to quantify water demand during the peak camping season and evaluate whether the existing well and water supply system can adequately meet that demand. If additional water supply is needed, the park shall consider upgrades to the existing water supply system. The water supply to the shower facility need not necessarily be potable; however, if a nonpotable water source is used, signs shall be installed to notify visitors. The park could also consider redirecting the water supply from the bathroom toilets to the showers and then using grey water from the showers for toilet flushing.

Mitigation Measure Public Services and Utilities-4b: The County shall ensure an adequate water supply for Phase 2 and Phase 3 projects.

The County shall review all projects proposed under Phases 2 and 3 of the Master Plan at the project level to determine the degree to which they will increase the demand for water and their associated impact on water supply. The County shall also develop project-level mitigation measures to ensure adequate and efficient use of available water supply for these projects. Such measures may include, but are not limited to:

- Utilize native, drought-resistant plants in landscaping.
- Install low-flow faucets and toilets in all new park facilities and consider composting toilets in place of flush toilets.
- New wells and water treatment shall be installed only with the correct permits.
- Reestablish a water supply system that draws water from Coyote Lake, in concert with SCVWD.
- For developments in the West Flat Area, the park shall consider building a connection to the nearest water main that runs along San Martin Avenue.
- Facilities proposed at higher elevations could require higher elevation structures and fire hydrants with their required pressures and may include a booster station, a new storage tank within the park, a new hydropneumatic zone within the park to service the higher elevations, or new main extensions from the local water company.
- In order to establish an adequate supply of non-potable water for irrigation, the park shall explore the use of recycled water from the recycled water treatment facility in Gilroy with the South County Regional Water Authority (SCRWA). As a provider of recycled water in the County, SCRWA is currently involved in similar arrangements, and is pursuing expanded programs.
- Best Management Practices shall be applied to the operation and maintenance of the golf course. Measures specific to golf course maintenance include nighttime watering to reduce evaporation loss and the practice of "multiple cycling" to reduce irrigation runoff.

Impact Significance After Mitigation:	Less Than Significant.

Impact Public Services and Utilties-5: Installation of showers as one of the campground improvements proposed at Lakeside Campground under Phase 1 of the Master Plan would increase wastewater flows to the park's existing septic system in the Lakeside Area. This is a potentially significant impact. Less Than Significant with Mitigation Measures.

Project-Level Components

As part of the proposed improvements to the Lakeside Campground, the Mater Plan proposes to add a shower facility, which would increase wastewater flows generated in the Lakeside Area. Operation of the shower facility could result in the need for additional septic capacity.

Except for the installation of showers at the Lake Side Campground, all plans and projects proposed under Phase 1 of the Master Plan would have no affect on the park's septic systems. These projects include implementation of Phase 1 of the Trail Plan, the hang-gliding launch and emergency landing site, an overflow parking area, the self-launch area for non-motorized boats at Coyote Lake, and use of the southern pond for an annual Fishability Days event. It is assumed that permanent bathrooms or other wastewater facilities will not be a part of these projects; therefore, operation of these facilities does not directly result in increased wastewater flows. Though these projects may attract additional visitation to the park, the associated increase in wastewater flows is not expected to exceed the capacity of the park's existing septic systems.

Program-Level Components

Operation of many projects proposed under Phases 2 and 3 of the Master Plan will directly generate additional wastewater flows, and therefore could significantly impact the park's existing water supply system; these projects include the golf course, the events pavilion, the equestrian/agricultural events center, additional picnic areas in the Lakeside and Mendoza Ranch areas, the environmental education center, a new Lakeside campground, and the youth campground. It is assumed that these facilities will have water supply and/or bathroom facilities.

Mitigation Measure Public Services and Utilties-5a: The County shall implement controls on the amount of wastewater generated by the shower facility proposed at the Lakeside Campground showers and ensure adequate septic capacity.

This shall include, but not be limited to, the following:

- Installation of low-flow shower heads.
- Enforcing time limits on shower use.
- Providing an additional septic system for wastewater flows from the shower facility, and/or direct wastewater flow from the showers to a non-potable use (e.g., toilet flushing).

Mitigation Measure Public Services and Utilties-5b: The County shall provide adequate capacity to handle peak wastewater flows for the following projects proposed under Phases 2 and 3 of the Master Plan. The County shall also develop project-level mitigation

measures to ensure adequate and efficient use of wastewater flow capacity for these projects.

Such measures shall include, but are not limited to:

- All faucets should be low-flow and have automatic shut off valves.
- Installation of additional septic systems for each facility.
- Consider composting toilets in place of flush toilets.
- For developments in the West Flat Area, the park shall consider building a connection to the nearest wastewater main.

impact Significance After Mittigation	: Less I nan Significant.

Impact Public Services and Utilities-6: Operation of projects included in the Master Plan could generate additional solid waste. Less Than Significant with Mitigation Measures.

Project-Level Components

Projects part of Phase 1 of the Master Plan would result in increased use of the park that would generate additional solid waste but the increase is relatively small compared to total landfill capacity serving the County. These projects include some new trails, campground improvements, a hang-gliding launch and emergency landing site, an overflow parking/equestrian camping area in the West Flat Area, a boat launch for non-motorized boats at Coyote Lake, and use of the southern pond for an annual Fishability Days event. The campground improvements at Lakeview Campground would slightly reduce its capacity and therefore could result in less waste generation. Further, use of some of these facilities is not expected to occur year-round. Overall, landfills serving the local area would easily accommodate the park's solid waste disposal needs after implementation of these Phase 1 projects.

Program-Level Components

Projects to be implemented under Master Plan Phases 2 and 3 are expected to generate additional solid waste, including the golf course, events pavilion, equestrian/agricultural events center, various picnic areas, and new campgrounds. Maintenance of the golf course, for instance, would generate substantial amounts of organic waste, as could activities at the equestrian/agricultural center. Additional waste would also be generated by events at the events pavilion and the equestrian/agricultural center, as well as use of the various new picnic grounds and campgrounds.

Because the design and use of these facilities is not fully planned, the amount of waste generated by them cannot be determined; therefore, each project should undergo individual project-level review.

Mitigation Measure Public Services and Utilities-6: Facilities and plans implemented under Phase 2 and Phase 3 of the Park Master Plan shall undergo further review with respect to their impact on solid waste services in the County at the project level.

Appropriate mitigation measures, as deemed necessary, shall be applied to the design or operation of each facility, including but not limited to:

- Organic wastes such as lawn cuttings, landscaping debris, straw, and horse manure shall be composted. Wood debris from landscaping shall be made available for campfires to visitors at the park's campgrounds.
- All park facilities, landscaped areas, picnic areas, parking lots, buildings and other visitorserving uses should be equipped with recycling and trash bins.
- Best Management Practices (BMP) to reduce and manage solid waste shall be implemented into the design and operation of the golf course proposed for the West Flat Area. For instance, "grass cycling" can be utilized to reduce waste from landscaping. The process of grass cycling involves more frequent mowing to produce shorter clippings that do not need to be bagged and hauled away. Another BMP would be to avoid using weed control products that later interfere with composting of landscaping debris.
- Onsite buildings will encourage recycling by providing facilities to accommodate park
 waste and recycling drop-off and pick-up programs. These facilities will include a space
 for a suitable number of containers for the separation of recyclable materials. Such
 containers will be designed to protect soils, water resources, biological resources, and other
 aspects of the environment.
- During construction, material waste will be minimized by utilization of standard dimensions and milling to length of repetitive dimensional lumber. In addition, a waste management plan will be incorporated into future construction documents. To the extent feasible, waste materials will be salvaged, reused, or recycled.

Impact Significance After	Mitigation:	Less	Than	Significant.
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Impact Public Services and Utilities-7: Operation of the facilities to be implemented under the Master Plan could consume additional energy. Less Than Significant with Mitigation Measures.

Project-Level Components

Projects proposed under Phase 1 of the Park Master Plan that would not result in increased consumption of energy include some new trails, a hang-gliding launch and emergency landing site, an overflow parking/equestrian camping area in the West Flat Area, a boat launch for non-motorized boats at Coyote Lake, and use of the southern pond for an annual Fishability Days event. While the addition of these facilities to the park may increase the number of people who visit the park (and in private motor vehicles), it does not result in an increase in the local population effect overall energy consumption rates. Overall, the existing energy supply to the

park – electricity and propane – would easily accommodate the operation these new facilities and efficient use of these energy sources would continue.

Of the projects proposed under Phase 1 of the Master Plan, only the campground improvements in the Lakeside area could result in higher energy consumption. Increased energy consumption would result if the addition of showers includes the installation of hot water heaters heated either by electricity or by propane. Additional energy would also be consumed if electric hook ups are provided for recreational vehicle (RV) sites.

Program-Level Components

Projects that would consume additional energy include the golf course and clubhouse, the events pavilion, the equestrian/agricultural events center, and the environmental education center. Other proposed facilities that may consume additional electricity or propane fuel are the bicycle sports park, the youth campground, the new Lakeside campground, satellite ranger office, amphitheater, entrance kiosk, and water play area. The degree to which these facilities will rely on additional electricity and/or propane will depend on their design and should undergo further review at the project-level.

Mitigation Measure Public Services and Utilties-7: The County shall ensure energy efficiency in the operation of its campground facilities.

The development of facilities to be implemented under Phases 2 and 3 of the Master Plan should undergo project-level review to ensure they do not result in the wasteful, inefficient, and unnecessary consumption of energy. Design measures may include:

- If the hot water is provided in the showers, ensure that energy efficient water heaters are used and enforce time limits on shower use. Limit operation of the hot water heaters to when the campground is open and in use.
- If RV electric hookups are installed, encourage their use during non-peak hours.
- Employment of site plan design and building design mitigation measures that increase heating and cooling efficiency. This may include building orientation to the north for natural cooling, the use of energy efficient appliances and lights, increased insulation and window treatments, light-colored roof materials to reflect heat, shade trees to reduce building's heat, and centralized water heating systems.
- Incorporation of alternative energy sources in facilities design, such as photovoltaic cells or wind turbines.
- Monitoring energy consumption of facilities throughout the park (both electricity and propane) to identify high energy consumers and facilities that could benefit from efficiency improvements.
- Designing the events pavilion as a cluster of individual indoor spaces could help limit unnecessary heating. For instance, a large space would not have to be heated for an event occurring in a small space.

Impact Significance After Mitigation: Less than Significant at the program level.

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RECREATION

SETTING

REGIONAL SETTING

Coyote Lake-Harvey Bear Ranch County Park is located adjacent to or near several park and publicly owned properties, including Henry Coe State Park, Lakeview Meadows Ranch (the Palassou Ridge property acquired by the Santa Clara County Open Space Authority and the Nature Conservancy), Anderson Lake County Park, and Gilroy Hot Springs, which was recently acquired by California Department of Parks and Recreation. These open space areas provide a large network of open space and park land in southern Santa Clara County. Coyote Lake-Harvey Bear Ranch County Park is also an important link in many regional trails as defined in the Countywide Trails Master Plan, including the Bay Area Ridge Trail, Anza Historic Trail, and San Martin area trails.

Regional Recreation Trends

Santa Clara County's population is projected to increase from 1,603,340 in 1995 to 2,196,750 in 2020 (State of California, 1998). The County's population in 2000 is estimated at 1,682,585 (Santa Clara County Planning Office, 2001). The forecasted population increase will result in increased recreational use of County parks.

Local communities have identified a deficit of parkland in the region based upon a recommended standard of 5 acres of parkland per thousand person population. The City of Morgan Hill, approximately 3 miles northwest of Coyote Lake-Harvey Bear Ranch County Park, identified a parkland deficit of approximately 74 acres (City of Morgan Hill, 2001). The City of Gilroy, which is located approximately 5 miles southwest of Coyote Lake-Harvey Bear Ranch County Park, identified a parkland deficit of approximately 89 acres. These parkland deficiencies are anticipated to grow as population increases (City of Gilroy, 1999).

Regional trends in the Santa Clara County park system include (Santa Clara County Parks and Recreation Department, 2001b):

- Resource regulations, particularly for listed threatened or endangered species, will affect the ability of parks to expand facilities and provide recreation services
- Trail use by hikers and bicyclists is expanding and equestrian use is declining
- Trail use is consistently heavy before and after work hours as well as on weekends. This indicates that parks are increasingly being used for exercise
- The buffer between urban areas and parks that were once remote is disappearing
- More trails are needed, and the distance traveled by trail users was limited by the length of the existing trails (Santa Clara County Parks and Recreation Department, 1995a)

Based on a public opinion survey of Santa Clara County residents, the majority of County residents are active and satisfied with their access to outdoor recreation activities. Walking and running are the most popular outdoor activities (58 percent), and picnicking is the second most popular activity (20 percent). Biking, hiking, swimming, playgrounds, and fishing are popular as well (10 percent). In terms of future park priorities, access to outdoor recreation, protection of open space, and preservation of natural resources are important to the majority of County residents (Santa Clara County Parks and Recreation Department, 2001a).

PROJECT SETTING

Coyote Lake-Harvey Bear Ranch County Park is a 4,448-acre public open space, and is the second largest park in the Santa Clara County Parks system. The original park comprises 760 acres, including Coyote Lake (636 acres) and lands contiguous to the lake (125 acres). In 1998, the park was expanded by 3,688 acres through the acquisition of the Harvey Bear and adjacent Mendoza Ranches. While the original park remains open to the public, the Bear and Mendoza properties do not yet have public access, pending completion of the new master plan for the expanded park. The Bear and Mendoza properties have extensive ranch roads, and ranch structures and barns, although these facilities are not accessible to the public.

Publicly accessible recreation facilities at Coyote Lake-Harvey Bear Ranch County Park include both day use and overnight facilities (Figure 3-9). Coyote Lake is the major attractant to the park. Park visitors enjoy boating, water skiing, and fishing at Coyote Lake, as well as hiking, horseback riding, sunbathing, picnicking, nature study, and camping in the park.

Campground

Coyote Lake-Harvey Bear Ranch County Park has one campground with 74 campsites. The Lakeview Campground is located adjacent to Coyote Lake, north of the Lakeview Picnic Area. The campground includes two public restroom buildings, 16 cold water spigots, and public telephones. Each campsite has a picnic table, fire ring, food storage locker, and paved parking platform. Campers need to securely store food to avoid providing human food sources for feral pigs and raccoons. A trail leads from the campground to the boat launch near the Sandy Beach Picnic Area. The campsites are located in close proximity to each other (generally within 20 feet), and there are few mature trees at the campground.

Entrance Facilities

A ranger station/visitor center and entrance kiosk/information booth is located at the entrance to the Park. These facilities provide park information for visitors, collect entrance fees, and regulate campground use. The ranger station provides resource protection, law enforcement, and interpretation/education services.

Picnic Areas

There are seven day use picnic areas at Coyote Lake-Harvey Bear Ranch County Park, including Lakeview, Sandy Beach, San Ysidro, Anglers Cove, Fault Line, Oak Flat, and Calveras picnic



- Coyote Lake - Harvey Bear Ranch County Park Master Plan EIR / 201017 ■ Figure 3-9

areas. The picnic areas generally include picnic tables, public restrooms, and visitor parking. The picnic areas are located in areas that provide views of Coyote Lake. Cooking fires are permitted in fire rings at picnic areas located in the southern portion of the park, including at Lakeview, Sandy Beach, San Ysidro, Anglers Cove, and Fault Line picnic areas. In the northern part of the park, cooking fires are prohibited because the area is a wildlife sanctuary.

Coyote Lake Access

Boat launch facilities are located north of the Sandy Beach Picnic Area. The boat launch facility includes a large parking area (accommodating up to 85 boats and trailers or up to 160 automobiles), a public restroom, and a fish cleaning facility. Coyote Dam at the northern end of Coyote Lake is a popular viewing platform and fishing pier. Fishing activity is generally concentrated at the southern end and northern end of Coyote Lake, away from the boat use areas.

Roads and Trails

Coyote Reservoir Road is a two-lane paved road that traverses the length of Coyote Lake, beginning at the park entrance off Roop Road and terminating at Coyote Dam. An approximately one-mile equestrian and hiking trail is located at the southern end of the park between the park entrance and the entrance kiosk/information booth. A one-mile footpath is located between the Lakeview Campground and the Sandy Beach Picnic Area and boat launch. An approximately two-mile trail connects the boat launch facility and Coyote Dam. Trails in the publicly accessible areas of the park are discontinuous and do not connect some major park features. Some pedestrians access the park using Coyote Reservoir Road, which results in some pedestrian/vehicle conflicts.

Park Visitation

Annual visitation to the park is approximately 80,000 visitors per year (Santa Clara County Parks and Recreation Department, 2002). The park's peak use occurs during the summer months between Memorial Day and Labor Day. During the summer period, the campground has 100 percent occupancy on weekends and approximately 30 percent occupancy on weekdays. Campground use is lower during the rest of the year (Lee, 2003).

Boating use is busiest during the summer season as well, although depending upon the weather, the busy boating season can extend into the shoulder season from April through October. Boating activity on Coyote Lake is limited to a maximum launch of 70 vessels per day due to Regional Water Quality Control Board efforts to improve water quality. In addition, the use of MTBE fuel is no longer allowed on the reservoir. In addition to the water quality restrictions, County Parks has an established safety limit of up to 75 vessels allowed on Coyote Lake at any one time during normal conditions, which is calculated based on the surface area of the lake. The water quality control is the more restrictive limiting factor, and drives the boating limitations for the park (Lee, 2003).

EXISTING PLANS AND POLICIES

Santa Clara County General Plan

The Santa Clara County General Plan provides county-wide guidance on regional parks and open space lands (Santa Clara County Planning Office, 1994). The County General Plan's vision for regional parks is a "necklace of parks" consisting of a series of major regional parks located in the foothills and mountains around the valley, similar to pearls on a necklace. Recreational trails and scenic highways were proposed to link these regional parks with one another as well as to provide access from the valley floor (Santa Clara County Planning Office, 1994). The County's regional parks and public open space lands policies include five major strategies, including:

- Developing parks and public open space lands
- Improving accessibility
- Balancing recreation and environmental objectives
- Facilitating inter-jurisdictional coordination
- Encouraging private sector and non-profit involvement

The General Plan also identifies six strategies for trails and pathways, including:

- Plan for trails, including identifying appropriate trail routes, providing trails offering a range of experiences and trip opportunities, and maintaining a trails master plan as the basis for the planning, coordination, and implementation of a Countywide trail system
- Provide recreation, transportation, and other public trail needs in balance with environmental and land owner concerns
- Implement the planned trails network
- Adequately operate and maintain trails
- Establish acquisition and development priorities for trails to provide maximum benefit given available public and private resources
- Facilitate inter-jurisdictional coordination within the County as well as with adjacent jurisdictions (Santa Clara County Planning Office, 1994).

Santa Clara County Countywide Trails Master Plan Update

The Santa Clara County Countywide Trails Master Plan Update directs the County's trail implementation efforts. The Countywide Trails Master Plan includes six primary strategies, which mirror the Trails and Pathways strategies identified in the County General Plan (described above). The Countywide Trails Master Plan also provides design and management guidelines and Countywide trail priorities. For example in the vicinity of Coyote Lake-Harvey Bear Ranch County Park, the Countywide Trails Master Plan identifies the extension of a segment of the Bay Area Ridge Trail through the Bear and Mendoza ranches, connecting Anderson County Park, Coyote Lake, and Mount Madonna County Park. The plan also identifies the establishment of a

segment of the Juan Bautista de Anza National Historic Trail in the vicinity of Coyote Lake-Harvey Bear Ranch County Park from Henry Coe State Park, to the Southern Recreation Retracement Route located on the southern border of Coyote Lake, connecting to the Northern Recreation Retracement Route (Santa Clara County Parks and Recreation Department, 1995b).

As an agency action separate from this park master planning effort, Santa Clara County Parks and Recreation Department recently adopted a negative declaration for the development of portions of the Bay Area Ridge Trail in Coyote Lake-Harvey Bear Ranch County Park. This action is being conducted in accordance with the County Wide Trails Master Plan Update (Santa Clara County Parks and Recreation Department, 1995b). The project includes rehabilitation of approximately 1.6 miles of ranch roads for trails, construction of approximately 2.0 miles of new trails, and development of two staging areas in the vicinity of West Flat and Mendoza Ranch. The proposed trails would connect these two staging areas.

The Master Plan modifies the County Wide Trails Master Plan Update because the County plans to abandon the proposed location of an alignment of the San Martin Cross-Valley Trail (referred to as S8) in the vicinity of New and Church Avenues. The San Martin Cross-Valley Trail connection has another suggested alignment approximately 1.5 miles north in the vicinity of Foothill and San Martin Avenues (Santa Clara County Parks and Recreation, 2003) which will be retained and developed.

IMPACTS AND MITIGATION MEASURES

SIGNIFICANCE CRITERIA

As stated in Appendix G of the CEQA Guidelines, a project would generally have a significant effect on the environment if it would:

- 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; or
- Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment (Governor's Office of Planning and Research, 2002).

The following recreation analysis addresses these general criteria. The impact analysis is includes both project-level impacts and program-level impacts. As indicated in Chapter 2, subsequent environmental documentation is required for implementation of the program-level components.

IMPACTS AND MITIGATION MEASURES

Impact Recreation-1: Implementation of the project would result in short-term adverse recreation impacts associated with project construction. Less Than Significant with Mitigation Measures.

Project-Level Components

The implementation of Master Plan Phase 1, including constructing approximately 16 miles of trails, improving the campground area, establishing a hang-gliding launch and emergency landing site, and providing overflow parking and equestrian camping in the West Flat Area would result in construction activity that would have a short-term adverse impact on recreation activities. Construction activity would limit access for park visitors to the campground area and trails, interruption of service for renovated facilities, and diminishment of visitor experience as a result of temporary adverse noise, air quality, transportation, and visual resource impacts (see the following Sections Noise, Air Quality, Transportation, and Visual Resources, respectively, for discussions of potential construction-related effects). Visitor experience would be temporarily diminished during construction activities. The project's best management practices (BMPs) for construction would ensure construction-related activities would not adversely affect the environment, and would reduce potential recreation impacts to less-than-significant levels.

Program-Level Components

As indicated in Chapter 2, subsequent environmental documentation is required for implementation of program-level components; they are here evaluated on a conceptual level. Construction of program-level components would result in recreation impacts, including limited access for park visitors in construction areas, interruption of service for renovated facilities, and diminishment of visitor experience as a result of temporary adverse noise, air quality, transportation, and visual resource impacts (see the following Sections Noise, Air Quality, Transportation, and Visual Resources, respectively, for discussions of potential construction-related effects).

As described in Chapter 2, development in the West Flat Area would include construction of an 18-hole golf course, events pavilion, an equestrian/agricultural education center, fishing pond, trails, Bicycle Park, hang-gliding area, and other site-specific use areas. Improvements outside of the West Flat Area include new trail construction, development of picnic and camping areas in the Lakeside Area, and development of an environmental education center and youth campground in the Mendoza Ranch Area. Development of the program-level components would occur over the course of 20 years, with an approximate timeframe of five years for development of the West Flat Area. The proposed construction activity would occur during brief intervals over the 10-year project implementation phase.

Construction activity in the West Flat Area would be quite intensive, and construction activity in the other park areas would be light to moderate. Visitor experience would be temporarily diminished during construction activities. The project's best management practices (BMPs) for construction would ensure construction-related activities would not adversely affect the environment, and would reduce potential recreation impacts to less-than-significant levels.

Mitigation Measure Recreation-1: The County shall implement Noise, Air Quality, Transportation, and Visual Resources mitigation measures included in this EIR.

Impact Significance After Mitigation: Less Than Significant.

Impact Recreation-2: Implementation of the Coyote Lake-Harvey Bear Ranch County Park Master Plan would expand the publicly accessible open space of the park resulting in a beneficial recreation impact. Significant Beneficial Impact.

Project-Level and Program-Level Components

Implementation of the Coyote Lake-Harvey Bear Ranch County Park Master Plan would substantially increase the publicly accessible area of the park from 760 acres to 4,448 acres, making this park the second largest park in the Santa Clara County Parks system. Adoption of the master plan would considerably expand the available area in which the public can recreate. In addition, the expansion of the Coyote Lake-Harvey Bear Ranch County Park assists in alleviating the open space deficit identified in the City of Morgan Hill and City of Gilroy Master Plans (City of Morgan Hill, 2001 and City of Gilroy, 1999).

Mitigation Measure: None required.

Impact Significance After Mitigation: Significant Beneficial.

Impact Recreation-3. Implementation of the project would improve and expand the types of publicly accessible recreation facilities and trails in the park resulting in beneficial effects on the visitor experience. Significant Beneficial Impact.

Project-Level Components

As described in Chapter 2, implementation of Master Plan Phase 1 would include improving the Lakeview campground area to reduce campsite density, add shower facilities, and develop native grass green spaces in the Lakeside Area. In the West Flat Area, the project would include developing overflow parking/equestrian camping and a hang-gliding emergency landing, as well as utilizing a fishing pond for annual Fishability Days events. Approximately 16 miles of trails would be constructed in the park, substantially expanding and improving the park's trail system. The proposed improvements would be designed to improve the range of visitor activities, access, and services at the park. The proposed facility improvements would moderately increase the types of visitor facilities at the park. The quality of the visitor experience would be improved due to the planned campground improvements, substantial expansion of the trail system, and provision of new facilities. The project would have a substantial, highly noticeable beneficial impact on recreation at the park.

Program-Level Components

Proposed new recreation facilities in the West Flat Area would include construction of an 18-hole golf course, an agricultural/equestrian/education center, an events pavilion, group picnic site, Bicycle Park, hang-gliding area, and dog off-leash area. In the Lakeside Area, recreation facility improvements include minor improvements to lakeside picnic areas and pedestrian trails; and development of two new campgrounds, a group picnic area, and water play area. At the Mendoza Ranch Area, a new environmental education center and youth campground are proposed, along with two hang-gliding landing sites and a staging area. Approximately 15 miles of trails would be constructed under this effort, nearly doubling the size of the park's trail system. The proposed improvements would substantially increase the range of visitor activities, facilities, and services at the park. Access to the park would be considerably increase due to the trail expansion, and the planned recreation improvements in previously unutilized areas of the park, such as the golf course, events pavilion, equestrian center, and environmental education center. The quality of the visitor experience would be improved due to the planned picnic area and lakeside trail improvements, trail system expansion, and provision of new facilities. The project would have a substantial, highly noticeable beneficial impact on visitor experience at the park.

Mitigation Measure: None required.

Impact Significance After Mitigation: Significant Beneficial.

Impact Recreation-4. Implementation of the project would expand the trail system within the park and improve regional trail connectivity. Significant Beneficial Impact.

Project-Level Components

Proposed implementation of Master Plan Phase 1 would increase the linear miles of trails in the park from approximately 4 miles to approximately 16 miles of trails. The proposed trail system would substantially improve park access, utilizing ranch roads to access the Slopes and Ridge Area, West Flat Area, and Mendoza Ranch Area of the park. The County also plans to improve wayfinding and interpretive signs on the trail system.

The proposed trail expansion, particularly along the ridgeline, would create regional trail connections to the Bay Area Ridge Trail and the Juan Bautista de Anza National Historic Trail. The proposed new trails would connect the Coyote Lake-Harvey Bear Ranch County Park to other regional parks creating the "necklace of parks" envisioned in the County's General Plan (Santa Clara County Planning Office, 1994) and the Countywide Trails Master Plan (Santa Clara County Parks and Recreation Department, 1995b). The trail system would connect Coyote Lake to Anderson County Park, Henry Coe State Park, Mount Madonna County Park, and other county, regional, and state parks. The proposed trail improvements would have a substantial and highly noticeable beneficial impact on the visitor experience.

Program-Level Components

Implementation of Master Plan Phases 2 and 3 would increase the linear miles of trails in the park from approximately 16 miles to approximately 30 miles of trails. The expanded trail system would double the length of trails in the park, and would improve access to the Lakeside Area, West Flat Area, and Mendoza Ranch Area. In addition, the proposed trails would provide gentler gradients, alternate routes and improved connectivity along ridgeline trails. Wayfinding and interpretive signs would augment the expanded trail system. The expanded trail system under this phase would marginally improve regional trail connectivity, particularly in the northern area of the park. Overall, the proposed trail improvements under Phases 2 and 3 would have a substantial and highly noticeable beneficial impact on the visitor experience.

Mitigation Measure: None required.

Impact Significance After Mitigation: Significant Beneficial.

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- Santa Clara County Planning Office. Census 2000: Data Report #1. May, 2001.
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TRAFFIC AND CIRCULATION

SETTING

The following describes the existing transportation system in the vicinity of Coyote Lake-Harvey Bear Ranch Park, including the roadway network, bicycle and pedestrian facilities, transit service, and roadway operating characteristics based on data collected by Environmental Science Associates (ESA) in September, 2001.

The existing roadway network and study area intersections within the Park are shown on Figure 3-10. Access to regional transportation facilities such as U.S. Highway 101 (US-101) and State Route 152 (SR-152) from the Park are provided by Leavesley Road. In addition, San Martin Avenue provides access to US-101 from the northern portion of the Park. However, there are no existing roadways that connect the Park directly to San Martin Avenue.

REGIONAL ROADWAY ACCESS

The following roadways provide regional access to the Park:

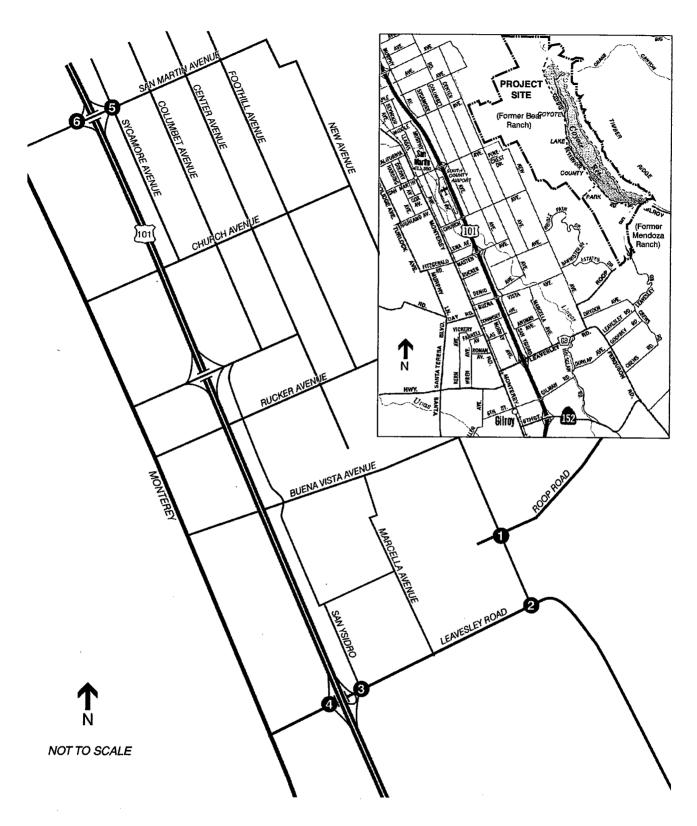
U.S. Highway 101

US-101 is a major north-south freeway originating in Los Angeles and extending north to the Canadian border. In the vicinity of the Park, US-101 provides two to three travel lanes in each direction. US-101 is located west of the Park. This facility is the primary regional access facility for the Park including the adjacent Cities of Gilroy and Morgan Hill. Access to US-101 from the Park is provided via interchanges at Leavesley Road and San Martin Avenue.

As reported on the Caltrans website (http://www.dot.gov/) the most current (2000) traffic volume counts on US-101 show that approximately 92,000 average daily trips (ADT) occur north of San Martin Avenue; 83,000 ADT occur between San Martin Avenue and Leavesley Road; and 75,000 ADT occur south of Leavesley Road.

State Route 152

SR-152 is also known as Leavesley Road west of US-101. This east-west State highway is a four-lane divided road adjacent to its interchange with US-101. SR-152 is a discontinuous highway within the Park. SR-152 shares the same route as US-101 between Leavesley Road and 10th Street. At the 10th Street/US-101 interchange, SR-152 continues to the east through the Pacheco Pass providing access to Interstate 5 (I-5). This portion of SR-152 is primarily a two-lane undivided road with four-lane divided segments in the Pacheco Pass area. SR-152 provides regional access from the Watsonville area to west; and central California from the east. According to Caltrans year 2002 data, SR-152 carries approximately 31,000 ADT on Leavesley Road (west of US-101).



Local Roadway Access

Figure 3-10 also presents a graphical summary of the local roadways that serve the Park. The main local roadways serving the Park include: Roop Road, New Avenue, San Martin Avenue and Leavesley Road. Each of these roadways is discussed below:

Roop Road

Roop Road is the sole access road to the existing Coyote Lake County Park. This east-west access road originates at New Avenue and primarily serves the local residents in the area and visitors to Coyote Lake. Roop Road is a rural two-lane undivided road. Due to the topographical features of the area, Roop Road contains several curved roadway sections with limited horizontal sight distance (i.e., blind curves). In addition, roadway lane width is constrained with maximum lane widths between nine and ten feet. Based on traffic counts collected by ESA in September, 2001, Roop Road, east of New Avenue carries approximately 1,300 ADT.

New Avenue

New Avenue is a north-south rural roadway that provides access to Roop Road from San Martin Avenue and Leavesley Road. This two-lane undivided roadway primarily serves the local residents in the area and provides access to Coyote Lake (via Roop Road). New Avenue has a posted speed limit of 45 miles per hour (mph) south of Church Avenue, and a 35 mph speed limit north of Church Avenue. A roadway "jog" exists at Fircrest Drive. A soft (dirt) shoulder exists on both sides of the roadway, and lane widths range between ten and eleven feet. Based on traffic counts collected by ESA in September, 2001, New Avenue, south of Roop Road, carries approximately 3,500 ADT.

San Martin Avenue

San Martin Avenue is located towards the northern portion of the Park, however there are no existing access roads from San Martin Avenue to Coyote Lake. San Martin Avenue has a diamond configuration interchange with US-101. Adjacent to the Park, San Martin Avenue is an east-west two-lane undivided roadway with soft (dirt) shoulders. San Martin Avenue has striped 11-foot lanes between US-101 and New Avenue. San Martin Avenue provides local access to residents from US-101 and has a posted speed limit of 45 mph. Based on traffic counts collected by ESA in September, 2001, San Martin Avenue, east of US-101, carries approximately 8,000 ADT.

Leavesley Road

Leavesley Road is located towards the southern portion of the Park, and provides direct access from US-101 to New Avenue (which provides access to Roop Road). Currently, Leavesley Road is the main regional access road to the Coyote Lake area since is provides direct access to US-101 and SR-152. West of US-101, Leavesley continues as SR-152 to the Watsonville area. Leavesley Road has a partial cloverleaf interchange with US-101. Near New Avenue, Leavesley Road is an east-west two-lane undivided roadway with soft (dirt) shoulders and a 50 mph speed

limit. Towards the US-101 interchange, Leavesley Road is a four lane divided roadway with signalized access to adjacent regional retail centers (i.e., Gilroy Outlet Malls). Based on traffic counts collected by ESA in September, 2001, Leavesley Road, east of US-101, carries approximately 7,900 ADT.

PARK AREA INTERSECTIONS

The following list outlines the study area intersections for the traffic analysis of the proposed Coyote Lake/Harvey Bear Ranch Master Plan EIR. These intersections would be potentially affected by vehicle traffic generated by the land uses of the Park. Data for all of the roadway segments and intersections in the Park were collected by ESA in September, 2001. The study area roadway and intersection geometrics, and traffic control are illustrated in Figure 3-11. A list of the study area intersections and their existing traffic control is provided in Table 3-15.

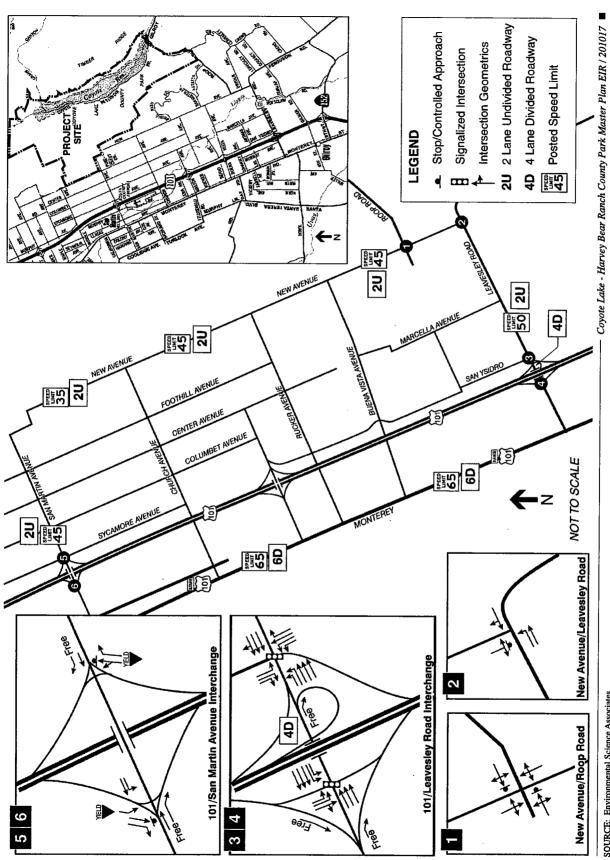
TABLE 3-15
STUDY AREA INTERSECTIONS AND TRAFFIC CONTROL

	Traffic Control
New Avenue/Roop Road	2-way stop control on Roop Road
New Avenue/Leavesley Road	1-way stop control on New Avenue
US-101 northbound ramps/Leavesley Road	Signalized intersection
	Signalized intersection
US-101 northbound ramps/San Martin Avenue	1-way stop control on NB off-ramp
US-101 southbound ramps/San Martin Avenue	1-way stop control on SB off-ramp

BICYCLE AND PEDESTRIAN FACILITIES

The data in this section are based primarily on information contained in the City of Gilroy and County of Santa Clara General Plans' Circulation Elements supplemented with additional descriptions of existing bicycle and pedestrian facilities from site surveys conducted by ESA in September, 2001. Types of bikeways are described by Caltrans in the *Highway Design Manual* (HDM) as follows:

- <u>Class I Bikeway</u>. Referred to as a "bike path" or "multi-use trail". Provides for bicycle travel on a paved right-of-way (ROW) completely separated from any street or highway.
- <u>Class II Bikeway</u>. Referred to as a "bike lane". Provides a striped lane for one-way travel on a street or highway.
- <u>Class III Bikeway</u>. Referred to as a "bike route". Provides for shared use with pedestrian or motor vehicle traffic and is identified only by signing.



SOURCE: Environmental Science Associates
California State Automobile Association

Existing Roadway and Intersection Geometrics

Figure 3-11

PUBLIC TRANSPORTATION

Public transportation is currently provided to the vicinity of the Park, mainly in the City of Gilroy, via three Santa Clara Valley Transportation Authority (VTA) bus routes. Regional rail transit is provided via Caltrain service from the Gilroy Caltrain station located approximately five miles southwest of the Park.

Santa Clara Valley Transportation Authority

The VTA is the primary bus service provider in the southern portion of Santa Clara County, including the City of Gilroy. VTA Routes 521, 17 and 18 serve the Park. These routes provide 20 to 40 minute headways during weekdays, and 40 minute headways during the weekend. Route 521 does not run during the weekends as it is a weekday express commuter shuttle. Based on visual surveys conducted at the site, there are no existing bus stops in the Park.

Caltrain

Caltrain provides intercity passenger rail service throughout the San Francisco Peninsula, from Gilroy to the southern portion of downtown San Francisco. In the vicinity of the Park, Caltrain provides passenger rail service from the Gilroy Caltrain Station located approximately five miles southwest of the Park at Monterey Highway and 6th Street.

EXISTING ROADWAY OPERATING CHARACTERISTICS

Terminology and Methods of Analysis

The existing roadway operating characteristics in the Park were evaluated using a peak hour level of service (LOS) analysis. The LOS analysis calculates operating LOS of affected intersections based upon a number of values, including traffic volumes and roadway capacity. LOS is a qualitative assessment of motorists' and passengers' perceptions of traffic conditions. LOS generally reflects driving conditions such as travel time and speed, freedom to maneuver, and traffic interruptions, even though it uses quantifiable traffic measures such as vehicle control delay (in delay seconds per vehicle) to approximate driver satisfaction. LOS measures differ by roadway type because users' perceptions and expectations vary by roadway type. An individual LOS is designated by letter: "A" for most favorable to "F" for least favorable, each representing a range of conditions. LOS A represents free flow conditions while LOS F indicates excessive delays and gridlocked conditions. Table 3-16 provides a description of the level of service grades.

For this analysis, the LOS was calculated for the a.m. and p.m. peak hours using the Highway Capacity Manual's (HCM, 2000) intersection "operations" method for both signalized and unsignalized intersections. According to the VTA Congestion Management Program (CMP), LOS E is the minimum acceptable level of service threshold for intersections within the VTA's jurisdiction. For facilities along the Leavesley Road corridor within the City of Gilroy, LOS D is the minimum acceptable level of service threshold.

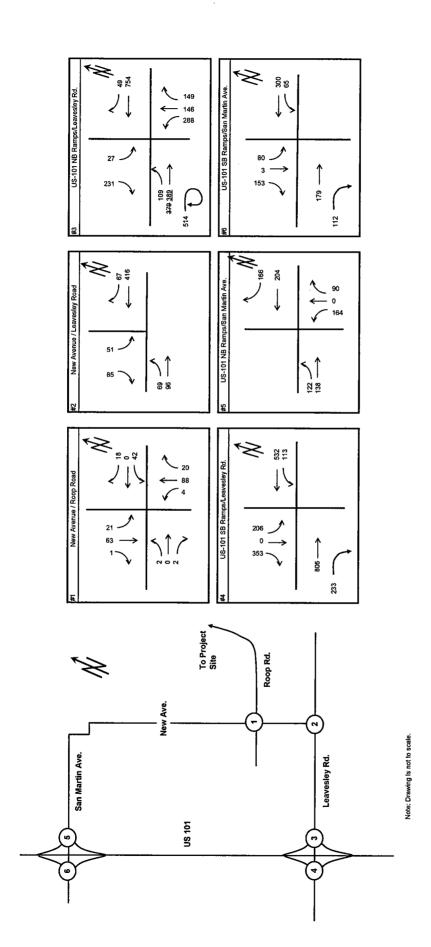
TABLE 3-16 LEVEL OF SERVICE DEFINITIONS

Level of Service	Intersection Operations	Delay (Seconds/Veh)
Signalized	Intersection Levels of Service	
A	Free flow conditions	≤ 10 sec.
В	Reasonable free flow, slight restriction to maneuverability	> 10 to 20 sec.
C	Stable operations, restricted maneuverability	> 20 to 35 sec.
D	Unstable operations, severely limited maneuverability	> 35 to 55 sec.
E	Extremely unstable, approaching or at capacity	> 55 to 80 sec.
F	Breakdown conditions, projected demand exceeds capacity	> 80 sec.
Unsignaliz	ed Intersection Levels of Service	
A	Little or no delay	$\leq 10 \text{ sec.}$
В	Short traffic delays	> 10 to 15 sec.
C	Average traffic delays	> 15 to 25 sec.
D	Long traffic delays	> 25 to 35 sec.
E	Very long traffic delays	> 35 to 50 sec.
F	Extreme delays potentially affecting other traffic movements in the intersection	> 50 sec.
SOURCE:	Institute of Transportation Engineers, 2000. Highway Capacity Manual 2000.	

Existing Condition Levels of Service

To establish existing intersection LOS, weekday a.m. and p.m. peak hour, and weekend midday peak hour turning movement count data were obtained at the six existing study area intersections. Appendix D contains the raw traffic count worksheets. Figures 3-12, 3-13 and 3-14 illustrate the existing a.m., p.m. and weekend peak hour traffic volumes at the study area intersections, respectively. The existing LOS is summarized in Table 3-17. The table indicates that all of the study area intersections currently operate at LOS C or better during the weekday a.m. and p.m. peak hours, and the weekend midday peak hour. The existing LOS worksheets are on file with the County.

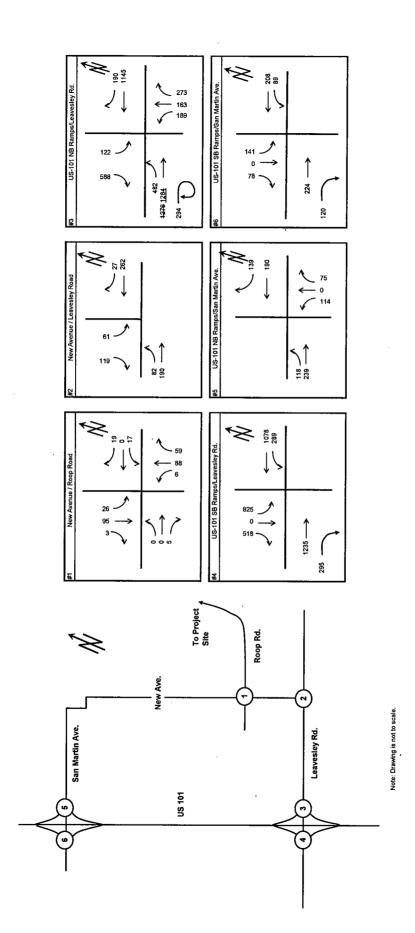
Although the existing levels of service are acceptable, the peak hour signal warrant is met at the San Martin Avenue/SB Highway 101 Ramps intersection. All-way stop control should be considered, which will result in LOS B. Traffic signals should only be considered after a comprehensive signal warrant analysis, not only from peak hour traffic.



- Coyote Lake Harvey Bear Ranch Count Park Master Plan EIR/201017

Existing Weekday AM Traffic Volumes

-Coyote Lake Harvey Bear Ranch Count Park Master Plan EIR / 201017
Figure 3-13
Existing Weekday PM Traffic Volumes



--- Coyote Lake Harvey Bear Ranch Count Park Master Plan EIR/201017

Figure 3-14

Existing Weekday-Weekend Traffic Volumes

TABLE 3-17 EXISTING INTERSECTION LEVELS OF SERVICE

	AM Peal	eekday l k Hour	Saturday Peak Hour Midday Peak Hour			
Intersection	Delay	LOS	Delay	LOS	Delay	LOS
1. New Avenue/Roop Road	2.4 sec	A	1.6 sec	A	1.3 sec	A
2. New Avenue/Leavesley Road	2.2 sec	Α	3.4 sec	Α	3.1 sec	Α
3. US-101 NB Ramps/Leavesley Road	28.1 sec	C	33.2 sec	C-	33.7 sec 33.8 sec	C-
4. US-101 SB Ramps/Leavesley Road	20.2 sec	C+	26.2 sec 21.7 sec	<u>C</u> C+	25.8 sec	C
5. US-101 NB Ramps/San Martin Avenue	6.6 sec	Α	4.7 sec	Α	5.0 sec	Α
6. US-101 SB Ramps/San Martin Avenue	4.4 sec	Α	8.1 sec	Α	5.3 sec	Α

IMPACTS AND MITIGATION MEASURES

Three planning zones within the park have potential traffic and circulation issues: the Western Flat area, which has access via San Martin Avenue east of Foothill Avenue, the Mendoza Ranch area, which has access west of the existing Coyote Lake Road, which is the existing access road to the existing park, and the Lakeside area which is proposed to be developed within the existing park immediately adjacent to Coyote Lake. The fourth zone, the Slopes and Ridge area, is accessed from the other zones, and would not generate traffic independent of them. Each of the planning zones has distinct and separate access routes and will impact separate portions of the road network in the project vicinity. The Western Flat area will primarily impact the San Martin Avenue corridor. The Mendoza Ranch area and Lakeside area will both have access off of Roop Road and will impact the Roop Road – New Avenue – Leavesley Road corridor. For this reason, the traffic generation associated with components of the park for each of these three distinct areas is separated in the trip generation as well as the trip distribution and assignment.

The three phases of the project are expected to be developed within very distinct time frames. Phase 1 is expected to be developed within the next several years. Phase 2 is expected to be developed within the next 10 years. Phase 3 will not be completed for another 10 to 20 years. Because Phase 1 is the only proposed component of the project for immediate implementation, it is analyzed at a project level of detail. Project Phases 2 and 3 are long-term components of the Master Plan that have not been precisely defined in terms of specific project activity levels. The activity levels assumed in this analysis are based upon the best information available at this time. Phases 2 and 3 will be subject to more detailed environmental analysis when more detailed project descriptions and more imminent implementation is expected. Phases 2 and 3 are analyzed at a program level and are considered together as project buildout.

SIGNIFICANCE CRITERIA

A project would normally have a significant effect on the environment if it would cause a substantial increase in traffic in relation to the existing or future baseline traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity (v/c) ratio on roads, or congestion at intersections), or change the condition of an existing street (i.e., through street closure, or change to direction of travel) in a manner that would substantially affect access or traffic load and capacity of the street system. The following criteria are consistent with County and Caltrans guidelines for determination of significance.

- At a signalized (and all-way stop-controlled) study intersection the project would cause the existing or future baseline level of service to degrade by one or more level, i.e. an intersection operating at LOS C degrading to LOS D, E or F).
- At a signalized (and all-way stop-controlled) study intersection where the baseline level of service is LOS F, the project would cause (a) the total intersection average vehicle delay to increase by two or more seconds, (b) an increase in average delay for any of the critical movements of four or more seconds; or (c) an increase in the v/c ratio of more than 0.03 (if delay values cannot be measured accurately).
- At a signalized (and all-way stop-controlled) study intersection, the project's contribution to cumulative impacts would be judged "considerable" (i.e., significant) if the project would contribute 5 percent or more of the cumulative traffic increase as measured by the difference between existing and cumulative (with project) conditions.
- At a side-street stop-controlled study intersection where the intersection currently does not satisfy traffic signal warrants, the project would cause one or more traffic signal warrants to be satisfied.
- At a side-street stop-controlled study intersection where the intersection currently does not satisfy traffic signal warrants, and where the project would not cause one or more traffic signal warrant to be satisfied but would cause the critical movement(s) at the intersection to degrade to worse than LOS D (or from LOS E to F, or to worsen within LOS F), and where the increase in minor street critical delay involves more than 30 peak-hour vehicles and is judged high enough to cause an unsafe condition to prevail.

IMPACTS AND MITIGATION MEASURES

Impact Transportation and Circulation-1: Implementation of the Master Plan has potential to adversely affect levels of service (LOS) at local intersections. Less than Significant.

Project-Level Components: Trip Generation and Level of Service

The first project development phase includes the development of staging areas in the Western Flat area and the Mendoza Ranch area. The Western Flat area is also proposed to include an equestrian camping area located where overflow parking will be provided in future phases of the project. The Western Flat staging area is proposed to include parking for 50 automobiles plus 25 autos with horse trailers. Additional miscellaneous traffic will be generated from maintenance, service and enforcement vehicles from the park. The Mendoza Ranch staging area

is proposed to include parking for 40 automobiles plus 10 autos with trailers. Again, some additional traffic is expected to be generated by park and service vehicles.

Table 3-18 tabulates anticipated activity associated with Project Phase 1 traffic generation and distribution in the Western Flat and Mendoza Ranch areas. This indicates that a total of one turnover of vehicles is expected during weekdays and off-season weekends, and three turnovers of vehicles are expected on summer weekends in the Western Flat staging area. The Mendoza Ranch staging area is expected to experience one full utilization of the parking supply on weekdays and off-season weekends, and two full utilizations of the parking supply on summer weekends.

The equestrian camping facility proposed for the Western Flat area will be able to accommodate about 150 automobiles with trailers. It is expected that this will only be utilized twice a year. This could be considered a special event that would not be considered as part of the baseline operations at the park. However, in order to evaluate a worst case condition, the full occupancy of the equestrian camping area is assumed as a part of the Phase 1 project description.

Table 3-20 provides trip generation estimates for worst case conditions, which is full occupancy of all proposed uses. In reality, on an annualized average basis, the typical daily trip generation will only be about 25% to 30% of the following estimates. This is true not only for Phase 1 but also for Project buildout. This must be kept in mind when reviewing the following analysis. Table 3-20 indicates that the Western Flat area will generate about 460 daily trips when the equestrian camping facility is fully occupied during weekdays, with about 10 peak hour trips during the morning peak hour and 46 PM peak hour trips. Weekends are expected to generate about 780 daily trips with 117 during the peak hour. The Western Flat area will generate about 160 trips on weekdays (when the equestrian camping facility is not utilized), and about 480 trips on weekend days.

Under full occupancy, the Mendoza Ranch area is expected to generate about 108 daily trips on weekdays with 3 during the morning peak hour and 11 during the PM peak hour. Weekend days are expected to include a total of about 216 daily trips with 32 during the peak hour. There is no proposed development in the Lakeside area for Phase1. The Western Flat and Mendoza Ranch areas are expected to generate a total of about 468 daily trips on weekdays with 13 during the morning peak hour and 57 during the evening peak hour. Weekends are expected to experience a total of about 996 daily trips with about 149 during the peak hour.

Table 3-21 provides a trip generation estimate taking into consideration the additional impact on capacity represented by automobiles with horse trailers. Each automobile with a horse trailer is assumed to represent the equivalent of two passenger cars. This multiplier is known as the passenger car equivalent. When all of the automobiles with horse trailers are converted to passenger car equivalents, the Western Flat area is estimated to generate a total of about 810 passenger car equivalents during weekdays with 16 during the morning peak hour and 81 during the evening peak hour. Weekends are expected to generate a total of about 1,230 passenger car equivalents. Again, this assumes the full utilization of the equestrian camping facility, which will only occur several times a year. The Mendoza Ranch area will also generate automobiles with

TABLE 3-18 - PROJECT ACTIVITY SUMMARY

	DADKE	IC CUIDDLY				ECT ACTIV			ENTÉ :	DED VE:	_			Territor -		
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	AUTOS	AUTOS	AUTOS	AUTOS	AUTOS	AUTOS	1	(75% Car				l	AUTOS	AUTOS	AUTOS	AUTOS
i i		WITH	l	WITH		WITH	MAXIMUM	WEEK V	NEEK	WEEK	WEEK	ANNUAL		WITH		WITH
ACTIVITY CENTER		TRAILERS		TRAILERS		TRAILERS	ATTEND.	DAY	END	DAY	END	ATTEND,		TRAILERS		TRAILERS
A. WESTERN FLAT			\vdash		L											
Phase 1			ŀ		i		l	l		1						
West Flat Area Staging Automobiles			١.		١			ŀ								
Automobiles Autos With Horse Trailers	50	25	1	1	3	3							50	-	150	
Park and Service Vehicles (Allowance)	5	25	1	•	3	•				Į.			5	25	15	75
Overflow Parking			'		"					[J		15	
Equest. Camping (Autos w/horse trailers)		150	1	1		1					2			150		150
Phase 1 Subtotal													55	175	165	225
Phase 2																
West Flat Area Staging			١.		١.,											
Automobiles Autos With Horse Trailers	50	25	1	1	3	3	1	l					50	26	150	75
Park and Service Vehicles (Allowance)	5	20	1	,	3	3							5	25	15	75
Golf Course			i '		"				,	l		74.000	185		555	
Events Pavilion (see note 1)			i		1		200			1	3	17,000	110		330	
Overflow Parking			ŀ		i			İ					_			
Equest/Agric Event Center (see note 2)	100		1		1				10	i	4		100		100	
Equestrian Camping		150		1	l	1					2			150		150
Historic Interpretation School Groups			١.		١.		60			ـــا	44	2,650	15		0	
Bicycle Park Fishing Pond (External Trips incl in other uses)			1		3		40			52	52		22		66	
Western Flat Group Pionic Area			1		l ₁		200				20		0 110		0	
Dog Off-Leash Area	25		2		3		200				20		50		110 75	
Lawn Play Areas (External Trips incl in other uses			_		ľ								0		75	
Phase 2 Subtotal					1			-					647	25	1,401	75
					l										.,	
Phase 3					l											
No Change from Phase 2					l				- 1							
B. MENDOZA AREA					 		ļ									
Phase 1									-							
Mendoza Staging Area													l			
Automobiles	40		1		2						J		40		80	
Autos With Horse Trailers		10		1	_	2]			10		20
Park and Service Vehicles (Allowance)	4		1		2								4	-	8	
Phase 1 Subtotal													44	10	88	20
Phase 2																
Phase 2 Mendoza Staging Area											- 1					
Automobiles	40		1		2						1		40		90	
Autos With Horse Trailers	70	10	'	1	'	2							40	10	80	20
Park and Service Vehicles (Allowance)	4		1		2								4	10	8	20
Family Picnic Site			i		ī		50				52		28		28	
Phase 2 Subtotal													72	10	115.5	20
									ı							
Phase 3																
Mendoza Staging Area Automobiles	40				١ .				- [40			
Automobiles Autos With Horse Trailers	40	10	1	1	2	2							40	40	80	
Park and Service Vehicles (Allowance)	4	10	1	1	2	Z			ŀ				4	10	8	20
Family Pionic Site	-		1		1		50		- [52		28		28	
Environmental Education Center					•		30				88	2,650	8		20	
Youth Campground							100		- [-,	44		220	
Staff Parking	15		3		3		L						45		45	
Phase 3 Subtotal													168	10	381	20
A LAWFORD AREA																
C. LAKESIDE AREA Phase 3																
Lakeside Campground	100	- 1	1		1				- 1		- 1		100		400	
Lakeside Group Picnic Area	25		2		2				- 1		- 1		50		100 50	
Phase 3 Subtotal		i i	_		_				- 1		- 1		150	0	150	
													100	·	100	

D. GRAND TOTALS

Phase 2 1,517 95 Phase 3 1,932

Table 3-19 Project Trip Generation Rates

Note: Project daily trip generation is based on activity levels determined by County Parks representatives and economic consultant. The peak hour rates below are based on Institute of Transportation Engineers "Trip Generation" data for the percentages o

		AM PEA	KHOUR		PM PEA	K HOUR	:		WEEKEND	PEAK HO	DUR
TRIP GENERATION RATES (per Acre) ¹	ITE LAND USE CODE	% OF ADT	% IN	% out	% OF ADT	% IN	out		% OF ADT	% IN	% OU1
Park Uses Except Those Listed Below	412	2%	80%	20%	10%	41%	59%		15%	59%	41%
Golf Course	430	7%	74%	26%	8%	43%	57%		11%	52%	48%
BMX Park	N.A.	2%	100%	0%	40%	80%	20%	Ì	30%	60%	40%
Youth Campground	N.A.	10%	70%	30%	10%	30%	70%		30%	50%	50%
Lakeside Campground	416	9%	49%	51%	10%	44%	56%		12%	48%	52%
Staff Parking	N.A.	10%	70%	30%	10%	30%	70%		10%	50%	50%

TRIPS HOUR OF N OUT TRIPS HOUR OUT OUT TRIPS HOUR OUT O	 					WEFE	/DAVe					,	14/55	(ENDC	
DAILY FEAK TRIPS TRI		\vdash		AM PEA	K HOUR	WEER		PM PFA	K HOUR		<u> </u>	WE			NIB
STERN FLAT			PEAK	%	TRIPS		PEAK	%							TRIPS
SSTEAN Company Compa		TRIPS			IN	OUT			IN	OUT	TRIPS			IN	OUT
West Plat Area Skaighing Automobiles 100 2 2% 2 0 10 10% 4 6 300 45 15% 27 18 Automobiles 100 2 2% 2 0 10 10% 4 6 300 45 15% 27 18 Automobiles 100 2 2% 2 0 10 10% 4 6 300 45 15% 27 18 Automobiles 100 2 2% 2 0 10 10% 5 1 5 5 15% 109 76 Essestism Camping (Autos With Horse Trailers) 600 12 2% 10 10 10% 4 6 300 45 15% 53 37 Essestism Camping (Autos With Horse Trailers) 600 12 2% 2 0 10 10% 4 6 300 45 15% 52 18 Automobiles 100 2 2% 2 0 10 10% 4 6 300 45 15% 52 18 Automobiles 100 2 2% 2 0 10 10% 4 6 300 45 15% 52 18 Automobiles 100 2 2% 2 0 10 10% 4 6 300 45 15% 52 18 Automobiles 100 2 2% 2 0 10 10% 4 6 300 45 15% 52 18 Automobiles 100 2 2% 2 0 10 10% 4 6 300 45 15% 52 18 Automobiles 100 2 2% 2 0 10 10% 4 6 300 45 15% 52 18 Automobiles 100 2 2% 2 0 10 10% 4 6 300 45 15% 52 18 Automobiles 100 2 2% 2 0 10 10% 4 6 300 45 15% 52 18 Automobiles 100 2 2% 2 0 10 10% 4 6 300 45 15% 52 18 Automobiles 100 2 2% 2 0 10 10% 4 6 300 45 15% 52 18 Automobiles 100 2 2% 2 0 10 10% 4 6 300 45 15% 52 18 Automobiles 100 2 2% 2 0 10 10% 4 6 300 45 15% 52 18 Automobiles 100 2 2% 2 0 10 10% 4 6 300 45 15% 52 18 Automobiles 100 2 2% 2 0 10 10% 4 6 300 45 15% 52 18 Automobiles 100 2 2% 2 0 10 10% 4 6 300 45 15% 52 18 Automobiles 100 2 2% 2 0 10 10% 4 6 300 45 15% 52 18 Automobiles 100 2 2% 2 0 10 10% 4 6 300 45 15% 52 18 Automobiles 100 2 2% 2 0 10 10% 4 6 300 45 15% 52 18 Automobiles 100 2 2% 2 0 10 10% 6 8 12 20 0 10 15% 50 30 15% 5	ESTERN FLAT	-	1FUPS	AUT			TRIPS	ADI			-	TRIPS	AD1	-	
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Equestrian Camping (Autos With Horse Trailers)	Overflow Parking					·	_		•		-	55	1070		
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BMX Park															
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No Change from Phase 2 1,574	ASE 2 SUBIQUA	1,5/4	50	3%	40	10	134	9%	62	72	2,842	402	14%	229	173
Section Sect	rase 3														
See	No Change from Phase 2	1,574	50	3%	40	10	134	9%	62	72	2,842	402	14%	229	173
Automobiles	"NDOZA ADEA	<u> </u>													
Mendoza Staging Area										_					
Automobiles Automo						- 1									
Autor With Horse Trailers 40		80	2	2%	2	0	В	10%	3	5	160	24	15%	14	10
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Automobiles	tase 2														
Autos With Horse Trailers	Mendoza Staging Area					İ					ì				
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Autos With Horse Trailers		80	2	2%	2	0	8	10%	2	5	160	24	15%	44	10
Park and Service Vehicles (Allowance) 8															
Environmental Education Center 15 0 29 0 0 0 2 100 1 1 1 0 0 0 15% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0					0			10%							
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ase 3 200 19 9% 9 10 20 10% 9 11 200 24 12% 12 12 24 25 2 0 10 10% 4 6 100 15 15% 9 6 24 25 2 0 10 10 10% 4 6 100 15 15% 9 6 25 2 0 10 10 10% 15 15% 9 6 25 2 0 10 10 10% 15 15% 9 6 25 2 0 10 10 10% 15 15% 9 6 25 2 0 10 10 10% 15 15% 9 6 25 2 0 10 10 10% 15 15% 9 6 25 2 0 10 10 10% 15 15% 9 6 25 2 0 10 10 10% 15 15% 9 6 25 2 0 10 10 10% 15 15% 9 6 25 2 10 10 10% 15 15% 9 6 25 2 10 10 10% 15 15% 9 6 25 2 10 10 10% 15 15% 9 6 25 2 15% 132 91 25 2 10 10 10% 15 2 9% 69 83 3,153 448 14% 256 192	VEGIDE AREA														
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ase 3 Subblai 300 21 7% 11 10 30 10% 13 17 300 39 13% 20 19 IAND TOTALS ase 1 938 19 2% 17 2 94 10% 38 55 1,486 223 15% 132 91 ase 2 1,787 54 3% 44 10 152 9% 69 83 3,153 448 14% 256 192	Lakeside Group Picnic Area	100	2	2%	2										
ase 1 938 19 2% 17 2 94 10% 38 55 1,486 223 15% 132 91 ase 2 1,757 54 3% 44 10 152 9% 69 83 3,153 448 14% 256 192	iase 3 Sublotal	300	21	7%	11	10	30		13						
ase 1 938 19 2% 17 2 94 10% 38 55 1,486 223 15% 132 91 ase 2 1,757 54 3% 44 10 152 9% 69 83 3,153 448 14% 256 192	PAND TOTALS														
ase 2 1,757 54 3% 44 10 152 9% 69 83 3,153 448 14% 256 192	1856 1	938	19	2%	17	2	94	10%	38	55	1.486	223	15%	132	01
	vase 2	1,757	54	3%	44										
	nase 3	2,250	93	4%	67	26	202	9%	88	114					

EXHIBIT - PROJECT TRIP GENERATION (PASSENGER CAR EQUIVALENTS)

^{1. * -} Because the Events Pavilion and Equestrian/Agricultural Events Center will not have separate activities during large Equestrian Camping events, their respective trip generation is not included in the Phase 2 Subtotal.

2. ** - Picnic areas at Coyote Lake historically have averaged 25% usage throughout the year. 100% utilization (twice per weekend day at the Lakeside Picnic Area) is assumed for a worst case condition.

TABLE 3-20 - PROJECT TRIP GENERATION (VEHICLES)

	CE 3-20	PROJEC	IIRIF	GENERA		EHICLES)								
	<u> </u>		AM DE A	K HOUR	WEE	DAYS	DM DE A	K HOUR			1872		KENDS	OUD.
	DAILY	PEAK HOUR	% OF	TRIPS IN	TRIPS OUT	PEAK HOUR	% OF	TRIPS IN	TRIPS OUT	DAILY	PEAK HOUR	% OF	PEAK H	TRIPS OUT
		TRIPS	ADT			TRIPS	ADT				TRIPS	ADT		
A. WESTERN FLAT Phase 1														
West Flat Area Staging														
Automobiles	100	2	2%	2	0	10	10%	4	6	300	45	15%	27	18
Autos With Horse Trailers	50	1	2%	1	Ō	5	10%	2	3	150	23	15%	13	9
Park and Service Vehicles (Allowance)	10	1	10%	1	0	1	10%	0	1	30	5	15%	3	2
Overflow Parking	1													
Equestrian Camping (Autos With Horse Trailers)	300	6	2%	5	1	30	10%	12	18	300	45	15%	27	18
Phase 1 Subtotal	460	10	2%	8	2	46	10%	19	27	780	117	15%	69	48
Phase 2	1									ł				
West Flat Area Staging														
Automobiles	100	2	2%	2	0	10	10%	4	6	300	45	15%	27	18
Autos With Horse Trailers	50	1	2%	1	0	5	10%	2	3	150	23	15%	13	9
Park and Service Vehicles (Allowance)	10	1	10%	1	0	1	10%	0	1	30	5	15%	3	2
Golf Course	370	26	7%	19	7	30	8%	13	17	1,110	122	11%	63	59
Events Pavilion Overflow Parking	220	4	2%	4	1	22	10%	9	13	660	99	15%	58	41
Equestrian / Agricultural Event Center	200	4	2%	3	1	20	10%	8	12	200	30	15%	18	12
Equestrian Camping	300	6	2%	5	1	30	10%	12	18	300	45	15%	27	18
Historic Interpretation School Groups	30	1	2%	ō	o .	3	10%	1	2	0	0	15%	ō	o
BMX Park	44	1	2%	1	0	18	40%	14	4	132	40	30%	24	16
Fishing Pond (External Trips are Included in Other Uses)	0	0	2%	0	0	0	10%	0	0	0	0	15%	0	0
Western Flat Group Picnic Area	220	4	2%	4	1	22	10%	9	13	220	33	15%	19	14
Dog Off-Leash Area	100	2	2%	2	0	10	10%	4	6	150	23	15%	13	9
Informal Lawn Play Areas (External Trips are Included in Other Uses) Phase 2 Subtotal*		0 44	2% 4%	34	10	0	10%	0	0	0	0	15%	0	0
Filase 2 Subtotal	1,224	44	4%	34	10	128	10%	60	68	2,392	334	14%	189	145
Phase 3]													
No Change from Phase 2	1.224	44	4%	34	10	128	10%	60	68	2,392	334	14%	189	145
	L									,				
B. MENDOZA AREA														
Phase 1						!								
Mendoza Staging Area Automobiles					_	_		_	_					
Automobiles Autos With Horse Trailers	80 20	2	2% 2%	1 0	0	8 2	10% 10%	3 1	5 1	160 40	24 6	15% 15%	14 4	10
Park and Service Vehicles (Allowance)	8	1	10%	1	ő	1	10%	0	0	16	2	15%	1	2
Phase 1 Subtotal	108	3	3%	2	1	11	10%	4	6	216	32	15%	19	13
		-							-					
Phase 2														
Mendoza Staging Area										ĺ				
Automobiles	80	2	2%	1	0	8	10%	3	5	160	24	15%	14	10
Autos With Horse Trailers Park and Service Vehicles (Allowance)	20 8	0	2% 10%	0	0	2 1	10%	1	1	40	6	15%	4	2
Family Picnic Site	55	1	2%	1	0	6	10% 10%	0 2	0 3	16 55	2 8	15% 15%	1 5	1
Phase 2 Subtotal	163	4	2%	3	1	16	10%	7	10	271	41	15%	24	17
				-	-			•			•••	10,0		"
Phase 3									,					
Mendoza Staging Area					_									
Automobiles	80	2	2%	1	0	8	10%	3	5	160	24	15%	14	10
Autos With Horse Trailers Park and Service Vehicles (Allowance)	20	0	2%	0	0	2	10%	1	1	40	6	15%	4	2
Family Picnic Site*	8 55	1	10% 2%	1	0	1 6	10% 10%	0 2	0 3	16	2	15%	1	1
Environmental Education Center	15	0	2%	0	0	2	10%	1	1	55 0	8 0	15% 15%	5 0	3 0
Youth Campground	88	9	10%	6	3	9	10%	3	6	440	132	30%	66	66
Staff Parking	90	9	10%	6	3	9	10%	3	6	90	14	15%	8	6
Phase 3 Subtotal	356	22	6%	16	6	36	10%	13	23	801	186	23%	98	88
O LAKECIDE ADEA	\square													
C. LAKESIDE AREA Phase 3														
Lakeside Campground	200	19	9%	9	10	20	10%	9	11	200	24	12%	40	40
Lakeside Group Picnic Area*	100	2	2%	2	0	10	10%	4	6	100	24 15	15%	12 9	12 6
Phase 3 Subtotal	300	21	7%	11	10	30	10%	13	17	300	39	13%	20	19
												,.		
D. GRAND TOTALS														
Phase 1	568	13	2%	10	3	57	10%	23	34	996	149	15%	88	61
Phase 2	1,387	48	3%	37	11	145	10%	67	78	2,663	375	14%	213	162
Phase 3	1,880	87	5%	60	26	194	10%	86	108	3,493	559	16%	307	252

Notes: 1.* - Because the Events Pavilion and Equestrian/Agricultural Events Center will not have separate activities during large Equestrian Camping events, their respective trip generation is not included in the Phase 2 Subtotal.

2. ** - Picnic areas at Coyote Lake historically have averaged 25% usage throughout the year. 100% utilization (twice per weekend day at the Lakeside Picnic Area) is assumed for a worst case condition.

TABLE 3-21 - PROJECT TRIP GENERATION (PASSENGER CAR EQUIVALENTS)

	Т				WEEK	CDAYS					Т.	WEF	KENDS	
			AM PEA	K HOUR			PM PEA	KHOUR			WEEKEND			OUR
	DAILY	PEAK HOUR TRIPS	% OF ADT	TRIPS IN	TRIPS OUT	PEAK HOUR TRIPS	% OF ADT	TRIPS	TRIPS	DAILY TRIPS	PEAK HOUR TRIPS	% OF ADT	TRIPS IN	TRIP
A. WESTERN FLAT						111111111111111111111111111111111111111	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			_	713110	7.01		
Phase 1	1									1				
West Flat Area Staging Automobiles	100	2	2%	2	0	10	10%	4	6	300	45	15%		
Autos With Horse Trailers	100	2	2%	2	0	10	10%	4	6	300	45 45	15%	27 27	18 18
Park and Service Vehicles (Allowance)	10	ő	2%	Õ	o	1 1	10%	ō	1	300	5	15%	3	2
Overflow Parking	"	•	2,0	Ū	Ū	'	.070	٠	•	"	1	1376	3	_
Equestrian Camping (Autos With Horse Trailers)	600	12	2%	10	2	60	10%	25	35	600	90	15%	53	37
Phase 1 Subtotal	810	16	2%	14	2	81	10%	33	48	1,230	185	15%	109	75
Phase 2	i									i				
West Flat Area Staging	.													
Automobiles	100	2	2%	2	0	10	10%	4	6	300	45	15%	27	18
Autos With Horse Trailers	100	2	2%	2	0	10	10%	4	6	300	45	15%	27	18
Park and Service Vehicles (Allowance)	10	0	2%	0	0	1	10%	0	1	30	5	15%	3	2
Golf Course	370	26	7%	19	7	1	8%	0	1	1,110	122	11%	63	59
Events Pavilion	220	4	2%	3	1	22	10%	9	13	660	99	15%	58	41
Overflow Parking	200		20/	•		20	400/		40	000		4500	40	
Equestrian / Agricultural Event Center Equestrian Camping (Autos With Horse Trailers)	600	4 12	2% 2%	3 10	1 2	20 60	10% 10%	8	12	200	30	15%	18	12
Historic Interpretation School Groups	30	1	2% 2%	10	0	3	10%	25	35 2	600 0	90	15%	53	37
BMX Park	44	1	2% 2%	1	0	18	10% 40%	1 14	4	132	40	15% 30%	0 24	0 16
Fishing Pond (External Trips are Included in Other Uses)	0	Ö	2%	ò	0	0	10%	0	0	0	0	15%	0	0
Western Flat Group Picnic Area	220	4	2%	3	1	22	10%	9	13	220	33	15%	19	14
Dog Off-Leash Area	100	2	2%	2	ò	10	10%	4	6	150	23	15%	13	9
Informal Lawn Play Areas (External Trips are Included in Other Uses)	0	0	2%	0	ō	0	10%	o	ō	0	0	15%	0	Ö
Phase 2 Subtotal	1,574	50	3%	40	10	135	9%	62	73	2,842	402	14%	229	173
Phase 3	1 ,													
No Change from Phase 2	1,574	50	3%	40	10	135	9%	62	73	2,842	402	14%	229	173
	<u> </u>									_,-,-				
B. MENDOZA AREA Phase 1														
Mendoza Staging Area														
Automobiles	80	2	2%	2	0	8	10%	3	5	160	24	15%	14	10
Autos With Horse Trailers	40	1	2%	1	ō	4	10%	2	2	80	12	15%	7	5
Park and Service Vehicles (Allowance)	8	0	2%	ō	ō	1	10%	0	0	16	2	15%	1	1
Phase 1 Subtotal	128	3	2%	3	0	13	10%	5	8	256	38	15%	22	16
Phase 2	1 1													
Mendoza Staging Area	i l													
Automobiles	80	2	2%	2	0	8	10%	3	5	160	24	15%	14	10
Autos With Horse Trailers	40	1	2%	1	0	4	10%	2	2	80	12	15%	7	5
Park and Service Vehicles (Allowance)	8	0	2%	0	0	1	10%	0	0	16	2	15%	1	1
Family Picnic Site	55	11	2%	1	0	6	10%	2	3	55	. 8	15%	5	3
Phase 2 Subtotal	183	4	2%	4	0	18	10%	8	11	311	47	15%	28	19
Phase 3					- 1					i				
Mendoza Staging Area	1 1								Į	Ì				
Automobiles	80	2	2%	2	0	8	10%	3 .	5	160	24	15%	14	10
Autos With Horse Trailers	40	1	2%	1	ō	4	10%	2	2	80	12	15%	7	5
Park and Service Vehicles (Allowance)	8	0	2%	0	0	1	10%	0	0	16	2	15%	1	1
Family Picnic Site	55	1	2%	1	0	6	10%	2	3	55	8	15%	5	3
Environmental Education Center	15	0	2%	0	0	2	10%	1	1	0	0	15%	0	0
Youth Campground	88	9	10%	6	3	9	10%	3	6	440	132	30%	66	66
Staff Parking Phase 3 Subtotal	90 376	- 9	10% 6%	6 16	6	9 38	10%	13	6 24	90 841	179	21%	94	85
	<u> </u>					· · ·	1070	15		١		2170	54	60
C. LAKESIDE AREA														
Phase 3 Lakeside Campground	200	19	00/		40	20	100/			200	24	400/	40	40
Lakeside Campground Lakeside Group Picnic Area	100	19	9% 2%	9 2	10	20 10	10% 10%	9	11 6	200 100	24	12%	12	12
Phase 3 Subtotal	300	21	7%	11	10	30	10%	13	17	300	15 39	15%	9 21	6 18
D. GRAND TOTALS Phase 1	938	19	2%	47		94	1007	20	EC	1.400	222	4501	40.	
Phase 2	1,757	19 54	2% 3%	17 44	2 10	94 153	10% 9%	38 70	56 83	1,486 3,153	223 448	15% 14%	131 256	92 192
					10			,,,	00	J. 1JJ			250	152

Notes: 1.* - Because the Events Pavilion and Equestrian/Agricultural Events Center will not have separate activities during large Equestrian Camping events, their respective trip generation is not included in the Phase 2 Subtotal.

2. ** - Picnic areas at Coyote Lake historically have averaged 25% usage throughout the year. 100% utilization (twice per weekend day at the Lakeside Picnic Area) is assumed for a worst case condition.

3. Passenger Car Equivalent: 1 horse trailer = 2 passenger cars

horse trailers. It is expected to generate a total of about 128 passenger car equivalents on weekdays with 3 during the morning peak hour and 13 during the evening peak hour. Weekends are expected to generate a total of about 256 passenger car equivalents with 38 during the peak hour. The grand total traffic generation from Phase 1 of the Master Plan buildout is expected to include a total of about 938 passenger car equivalents on weekdays with 19 during the morning peak hour and 94 during the evening peak hour. Weekends are expected to include a total of 1,486 daily trips with 223 during the peak hour.

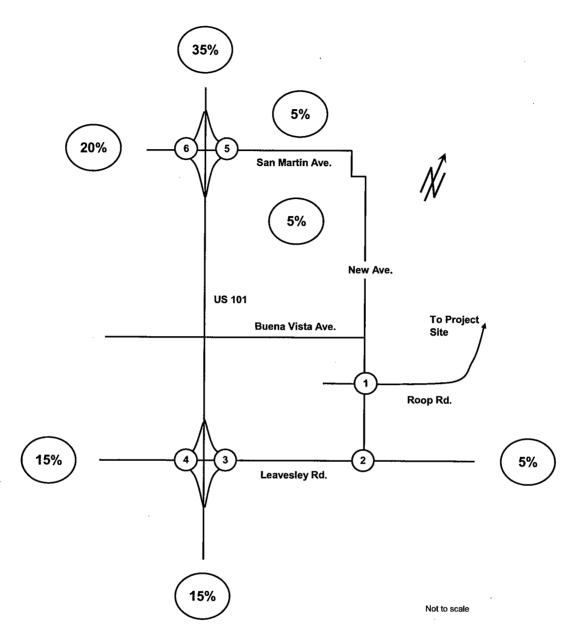
Figure 3-15 illustrates the assumed distribution of project traffic generated in the Western Flat area. Figure 3-16 illustrates traffic distribution assumptions for the Mendoza Ranch and Lakeside areas. These distributions are based upon the distribution of population in South Santa Clara County and northern San Benito County. Additional trip productions are expected from the San Jose area as well as Merced, Monterey and Santa Cruz Counties. However, it is expected that the market penetration in these outlying areas will be significantly less per capita than what occurs in South Santa Clara County.

Figures 3-17, 3-18 and 3-19 illustrate the existing plus project Phase 1 respective weekday and weekend traffic volumes from the addition of project Phase 1 traffic to existing traffic.

The resulting existing plus project Phase 1 LOS is summarized in Table 3-22. This table indicates that all study intersections will continue to operate at acceptable LOS C or better during the weekday AM and PM peak hours as well as the weekend midday peak hour. The only exception is the Leavesley Road/Southbound Highway 101 Ramp intersection which will operate at a D level of service. However, this is acceptable according to the level of service standards in the City of Gilroy General Plan. No project specific mitigation measures will be required to accommodate project Phase 1 off-site traffic impacts, even assuming the worst case full occupancy of all of the proposed uses.

Program-Level Components: Trip Generation and Level of Service

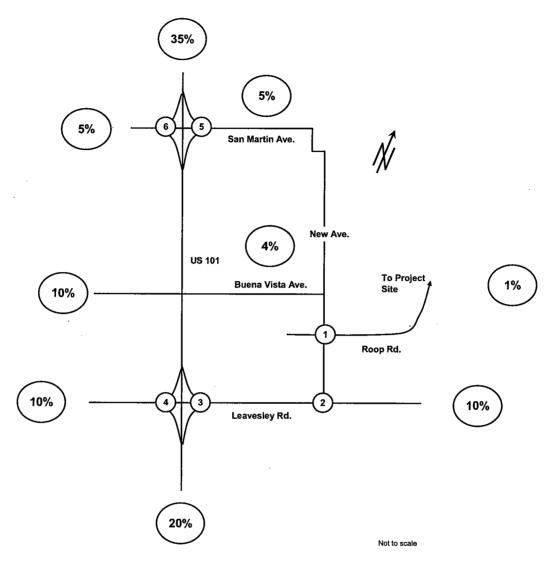
Program-level components of the Master Plan (Phases 2 and 3) are expected to be developed over the next 12 to 20 years. The precise scope of these phases has not been determined, although a general description of these phases has been developed as a part of the Master Plan. Because these phases will not occur for an extended period of time, background traffic conditions at that time are expected to be noticeably different than what is experienced at the present time. Because the buildout of the Coyote Lake-Harvey Bear Ranch Master Plan will occur at roughly the same time as the buildout of the Morgan Hill and Gilroy General Plans, the General Plan buildout forecasts from these General Plans is used as a background condition for evaluating the Master Plan buildout impacts. In addition, traffic growth is expected in the San Martin area. In recent discussions with Derek Farmer of the Santa Clara County Planning Office, unincorporated San Martin is expected to have an average annual growth rate of less than 1%. This is consistent with traffic growth trends on New Avenue over the past 10 years. New Avenue traffic volumes have been essentially unchanged during this time period.



- Coyote Lake Harvey Bear Ranch Count Park Master Plan EIR / 201017 🔳

Figure 3-15

Project Trip Distribution – Western Flat Area



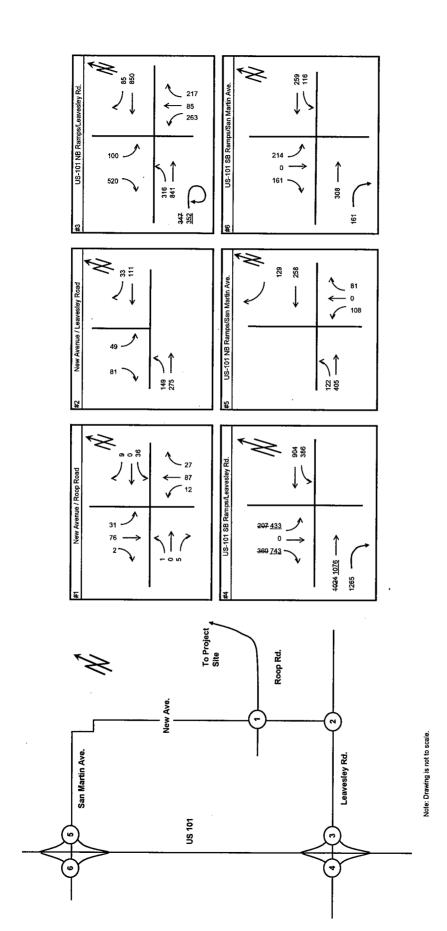
Coyote Lake Harvey Bear Ranch Count Park Master Plan EIR / 201017

Figure 3-16
Project Trip Distribution – Mendoza Ranch and Lakeside Areas

— Coyote Lake Harvey Bear Ranch Count Park Master Plan EIR / 201017 = Figure 3-17

Existing + Project Phase 1

AM Traffic Volumes

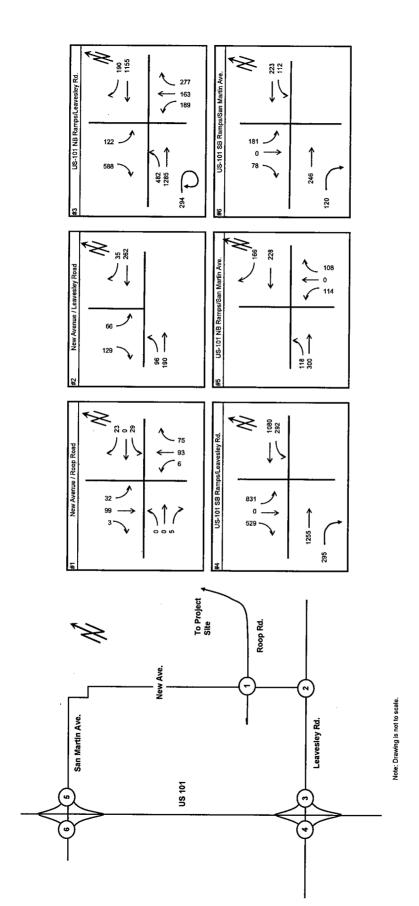


-Coyote Lake Harvey Bear Ranch Count Park Master Plan EIR / 201017

Figure 3-18

Existing + Project Phase 1

PM Traffic Volumes



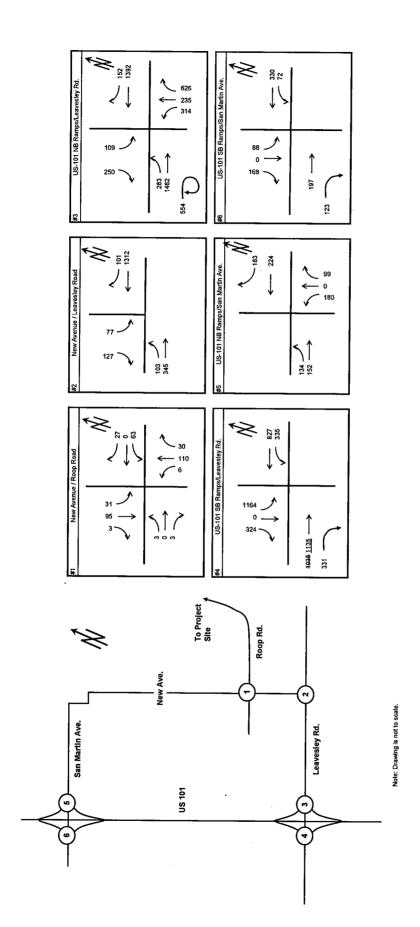
- Coyote Lake Harvey Bear Ranch Count Park Master Plan EIR/201017
Figure 3-19
Existing + Project Phase 1
Weekend Traffic Volumes

TABLE 3-22 EXISTING + PROJECT-LEVEL COMPONENTS INTERSECTION LEVELS OF SERVICE

	W	eekday l	Peak Hours		Sature Peak H	-
	AM Peal	k Hour	PM Peak	Hour	Midday Pe	ak Hour
Intersection	Delay	LOS	Delay	LOS	Delay	LOS
1. New Avenue/Roop Road	2.4 sec	A	1.8 sec	A	1.6 sec	A
2. New Avenue/Leavesley Road	2.2 sec	Α	3.5 sec	Α	3.4 sec	A
3. US-101 NB Ramps/Leavesley Road	28.1 sec 28.2 sec	C	33.3 sec	C-	33.9 sec	C-
4. US-101 SB Ramps/Leavesley Road	20.1 sec	C+	26.3 sec	<u>C</u> C ≠	26.0 sec	C
5. US-101 NB Ramps/San Martin Avenue	6.6 sec	Α	4.7 sec	A	5.1 sec	Α
6. US-101 SB Ramps/San Martin Avenue	4.5 sec	Α	9.4 sec	Α	6.8 sec	A

According to the Gilroy General Plan, which has the most influence on the study area, traffic volumes are expected to increase substantially along the Leavesley Road corridor at Gilroy General Plan buildout. Much of the increase in traffic growth along Leavesley Road in the vicinity of New Avenue will be related to the 660 acre industrial area east of the Gilroy Outlet Centers. Traffic volumes are expected to triple along Leavesley Road in the vicinity of New Avenue. The exact amount of increase along Leavesley Road in this area is subject to the ultimate method of upgrading the Highway 152 corridor southeast of the City of Gilroy. One alternative that has been given serious consideration in the past is to construct a new by-pass that is partially in San Benito County south of the existing alignment. This would divert traffic away from the existing Highway 152 corridor and, correspondingly from the Leavesley Road -Ferguson Road corridor near New Avenue. Consideration also has been given to methods of connection with the Highway 152 freeway that would substantially alter traffic patterns and resulting traffic volumes on Leavesley Road near New Avenue. However, the worst case assumption of traffic using Leavesley Road in this area is made for this analysis. The traffic volumes are depicted on Figures 3-20, 3-21 and 3-22 for the weekday morning, weekday evening and Saturday midday peak hours. Leavesley Road will require widening to a four lane arterial from east of New Avenue to the existing City of Gilroy city limit.

Traffic volumes are also expected to increase significantly along Leavesley Road in the vicinity of the Highway 101 interchange. The City of Gilroy General Plan includes the construction of a new interchange on Highway 101 at Buena Vista Avenue. This will divert traffic from Leavesley Road and result in a substantial amount of mitigation at this location. Nevertheless, the City of Gilroy is expecting a level of service D at most major intersections along the Leavesley Road corridor and has established level of service D as the acceptable standard for this roadway. LOS F will, however, be experienced at the Leavesley Road/Northbound Highway 101 off-ramp-

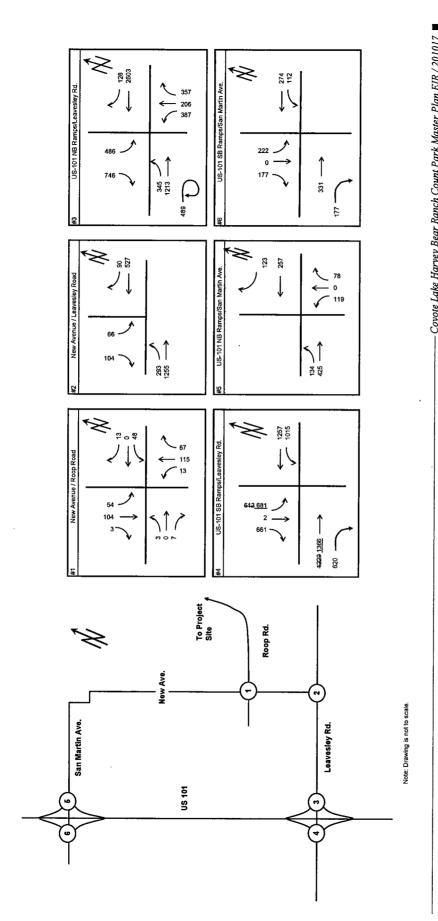


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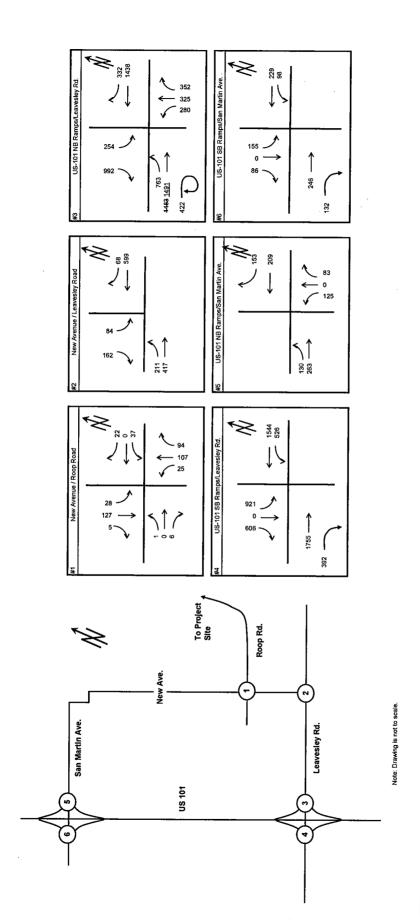
Figure 3-20

Cumulative (General Plan Buildout)

Weekday AM Traffic Volumes



- Coyote Lake Harvey Bear Ranch Count Park Master Plan EIR / 201017
Figure 3-21
Cumulative (General Plan Buildout)
Weekday PM Traffic Volumes



- Coyote Lake Harvey Bear Ranch Count Park Master Plan EIR / 201017

Figure 3-22

Cumulative (General Plan Buildout)

Weekend Traffic Volumes

San Ysidro Avenue intersection. The addition of a second northbound off-ramp though lane and second southbound San Ysidro Avenue left turn lane will be required to achieve LOS D. The Leavesley Road/New Avenue intersection is expected to operate at an overall B level of service with Leavesley Road widened to a four lane arterial. The Southbound New Avenue approach will operate at an F level of service. A traffic signal will be warranted at this intersection. The provision of separate left and right turn lanes will mitigate the level of service on the southbound New Avenue approach to an acceptable level of service.

The New Avenue/Roop Road intersection is expected to operate at an acceptable level of service and not require mitigation.

The San Martin Avenue intersections with the Southbound Highway 101 ramps and the Northbound Highway 101 ramps are expected to operate at overall LOS A and B. These intersections will warrant signalization. With traffic signals, these intersections will operate at LOS B San Martin Avenue left turn channelization may require lengthening at both Highway 101 ramp intersections. This will need to be verified in more detailed analysis in the future. Table 3-23 provides a summary of levels of service for the study intersections for cumulative conditions without the project. Table 3-24 provides a summary of the congestion management measures that may be in place under cumulative conditions without the project. The anticipated LOS with the measures recommended above are summarized in Table 3-25.

TABLE 3-23
CUMULATIVE WITHOUT MASTER PLAN
LOS WITHOUT LOCAL CONGESTION MANAGEMENT MEASURES

	Weekday Peak Hours				Saturday Peak Hour	
	AM Peal	K Hour	PM Peak	Hour	Midday Pea	ak Hour
Intersection	Delay	LOS	Delay	LOS	Delay	LOS
1. New Avenue/Roop Road	2.8 sec	A	1.9 sec	A	1.6 sec	A
2. New Avenue/Leavesley Road	32.0 sec	D	52.0 sec	F	15.2 sec	C+
3. US-101 NB Ramps/Leavesley Road	44.3 sec	D	87.4 sec 86.5 sec	F	55.2 sec	E+
4. US-101 SB Ramps/Leavesley Road	30.2 sec 29.5 sec	C	41.8 sec 36.1 sec	<u>D</u> D+	33.8 sec	C-
5. US-101 NB Ramps/San Martin Avenue	7.3 sec	Α	5.4 sec	Ā	5.4 sec	Α
6. US-101 SB Ramps/San Martin Avenue	4.6 sec	A	10.4 sec	B+	5.8 sec	A

Program-Level Components: Cumulative Conditions

This section analyzes the buildout of the Master Plan, which includes phases 2 and 3. This is only required to be a program level document with respect to the Phase 2 and 3 impact evaluation. However, the buildout of these phases is also a component of the cumulative

TABLE 3-24
CUMULATIVE WITHOUT MASTER PLAN
RECOMMENDED LOCAL CONGESTION MANAGEMENT MEASURES

Intersection	Recommended Measures		
New Avenue/Roop Road	None required		
2. New Avenue/Leavesley Road	 Widen Leavesley to 4 lanes Add SB New Right Turn Lane Signalize Intersection 		
3. US-101 NB Ramps/Leavesley Road	 Construct Hwy. 101/Buena Vista Interchange Restripe NB 101 Off Ramp as 1-L, 1-L/T, 1-T/R, 1-R Add 2nd SB San Ysidro Left Lane 		
4. US-101 SB Ramps/Leavesley Road	None Required		
5. US-101 NB Ramps/San Martin Avenue	 Signalize Intersection Verify EB San Martin Left Turn Storage Adequacy 		
6. US-101 SB Ramps/San Martin Avenue	Signalize Intersection Verify WB San MartinLeft Turn Storage Adequacy		

TABLE 3-25 CUMULATIVE WITHOUT MASTER PLAN LOS WITH LOCAL CONGESTION MANAGEMENT MEASURES

	W	eekday l	Peak Hours		Saturd Peak H	•
	AM Peal	k Hour	PM Peak Hour		Midday Peak Hour	
Intersection	Delay	LOS	Delay	LOS	Delay	LOS
1. New Avenue/Roop Road	_	_	_	_		_
2. New Avenue/Leavesley Road	15.2 sec	В	15.6 sec	В	21.8 sec	C+
3. US-101 NB Ramps/Leavesley Road	31.0 sec	С	41.7 sec 41.3 sec	D	38.2 sec	<u>D+</u>
4. US-101 SB Ramps/Leavesley Road	-	-	-	_	_	-
5. US-101 NB Ramps/San Martin Avenue	17.1 sec	В	12.1 sec	В	14.6 sec	В
6. US-101 SB Ramps/San Martin Avenue	16.2	В	17.7 sec	В	16.2 sec	В

development scenario. It, therefore, also serves as the cumulative analysis for the phase 1 report because it includes the traffic impacts not only from the buildout of the Master Plan but also the cumulative development scenario for the surrounding community.

A number of components are included in Phases 2 and 3 of the Master Plan. These are located in the Western Flat area, Mendoza Ranch area and Lakeside area. The Western Flat area will include the Western Flat Staging area and equestrian camping in the overflow parking area as described in Phase 1. In addition, Phase 2 will include a golf course, an events pavilion, a bicycle park, a fishing pond, the Western Flat group picnic area, a dog off-leash area and informal lawn play areas.

The golf course is expected to serve about 74,000 rounds of golf as summarized on Table 3-10. This is based upon forecasts by the economic consultant for the Master Plan. The number of vehicles assumed for a weekday was determined by dividing the total number of rounds per year by 300 days, which implies that 65 days out of the year are unsuitable for playing golf. It is also assumed that two persons arrive per vehicle. A reasonable worst case average day is assumed to be about 50% greater than an average day.

Weekends are expected to generate significantly more traffic than weekdays. The weekday total is tripled to approximate weekend days, which would include more usage of the golf course club house facilities as well as the golf course itself. The rates assumed for the golf course could vary depending on the specific amenities provided with the golf course including club house, banquet facilities and utilization for special events such as weddings and receptions. This will not be determined until the type of concessionaire is determined and a specific project description is developed in the future.

The events pavilion is expected to have a maximum attendance of 200 people. It is expected to have one full capacity activity on a weekday and as many as three the weekend.

The overflow parking area that will accommodate the equestrian camping in Phase 1 will be available for use for equestrian and agricultural events in Phase 2. A maximum attendance of about 100 persons is expected for equestrian/agricultural events. Only about 4 full capacity activities are expected on a weekend for these types of events. They will not occur concurrently with equestrian camping. The equestrian camping activities are the worst case condition and are utilized in the traffic analysis.

The overflow parking area will also be used for historic interpretation school groups parking. Based upon the experience at the Chictactac Park at the intersection of Watsonville Road and Burchell Road, a total of about 2,650 elementary school students will visit the site per year. These will occur on weekdays. It is assumed that the maximum attendance on a given day will be 60 persons and they will arrive via carpool with four persons per vehicle, resulting in 15 vehicles per day.

The Bicycle Park is expected to have a maximum attendance of about 40 persons on a weekday. It is expected to have about 40 persons for three separate activities on a weekend. This is an allowance because occupancy and trip generation data does not exist for bicycle parks. Anecdotally, there is a similar type of Bicycle Park at Manzanita Park in Monterey County. Discussions with representatives of Manzanita Park indicate that its Bicycle Park generates traffic similar to a Little League baseball game.

The fishing pond is anticipated to generate activity from persons on-site for other uses. No additional traffic is expected to be generated by this use.

The Western Flat group picnic area is expected to have a maximum attendance of 200 people. One event could be scheduled on a weekday or a weekend. With vehicle occupancy of 2 persons per vehicle with some additional traffic associated with caterers, about 110 vehicles are expected to be generated on weekdays and weekends for this use.

The dog off-leash area will have parking provided for 25 vehicles. It is expected that there will be full utilization of the lot two times on weekdays and three times on weekends, resulting in 50 vehicles on weekdays and 75 vehicles on weekends.

The informal lawn play areas are ancillary to other uses proposed in the Western Flat area. No additional traffic is expected from this component of the project.

The Mendoza Ranch area is proposed to include a family picnic site in Phase 2 that will be an addition to the staging area described in Phase 1. The picnic site will have a capacity of 50 persons and is expected to have one utilization on a weekday and one utilization on a weekend day. With an average automobile occupancy of 2 persons per vehicle with some additional ancillary traffic, about 28 vehicles are expected on a weekday and weekend for this use.

The Lakeside area is not proposed to include any additional uses in Phase 2. No uses were proposed for Phase 1 as well. No additional traffic is expected to be generated in the Lakeside area due to expanded uses near Coyote Lake.

Using trip generation characteristics tabulated on Table 3-26, the anticipated traffic associated with Phase 2 is tabulated on Table 3-27. Again, it must be emphasized that these are worst case estimates assuming full utilization of all on-site facilities. The actual average conditions will be only about one-fourth of the estimated values in the following analysis. Under full occupancy, Phase 2 of the Western Flat area is expected to generate about 1,024 vehicle trips per weekday with 44 during the morning peak hour and 128 during the evening peak hour. Weekends are expected to experience about 2,392 daily trips with 334 during the weekend peak hour. Under full occupancy, the Mendoza Ranch area is expected to generate about 163 weekday trips for Phase 2 with 4 during the morning peak hour and 16 during the evening peak hour. Weekends are expected to experience about 271 daily trips with 41 during the peak hour. This results in a total of about 1,387 trips from the entire Master Plan for Phase 2 with 48 during the morning peak hour and 145 during the evening peak hour on weekdays. Weekends are expected to generate about 2,663 daily trips with 375 during the peak hour.

The conversion of automobiles with horse trailers to two passenger car equivalents results in the passenger car equivalent totals included in Table 3-21. Under full occupancy, the Western Flat area is expected to generate about 1,574 passenger car equivalents with 50 during the morning peak hour and 134 during the evening peak hour. Saturdays and Sundays are expected to experience about 2,842 daily trips with 402 passenger car equivalents on the weekend peak hour. Under full occupancy, the Mendoza Ranch area will generate about 183 daily passenger car

TABLE 3-26
CUMULATIVE PLUS MASTER PLAN BUILDOUT
LOS WITHOUT LOCAL CONGESTION MANAGEMENT MEASURES
AVERAGE DAILY CONDITIONS

	Weekday Peak Hours				Saturday Peak Hour	
	AM Peal	Hour	PM Peak	Hour	Midday Pea	ak Hour
Intersection	Delay	LOS	Delay	LOS	Delay	LOS
1. New Avenue/Roop Road	2.9 sec	A	2.1 sec	A	2.1 sec	A
2. New Avenue/Leavesley Road	33.6 sec	D	57.9 sec	F	23.5 sec	C
3. US-101 NB Ramps/Leavesley Road	44.4 sec	D	87.9 sec 87.0 sec	F	56.3 sec	E
4. US-101 SB Ramps/Leavesley Road	30.3 sec 29.6 sec	С	42.1 sec 36.3 sec	D	34.4 sec	<u>C-</u> €
5. US-101 NB Ramps/San Martin Avenue	7.3 sec	Α	5.5 sec	Α	5.6 sec	Ā
6. US-101 SB Ramps/San Martin Avenue	4.7 sec	A	11.7 sec	В	7.7 sec	A

TABLE 3-27 CUMULATIVE PLUS MASTER PLAN BUILDOUT LOS WITH CONGESTION MANAGEMENT MEASURES

	w	eekday l	Saturday Peak Hour			
	AM Peal	k Hour	PM Peak	Hour	Midday Peak Hour	
Intersection	Delay	LOS	Delay	LOS	Delay	LOS
1. New Avenue/Roop Road	_	_		_	~	
2. New Avenue/Leavesley Road	16.3 sec	В	13.3 sec	В	24.8 sec	С
3. US-101 NB Ramps/Leavesley Road	31.0 sec	С	42.0 sec 41.6 sec	D	38.8 sec	<u>D</u> D+
4. US-101 SB Ramps/Leavesley Road	-	-	-	-	_	_
5. US-101 NB Ramps/San Martin Avenue	17.1 sec	В	12.2 sec	В	15.0 sec	В
6. US-101 SB Ramps/San Martin Avenue	16.2 sec	В	18.1 sec	B-	17.8 sec	В

equivalents with 4 during the morning peak hour and 18 during the evening peak hour. Weekends are expected to experience about 311 passenger car equivalents from the Mendoza Ranch staging area during Phase 2 with 47 during the peak hour. Total phase 2 passenger car equivalents include 1,757 weekday trips with 54 during the morning peak hour and 152 during the evening peak hour. A total of about 3,153 passenger car equivalents are expected to be generated on weekend days with 448 during the weekend peak hour.

Phase 3 of the project will result in additional activity at the Coyote Lake Park. The Western Flat area will experience no increase in activity from what is proposed in Phase 2. The Mendoza Ranch area will have additional development including an environmental education center, a youth campground and staff parking. The Lakeside area will include additional development including a lakeside campground and a lakeside group picnic area.

The Mendoza Ranch area family picnic site is expected to have a capacity of about 50 persons. Assuming two persons per vehicle with some additional ancillary traffic for service vehicles and park personnel, a total of 28 vehicles are expected. One maximum capacity activity is expected for this facility on both weekdays and weekends.

The environmental education center is expected to have similar traffic generation to the historic interpretation facility included in Phase 2 of the Western Flat area. The trip generation on a daily basis is expected to be one half that of the historic interpretation center due to a maximum attendance of 30 people.

The youth campground will have a maximum attendance of 100 persons. This will involve 4-H, YMCA and similar types of youth group camping activities as well as camp activities from municipal recreational programs. This is a different type of campground than a public campground with the random arrival and departure of individual and family campers. Assuming a week long camp, Saturdays and Sundays are the peak days where parents pick up and drop off campers. Assuming each camper arrives in an individual vehicle, a total of two trips would be expected per camper on a weekend day with additional traffic generated by camp staff. Arrivals and departures during the week are expected to be about 20% of the traffic generation during weekends.

The staff parking facility will have a capacity of 15 vehicles. It is expected that this will turnover three times on weekdays and weekend days due to the arrival and departure of staff members throughout the day. Visitor traffic may also be generated by the staff parking facility.

The Lakeside area campground will be a public campground that is expected to have 50 campsites. Each campsite can accommodate two vehicles. Assuming all campsites are occupied with two vehicles and one half arrive or depart on any individual day, a total of 100 vehicles will be generated by the Lakeside campground. The Lakeside group picnic area will have a parking capacity of 25 vehicles. It is expected to turnover twice on a weekday and twice on a weekend day, resulting in 50 vehicles on weekdays and 50 vehicles on weekend days. The activity levels are tabulated on Table 3-18 for Phase 3.

Under full occupancy, Phase 3 at the Mendoza Ranch area is expected to generate a total of 356 weekday daily trips with 22 during the morning peak hour and 36 during the evening peak hour as indicated on Table 3-20. Saturdays and Sundays are expected to experience about 801 daily trips with 173 during the peak hour.

Under full occupancy, the Lakeside area is expected to generate about 300 daily trips with 21 during the morning peak hour and 30 during the evening peak hour. Saturdays and Sundays are also expected to experience about 300 daily trips with 39 during the peak hour.

Table 3-21 provides a tabulation of project traffic generation based upon passenger car equivalents. Phase 3 of the Mendoza Ranch area is expected to generate about 376 passenger car equivalents with 22 during the morning peak hour and 38 during the evening peak hour. About 841 daily passenger car equivalents are expected on weekends with 179 during the peak hour.

The Lakeside area is expected to generate the same amount of passenger car equivalents as vehicle traffic because little or no trailers are expected in addition to what are already generated by lake activities due to the limitation of the number of boats that can utilize the lake, which is already at capacity.

The grand total trip generation for the buildout of the project is 1,880 daily vehicle trips with 87 during the morning peak hour and 194 during the evening peak hour. Weekends are expected to include a total of 3,493 daily trips with 546 during the peak hour. Converted to passenger car equivalents, project buildout will include a total of 2,250 passenger car equivalents during weekdays with 93 during the morning peak hour and 202 during the evening peak hour. Weekends are expected to include a maximum of about 3,983 daily passenger car equivalents with 619 during the peak hour.

The distribution and assignment of traffic from the Western Flat area under Phases 2 and 3 is expected to be similar to what is assumed for Phase 1. Similarly, the Mendoza Ranch and Lakeside areas are expected to have traffic distribution and assignment similar to what was described for Phase 1 of the Mendoza Ranch area.

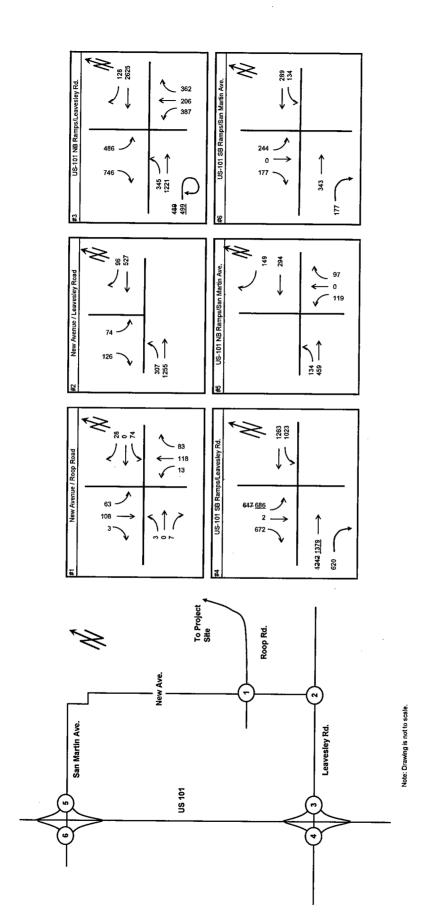
The resulting cumulative plus project buildout traffic volumes at study intersections are illustrated on Figures 3-23, 3-24 and 3-25 for weekday morning, weekday evening and weekend peak hours. Traffic increases along the Leavesley Road corridor including the Highway 101 Southbound ramps, Highway 101 Northbound ramps and New Avenue intersections will be very similar to what are expected under cumulative conditions without the project. Table 3-26 summarizes the resulting LOS at the study intersections with cumulative and buildout of the Master Plan under average daily conditions that would occur during most of the year, and shows that LOS does not change appreciably from cumulative conditions in the absence of the project.. The anticipated LOS with the recommended local congestion management measures are summarized in Table 3-27.

The San Martin Avenue corridor will experience the largest percentage of project traffic growth of any location in the study area. The San Martin Avenue intersections with the Southbound Highway 101 and Northbound Highway 101 ramps are expected to warrant signalization under cumulative conditions without the project. This of course will be true of the cumulative plus Master Plan buildout development scenario. However, channelization improvements will be required to accommodate the increased left turn volumes from westbound San Martin Avenue onto the southbound Highway 101 ramps. This will need to be studied in the detailed project

- Coyote Lake Harvey Bear Ranch Count Park Master Plan EIR / 201017

Figure 3-23

Cumulative + Project Buildout
Weekday AM Traffic Volumes



- Coyote Lake Harvey Bear Ranch Count Park Master Plan EIR / 201017 = Figure 3-24

Cumulative + Project Buildout
Weekday PM Traffic Volumes

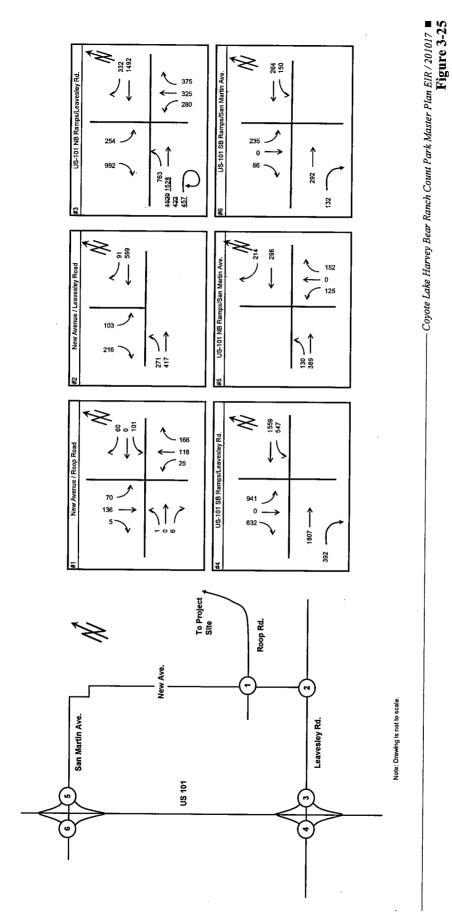


Figure 3-25
Cumulative + Project Buildout
Weekend Traffic Volumes

level environmental analysis that will be conducted as a part of the implementation of Phases 2 and 3 of the Master Plan in the future. The project will add incrementally to the cumulative traffic conditions that will warrant signalization at the two San Martin Avenue/Highway 101 ramp intersections. The project may, therefore, be responsible for paying a pro-rata contribution towards these improvements. Similarly, the project should pay pro-rata contributions to the Leavesley Road/New Avenue signal that will be warranted under cumulative traffic conditions, although currently there is no program in place to implement these and other congestion management measures identified.

Mitigation: None required.

Impact Significance After Mitigation: Less than Significant.

Impact Transportation and Circulation-2: Implementation of the Master Plan could result in adverse effects on access and internal circulation within the park. Less than Significant with Mitigation

Project-Level Components

Access to Phase 1 project components include the use of a driveway from the north side of San Martin Avenue east of Foothill Avenue to serve the Western Flat area. The anticipated peak left turn volume into this driveway is expected to be about 104.

The entrance on San Martin Avenue for the Western Flat area will not require any major capacity improvements such as left turn or right turn channelization. This driveway should be designed, however, to accommodate turning movements for vehicles pulling horse trailers.

The proposed access to the Mendoza Ranch area will not require capacity improvements. Existing volumes on Roop Road are extremely low in this area and the volumes into and out of the Mendoza Ranch area are expected to be less than one vehicle very three minutes inbound or outbound during the weekend peak hour. Again, no capacity improvements will be required but the configuration of the driveway should be designed to accommodate vehicles pulling horse trailers.

Program-Level Components

Implementation of program-level Master Plan components will result in increased traffic at the project entrances. Left turn channelization on eastbound San Martin Avenue will be required at the Western Flat entrance. In addition, the location of the kiosk which will be used to collect park fees will need to be strategically located to ensure that vehicle stacking will occur on-site and not spill over onto San Martin Avenue. This will need to be designed during the detailed design development of Phase 2 of the Western Flat area.

It is expected that left turn channelization will not be warranted at the Mendoza Ranch Area entrance and existing Coyote Lake entrance on Roop Road. This is because the left turn volumes will be relatively low, especially considering the relatively low conflicting through traffic.

Mitigation Measure Transportation and Circulation-2a: Provide eastbound left turn channelization on San Martin Avenue on the Western Flat entrance.

Mitigation Measure Transportation and Circulation-2b: Design the Western Flat area entrance kiosk location to ensure adequate on-site storage is provided for vehicles entering the park.

Impact Significance	After	Mitigation:	Less that Significant.
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Impact Transportation and Circulation-3: Construction traffic could adversely impact local traffic conditions.

Mitigation Measure Transportation and Circulation-3: Construction traffic control plans shall be mitigated in accordance with the Caltrans Traffic Manual and subject to the approval of the Santa Clara County Department of Roads and Airports Department.

Impact Significance After	Mitigation:	Less that	Significant
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REFERENCES – Transportation and Circulation

County of Santa Clara, Santa Clara County General Plan, adopted 1994.

Morgan Hill General Plan, 1999.

Higgins Associates, Gilroy General Plan – City-Wide Transportation Study, August, 2001.

Higgins Associates, Stamco Allwaste Transportation Company – Traffic Analysis Report, December 2000.

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Thomas Reid Associates, Gilroy Hot Springs - Draft Environmental Impact Report, December 1990.

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U.S. Department of Transportation, Urban Mass Transportation Administration, Guidance Manual for Transportation, Noise and Vibration Impact Assessment, July 1990.

VISUAL RESOURCES

SETTING

This section examines existing scenic conditions in the vicinity of the Park and the potential for implementation of the proposed master plan to affect those conditions. The section focuses on views from nearby public areas, the scenic character of the Park and vicinity, and light and glare.

REGIONAL VISUAL ENVIRONMENT

Coyote Lake-Harvey Bear Ranch County Park is located in the western foothills of the Mt. Hamilton Range in southern Santa Clara County. The landscape of the Park typifies the California foothills, with varied topography that ranges from nearly flat on the western Santa Clara Valley floor to gently rolling hills, with several steep canyons and rugged escarpments.

The regional scenic environment is predominantly characterized by natural landscapes, open space, and agricultural fields, including nearby parks such as Anderson Lake County Park to the north and Lakeview Meadows Ranch, Timber Ridge, Sheep Ridge, Palassou Ridge, and Henry Coe State Park to the east. West of Coyote Lake-Harvey Bear Ranch County Park, urban features characterize the scenic landscape, including Highway 101 and the community of San Martin. Occasional aircraft are viewed overhead from the South County Airport in San Martin.

Highway 101 and Highway 152 provide long-range views of Coyote Lake-Harvey Bear Ranch County Park. The site topography and vegetation are the dominant features from these roadways. The rugged hills of the Park rise sharply from the Santa Clara Valley floor (see Photo 1). The hillscape is lined with trees along the drainages. Built features and tilled fields associated with residential and agricultural uses encroach upon the hills from the flat valley floor.

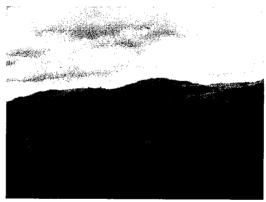


Photo 1 View of Coyote Lake – Harvey Bear Ranch County Park from Highway 101

Residential development and other built features directly abut the Park property on Foothill Avenue and New Avenue west of the Park, and along Roop Road south of the Park. Views of the Park from these areas are generally characterized by views of open grasslands, foothill oak woodlands, and ranch structures.

Scenic Highways

There are no formally designated State Scenic Highways in the area of the Park. Two highways near the Park are proposed state scenic highways. Highway 152, the Pacheco Pass Highway, is one of the most dramatically scenic gateways into Santa Clara County. The highway is on the California Master Plan of State Highways Eligible for Official Scenic Highway Designation, but

has not been officially designated as a State Scenic Route. Highway 152 is located approximately 5 miles south of Coyote Lake-Harvey Bear Ranch County Park.

Highway 101, the South Valley Highway, is one of the major transportation arteries between northern and southern California, and passes through areas in Santa Clara County that remain primarily agricultural and rural residential uses. This highway is proposed by Santa Clara County to be added to the California Master Plan of State Highways Eligible for Official Scenic Highway Designation. Highway 101 is located approximately three miles west of Coyote Lake-Harvey Bear Ranch County Park. Medium to long-range views of the Park are visible from Highway 101.

PARK VISUAL ENVIRONMENT

The central portion of Coyote Lake-Harvey Bear Ranch County Park is dominated by a northwest-southeast trending ridgeline and divides the Park into major viewsheds. To the west is the Santa Clara Valley, which is visible in an unbroken sweep from many of the highest elevations, and which retains a rural appearance from these vantages (see Photo 2). To the east is Coyote Lake with Palassou Ridge rising sharply above it. Views of the lake from the central ridge are periodically broken by dense stands of foothill oak woodland, which follow narrow side canyons and draws down the slope toward the lake's edge.



Photo 2 View from Ridgeline

Between the stands of oaks and other evergreen and deciduous trees are broad expanses of annual grassland, which also cloaks the entire western slope of the hills above the Santa Clara Valley floor. Through the seasons, these areas undergo the dramatic transformation that is the landscape's expression of California's Mediterranean climate, from the velvet green of winter and spring to the burnished brown and gold of summer and fall.



Photo 3 View of Coyote Lake from Lakeview Campground

The existing area accessible to the public comprises 760 acres, which includes 635-acre Coyote Lake. The recently acquired Bear and Mendoza properties increased the size of the Park to 4,448 acres; however, approximately 3,688 acres are not yet open to the public.

Existing viewsheds within the Park are focused in areas with current public accessibility (see Photo 3), including from Coyote Reservoir Road, the seven Park picnic areas (Lakeview, Sandy Beach, and San Ysidro, Anglers Cove, Fault Line, Oak Flat, and Calveras), Coyote Lake-Lakeview

Campground, Coyote Dam, and from Coyote Lake itself due to the popularity of water activities at the Park. Viewsheds from the publicly accessible areas of the Park are dominated by Coyote Lake, due to the linear nature of the Park along the lake (see Photo 3). Grassy expanses and sandy terraces abut the western lake edge. Palassou Ridge rises dramatically on the eastern lake side. Coyote Dam at the northern end of the lake is a popular viewing platform (see Photo 4).

The visual landscape is predominantly comprised of natural features. There are limited built structures in the publicly accessible areas of the Park. There are two built structures at the southern end of Coyote Lake near the Park entrance, including the ranger station/visitor center and the entrance kiosk/information booth (see Photo 5). Other built structures include restroom facilities, picnic tables, and boat launch facilities.

Scenic features on the recently acquired 3,688-acre Bear and Mendoza properties are dominated by the natural landscape and topography. Foothill oak woodlands dominate the landscape (see Photo 6). Rolling grassy hills accentuated with lightly interspersed trees contribute to the bucolic character of the landscape. Built features are located in defined pockets on the landscape, including the Bear Ranch houses, barns, and associated farm buildings (see Photo 7), and the Mendoza Ranch house (see Photo 8). The Bear Ranch and Mendoza Ranch are isolated from one another, and the ranch buildings retain much of their rustic scenic appeal.

There are limited existing sources of light and glare at the Park. The ranger station, entrance kiosk, and



Photo 4 View from Coyote Lake Dam



Photo 5 Park Ranger Station and Visitor Center



Photo 6 View of Foothill Oak Woodlands

Lakeview Campground and Picnic Area restrooms have nighttime security lighting. Campfires at the campground also contribute nominally to the ambient light at the Park. At Mendoza Ranch, a security light typically illuminates the porch. On the western side of the Park, sources of nighttime light include the City of San Martin and automobile traffic along Highway 101. Parking areas at the Park are sources of glare due to sunlight reflections on windshields, including parking lots at Lakeview Picnic Area, Lakeview Campground, and the boat launch facility.

EXISTING PLANS AND POLICIES

Santa Clara County General Plan

The Santa Clara County General Plan provides county-wide guidance for the protection of scenic resources (Santa Clara County, 1994). The County's scenic resources policies include maintaining rural densities that help conserve scenic resources and limiting development impacts on highly significant scenic resources. The County protects the scenic quality of major south County entranceways to enhance residents and visitors appreciation of the area and its attractions. In particular, the County protects the scenic value of Highway 101 (from the San Jose City limits south to the San Benito County border) through proposed state scenic highway designation. In addition, the County protects and enhances scenic resources through the designation of scenic highways, protection of scenic highway corridors, and developing complementary recreation facilities along scenic highways (Santa Clara County, 1994).



Photo 7 Bear Ranch House and Barns



Photo 8 Mendoza Ranch House

IMPACTS AND MITIGATION MEASURES

SIGNIFICANCE CRITERIA

As stated in Appendix G of the CEQA Guidelines, a project would generally have a significant effect on the scenic environment if it would:

- Have a substantial adverse effect on a scenic vista;
- Substantially degrade the existing scenic character or quality of the site and its surroundings;
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area; or
- Substantially damage scenic resources, including, but not limited to, trees, rocks outcroppings, and historic buildings within a state scenic highway (Governor's Office of Planning and Research, 2002).

The following scenic analysis addresses the first three of these general criteria; the fourth is not discussed since there are no designated state scenic highways in the project area. The impacts analysis is divided into project-level impacts and program-level impacts. As indicated in

Chapter 2, subsequent environmental documentation is required for implementation of the program-level components; they are here evaluated on a conceptual level.

For purposes of this EIR, a project is considered to have the potential for significant adverse aesthetic effect if it would have a substantial, demonstrable negative impact on existing scenic resources, if it would affect a scenic vista or scenic highway, or if it would generate substantial new light and glare.

IMPACTS AND MITIGATION MEASURES

Impact Visual Resources-1: Implementation of the Master Plan would result in short-term adverse visual impacts associated with project construction. Less Than Significant with Mitigation Measures.

Project-Level Components

The implementation of project-level components of the Master Plan, including constructing 16 miles of trails, improving the campground area, establishing a hang-gliding launch and emergency landing site, and providing overflow parking and equestrian camping in the West Flat Area would result in construction activity that would have a short-term adverse impact on scenic resources. Construction activity would include use of construction equipment, ground disturbance associated with establishment of construction phasing areas, and temporary installation of construction safety fencing. These activities and equipment would have an adverse visual effect on the natural landscape. The construction activity, however, would be temporary in nature and localized in small areas within the project site. Implementation of Mitigation Measure Visual Resources-1 would reduce potential visual impacts to less-than-significant levels.

Program-Level Components

As indicated in Chapter 2, subsequent environmental documentation is required for implementation of program-level components; they are here evaluated on a conceptual level. Construction of program-level components would result in visual resource impacts, as the proposed facilities would require use of construction equipment, ground disturbance in the vicinity of construction staging areas, and temporary installation of construction safety fencing. Development in the West Flat Area would include construction of an 18-hole golf course, a fishing pond, trails, building and events center structures, Bicycle Park, and other site-specific use areas. Improvements outside of the West Flat Area include trail construction, development of picnic and camping areas in the Lakeside Area, and minor development in the Mendoza Area. Development of the program-level components would occur over the course of ten years, with an approximate timeframe of five years for development of the West Flat Area. The proposed construction activity would occur during brief intervals over the 10-year Master Plan implementation phase. Construction activity in the West Flat Area would be quite intensive, and construction activity in the other Park areas would be light to moderate. Implementation of Mitigation Measure Visual Resources-1 would reduce potential impacts would be reduced to lessthan-significant levels.

Mitigation Measure Visual Resources-1: The following measures are included to minimize or reduce project impacts on existing scenic resources and visual quality during project construction:

- During construction of Park facilities construction staging shall be located in areas that are not visible from public vantages, to the extent possible.
- Avoid damage to natural surroundings in and around the work limits.
- Provide temporary barriers to protect existing trees, plants, and root zones, if necessary.
- Construction activities shall be phased to minimize the appearance of disturbed areas within the Park.

Impact Significance After Mitigation: Less Than Significant.

Impact Visual Resources-2: The proposed Master Plan would alter and visually intrude upon the open, natural character of the Park in which new development is proposed. Less Than Significant with Mitigation Measures.

Project-Level Components

The implementation of project-level facilities of the Master Plan would result in minor developments in the West Flat area, including a hang-gliding launch and emergency landing site and overflow parking and equestrian camping. In the Lakeside area, campground improvements are proposed. New developments would have minimal adverse impacts on the visual landscape. The proposed new development would be low-scale, predominantly surface features, such as parking and camping areas. The proposed Master Plan would add native grass green spaces to the existing campground, which would increase the vegetated area at the campground compared to existing conditions. The surface of the overflow parking area would be grass, which would visually blend into the surrounding landscape.

Views from Adjacent Streets

Views of the West Flat Area from Foothill and San Martin Avenue would not change substantially from existing conditions. The overflow parking and equestrian camping area would appear as a grassy area from the public roads consistent with current appearance. The hang-gliding launch and emergency landing site would not be visible from the roadways due to site topography and vegetation and would appear as an area of somewhat shorter or less vegetation. No components of Phase 1 would be visible from Roop Road.

Views from Highway 101 and Highway 152

No components of Phase 1 would be visible from Highway 101 and Highway 152. Implementation of Mitigation Measure Visual Resources-2 would reduce potential visual impacts to less-than-significant levels.

Program-Level Components

The West Flat area would include extensive new development; converting an existing open grassland to a managed Park landscape. Prominent visual features include a new 18-hole golf course, including a club house and maintenance facility, a group picnic site accommodating up to 200 people, and agricultural/equestrian/education center, and events center, and Bicycle Park. The proposed golf course and the equestrian facility would be the most visually prominent features. These types of features are not new uses in the area. The Institute, a private 18-hole golf course, is located adjacent to the West Flat Area on Foothill Avenue near Maple Avenue. Equestrian centers are located on New Venue and Roop Road near the Park. Although these developments would be new to the Park, similar types of uses are located nearby within the visual landscape.

In the Lakeside Area, the Master Plan proposes to develop two new campgrounds, a group picnic and staging area, a water play area, a satellite ranger office, and an expanded maintenance facility. The proposed new uses would increase the developed landscape of the Park. Proposed new developments, however, are compatible with the existing visual character of the site. Areas of dense new development would utilize native vegetative screening to minimize visual impacts.

In the Mendoza Ranch Area, the project would include development of a youth campground, staging area, and two hang-gliding landing sites, and expansion or conversion of the Mendoza Ranch house to an environmental education center. The proposed developments would moderately increase the developed character of this area. In the vicinity of the proposed campground and staging area, existing grass rangelands would be modified to packed earth, decomposed granite, or asphalt surfaces. The architecture of proposed new facilities would enhance the existing rustic ranchland character. Vegetative plantings would be used to screen views from public vantage points.

Views from Adjacent Streets

Views of the West Flat Area from Foothill and San Martin Avenue would be modified from a fenced, open grassland to a managed Park site. The most visually prominent features in the West Flat Area would be the proposed golf course and the equestrian facility. Although these developments would be new to the Park, similar types of uses are located nearby within the visual landscape. Vegetative screening would be utilized to block views of development from the roadway. The Mendoza Ranch Area, which is visible from Roop Road, would appear more developed with the proposed campground and staging area uses. The topography of the site would somewhat block views of the proposed campground from the roadway.

Views from Highway 101 and Highway 152

Due to the long-range views of the Park from these roadways, and the intervening topography, vegetation, and development, the proposed project features would not be visible from Highway 101 or Highway 152. Implementation of Mitigation Measure Visual Resources-2 would reduce potential visual impacts to less-than-significant levels.

Mitigation Measure Visual Resources-2: The following measures are included to minimize or reduce project impacts on existing scenic resources and visual quality:

- Minimize development footprints.
- Choose building materials that are visually compatible or do not compete with the landscape.
- In the West Flat and Mendoza areas, architecture of new facilities shall enhance the existing rustic ranchland character.
- In the West Flat area, existing barns shall remain the dominant structures, with no other structure exceeding the barns in height.
- New structures shall include arbors, porches, and patios to blend indoor and outdoor spaces.
- New architectural features in the Lakeside area shall blend with the existing architectural styles.
- Staging areas shall be paved with asphalt or be unpaved with road base material.
- Overflow parking areas shall be grass that can be moved seasonally.
- Provide native vegetative screening to block views of new developed areas at the Park from public view corridors. Select tree and vegetation species that enhance the ranchland character theme.

Impact Significance After Mitigation:	Less Than Significant.	

Impact Visual Resources-3: The proposed Master Plan would introduce new publicly accessible trails on the site providing new opportunities for scenic views. Significant Beneficial Impact.

Project-Level and Program-Level Components

The proposed Master Plan would develop over 30 miles of new trails in the Park over three construction phases. The proposed trails would provide new opportunities for public views of the Park and surrounding region, particularly along the northwest-southeast trending ridgeline. New trails would provide views of the foothill oak woodlands, Palassou Ridge, and distant views of Santa Clara Valley, Mount Madonna, and the Coastal Range.

Mitigation Measure: None required. This would be a significant beneficial impact for visual resources.

Impact Significance After M	Iitigation:	Significant Beneficial.

Impact Visual Resources-4: The proposed Master Plan would introduce sources of light and glare to the Park. Less Than Significant with Mitigation Measures.

Project-Level and Program-Level Components

The proposed Master Plan would introduce limited new sources of light at the Park, including low-level security lighting at the equestrian center, golf course/events pavilion, Park entrances along the main roads, and at restroom facilities. New campgrounds would also provide new sources of light at the Park due to the use of campfires. New sources of night lighting would nominally increase the ambient light at the Park. Most areas proposed for nighttime security lighting would be directly adjacent to developed residential areas in San Martin where ambient light levels are somewhat elevated, and night sky viewing is compromised. The nominal increase in nighttime lighting in the project area would have a less than significant impact with implementation of Mitigation Measure Visual Resources-3.

Proposed new parking, staging, and campground areas would introduce new sources of glare, predominantly due to sunlight reflections on windshields and reflective automotive fixtures. The new sources of glare would detract from the existing natural ranchland character of the visual landscape. These areas would be concentrated near existing developed areas to reduce the overall site impacts. Implementation of Mitigation Measure Visual Resources-3 would reduce the visual impacts associated with glare to a less than significant level.

Mitigation Measure Visual Resources-3: The following mitigation measures are recommended to minimize project impacts of light and glare:

- Exterior lighting shall use fixtures with low-level lighting, focused beams, and directional hoods to minimize light visible from other properties and reduce night sky impacts.
- Vegetative screening and islands shall be utilized in parking, staging, and camping areas to reduce reflective glare.
- Non-reflective asphalt surfaces shall be utilized to reduce glare.

Impact Significance After Mitigation: Less than Significant.

REFERENCES – Visual Resources

County of Santa Clara, Santa Clara County General Plan, adapted 1994.

Governor's Office of Planning and Research, California Environmental Quality Act, CEQA Guidelines, Appendix G, 2002.

CHAPTER 3

ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION MEASURES

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AIR QUALITY

INTRODUCTION

This section provides region-specific information related to climate and topography; followed by an overview of air quality pollutants, plans, policies, and regulations; and existing air quality conditions. This section also analyzes construction and operational emissions generated under the Master Plan, and the Master Plan's contribution to cumulative air quality effects.

SETTING

REGIONAL SETTING

Federal and state air quality standards have been established for six ambient air pollutants, primarily to protect human health and welfare. The six "criteria air pollutants" for which federal and state ambient standards have been established are ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), suspended particulate matter (PM-10) and lead (Pb). Criteria pollutants are regulated separately from air toxics at both federal and state levels. Documented health effects from air pollution include acute respiratory infections, chronic bronchitis, pulmonary emphysema, and bronchial asthma.

CLIMATE AND METEOROLOGY

The primary factors that determine air quality are the locations of air pollutant sources and the amounts of pollutants emitted. Meteorological and topographical conditions, however, also are important. Atmospheric conditions such as wind speed, wind direction, and air temperature gradients interact with the physical features of the landscape to determine the movement and dispersal of air pollutants.

The San Francisco Bay Area climate is Mediterranean in character, with mild, rainy winter weather from November through March, and warm, dry weather from June through September. There is a high percentage of sunshine at areas located away from the immediate coast, particularly in summer. The movement of marine air in a large part determines the temperature, humidity, wind, and precipitation throughout the year, depending upon the location and strength of the dominant Pacific high-pressure system and the coastal temperature gradient. Within the Bay Area, average air temperature increases as distance from the coast increases.

During summer and early autumn, persistent high-pressure systems off the coast of California maintain conditions conducive to the formation of smog in the Bay Area. During winter months, cooler temperatures result in greater CO emissions from an increase in cold-starting internal combustion engines when catalytic converters are less efficient. Frequent stagnant weather conditions allow for the buildup of these emissions, resulting in higher CO concentrations. In general, northwesterly winds generated by high-pressure cells over the Pacific Ocean are drawn through the Golden Gate and forced into a more westerly orientation. Once through the Gate, this

air mass is split and rechanneled by the East Bay hills, producing southwesterly winds at San Pablo and northwesterly winds at San Jose.

The Park is located within Santa Clara County, which is characterized by hot summers, moderate winters, a distinct rainy season, and high winds. During the summer months, when there is a strong inversion with a low ceiling, air movement is weak and pollutants become trapped and concentrated. Maximum summer temperatures in the area range from the high 80's to the low 90's with extremes in the 100's.

EXISTING AIR QUALITY

The BAAQMD and the ARB operate a regional air quality monitoring network that measures the ambient concentrations of the six criteria pollutants. Existing and probable future levels of air quality in the project area can generally be inferred from ambient air quality measurements at these monitoring stations. The major pollutants of concern in the Bay Area, ozone, carbon monoxide, and particulate matter, are monitored at a number of locations. The monitoring station closest to the project site is located on Murphy Avenue in San Martin, approximately two miles south of the project site and monitors ozone. The monitoring stations for PM-10 and carbon monoxide are located in San Jose, about 25 miles northwest of the Park. (on Tully Road and 4th Street, respectively). Table 3-1 shows a five-year summary of monitoring data from these three stations. Table 3-1 also compares measured pollutant concentrations with state and national ambient air quality standards.

SENSITIVE RECEPTORS

Some receptors are considered more sensitive than others to air pollutants. The reasons for greater than average sensitivity include pre-existing health problems, proximity to emissions source, or duration of exposure to air pollutants. Schools, hospitals and nursing homes are considered to be relatively sensitive to poor air quality because children, elderly people and convalescents are more susceptible to respiratory distress and other air quality-related health problems than the general public. Residential areas are considered sensitive to poor air quality because people are usually at their homes for extended periods of time, with associated greater exposure to ambient air quality.

There are no sensitive receptors inside the park. The nearest sensitive receptors outside of the Park include homes along Foothill, E. San Martin, and New Avenues near the West Flat Area.

REGULATORY FRAMEWORK

REGULATORY AGENCIES

The California Air Resources Board (CARB), California's state air quality management agency, regulates mobile emissions sources and oversees the activities of regional/county air districts. CARB is responsible for establishing emissions standards for on-road motor vehicles sold in California. The Bay Area Air Quality Management District (BAAQMD) is the regional agency

TABLE 3-1
AIR QUALITY DATA SUMMARY (1997-2001) FOR THE PROJECT AREA

	Monitoring Data by Year ^a						
Pollutant	Standard ^b	1997	1998	1999	2000	2001	
Ozone:	ya Afrika ya		jaka 1				
Highest 1 Hour Average (ppm) c		0.09	0.14	0.13	0.11	0.12	
Days over State Standard	0.09	0	15	7	4	7	
Days over National Standard	0.12	0	3	1	0	0	
Highest 8 Hour Average (ppm) c		0.07	0.11	0.10	0.10	0.09	
Days over National Standard	0.08	0	6	3	1	2	
Carbon Monoxide:				englik Kalingtongs			
Highest 8 Hour Average (ppm) c	20	6.1	6.3	6.3	7.0	5.1	
Days over State Standard		0	0	0	0	0	
Particulate Matter (PM-10):	144.1.		e e e e e e e e e e e e e e e e e e e				
Highest 24 Hour Average (µg/m³) c	50	95.0	88.5	96.5	68.5	75.1	
Days over State Standard		14	6	18	12	21	
Number of samples d		58	61	55	58	59	
Annual Average (μg/m³) c	30	21	19	21	18	19	

Ozone data are from the Murphy Avenue station in San Martin, PM-10 data are from Tully Road station in San Jose, and carbon monoxide data are from the 4th Street station also in San Jose.

NOTE: Values in **bold** are in excess of applicable standard. NA = Not Available.

SOURCE: California Air Resources Board, Summaries of Air Quality Data, 1997, 1998, 1999, 2000, 2001; http://www.arb.ca.gov/adam.

empowered to regulate air pollutant emissions from stationary sources in the Bay Area. BAAQMD regulates air quality through its permit authority over most types of stationary emission sources and through its planning and review activities.

PLANS, POLICIES, AND ATTAINMENT STATUS

Regulation of air pollution is achieved through both national and state ambient air quality standards and emissions limits for individual sources of air pollutants. The federal Clean Air Act (CAA) requires the U.S. Environmental Protection Agency (EPA) to identify National Ambient Air Quality Standards (national standards) to protect public health and welfare. National standards have been

b Generally, state standards are not to be exceeded and national standards are not to be exceeded more than once per year.

ppm = parts per million; $\mu g/m^3 = micrograms per cubic meter.$

d PM-10 is not measured every day of the year. "Number of samples" refers to the number of days in a given year during which PM-10 was measured at the Tully Road station in San Jose.

established for ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, suspended particulate matter (PM-10), and lead. These pollutants are called "criteria" air pollutants because standards have been established for each of them to meet specific public health and welfare criteria set forth in the CAA. California has adopted more stringent ambient air quality standards for the criteria air pollutants (referred to as State Ambient Air Quality Standards, or state standards) and has adopted air quality standards for some pollutants for which there is no corresponding national standard. Table 3-2 presents both sets of ambient air quality standards.

TABLE 3-2 STATE AND NATIONAL AMBIENT AIR QUALITY STANDARDS

Pollutant	Time Averaging	Statea	National ^b
Ozone	1 hour	0.09 ppm ^c	0.12 ppm
Carbon Monoxide	1 hour	20 ppm	35 ppm
	8 hour	9.0 ppm	9 ppm
Nitrogen Dioxide	1 hour	0.25 ppm	NA
	Annual	NA	0.053 ppm
Sulfur Dioxide	1 hour	0.25 ppm	NA
	3 hour	NA	0.5 ppm
	24 hour	0.04 ppm	0.14 ppm
	Annual	NA	0.03 ppm
Suspended Particulate Matter (PM-10)	24 hour	50 μg/m ³ c	150 μg/m ³
	Annual	30 μg/m ³	50 μg/m ³
Sulfates	24 hour	$25 \mu g/m^3$	NA
Lead	30 day	1.5 μg/m ³	NA
	Calendar Quarter	NA	1.5 μg/m ³
Hydrogen Sulfide	1 hour	0.03 ppm	NA

a California standards for ozone, carbon monoxide, sulfur dioxide (1-hour and 24-hour), nitrogen dioxide, and suspended particulate matter are values that are not to be exceeded. All other California standards shown are values not to be equaled or exceeded.

ppm = parts per million by volume; $(g/m^3 = micrograms per cubic meter.$

NA = Not Applicable.

SOURCES: California Air Resources Board, Ambient Air Quality Standards Chart, updated 1999.

b National standards, other than ozone and those based on annual averages, are not to be exceeded more than once a year. The ozone standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above the standard is equal to or less than one.

Under amendments to the federal CAA, EPA has classified Air Basins, or portions thereof, as either "attainment" or "nonattainment" for each criteria air pollutant, based on whether or not the national standards have been achieved. In 1988, the state legislature passed the California Clean Air Act (CCAA), which is patterned after the federal CAA to the extent that it also requires areas to be designated as "attainment" or "nonattainment," but with respect to the state standards rather than the national standards.

The Bay Area is designated nonattainment for state and national ozone standards, and for the state PM-10 standard. In 1998, urbanized areas within the Bay Area were redesignated as attainment for the national carbon monoxide standard. The Bay Area is in attainment or unclassified for all other ambient air quality standards.

Both the federal CAA and the state CCAA require nonattainment areas to prepare plans that include strategies for achieving attainment. These plans contain measures through which both stationary and mobile sources of pollutants can be controlled in order to achieve national and state ambient air quality standards. At the local level, Ozone Attainment Plans are prepared to comply with the national ozone standard and Clean Air Plans are prepared to comply with the California ozone standard. As such, the BAAQMD has published its *Bay Area 2000 Clean Air Plan*, which is the third triennial update of the District's original *Bay Area 1991 Clean Air Plan*. The goal of the plan is to improve air quality by reducing emissions of certain criteria pollutants (ROG and NOx) that lead to the formation of ozone through tighter industry controls, cleaner cars and trucks, cleaner fuels, and increased commute alternatives. The plan encourages cities and counties to adopt measures in support of this goal (BAAQMD, 2000).

The Bay Area 2001 Ozone Attainment Plan responds to the EPA's proposed partial disapproval of the Bay Area's Bay Area 1999 Ozone Attainment Plan and finding of failure to attain the national one-hour standard for ozone and establishes an ozone attainment plan that will provide for attainment by 2006 through implementation of stationary source, mobile source, and transportation control measures (BAAQMD, et.al., 2001). The co-lead agencies (the BAAQMD, the Metropolitan Transportation Commission [MTC], and the Association of Bay Area Governments [ABAG]) authoring the plan granted final approval of the plan on October 24, 2001. Subsequent CARB approval was granted on November 1, 2001. The Plan is currently under review by the EPA.

POLLUTANT DESCRIPTION

A discussion of the air pollutants of interest to the regulatory agencies for their potential adverse impacts on the environment and sensitive receptors are described below.

OZONE

Ozone is not emitted directly into the atmosphere, but is a secondary air pollutant produced in the atmosphere through a complex series of photochemical reactions involving reactive organic gases (ROG) and nitrogen oxides (NO_x). ROG and NO_x, which are emitted directly to the atmosphere, are known as precursor compounds for ozone. Significant ozone production generally requires

ozone precursor presence for approximately three hours in a stable atmosphere with strong sunlight. Ozone is a regional air pollutant because its precursors are transported and diffused by wind concurrently with ozone production.

Short-term exposure to ozone can irritate the eyes and cause construction of the airways (BAAQMD, 1999). Besides causing shortness of breath, ozone can aggravate existing respiratory diseases such as asthma, bronchitis, and emphysema. Ozone concentrations in the Bay Area are expected to decline somewhat over the next several years, but violations of the state standard are expected to continue to occur in the sheltered inland valleys into the foreseeable future.

CARBON MONOXIDE

Ambient carbon monoxide concentrations normally are considered a local effect and typically correspond closely to the spatial and temporal distributions of vehicular traffic. Carbon monoxide concentrations also are influenced by wind speed and atmospheric mixing. Under inversion conditions, carbon monoxide concentrations may be distributed more uniformly over an area, out to some distance from vehicular sources.

When inhaled at high concentrations, carbon monoxide combines with hemoglobin in the blood and reduces the oxygen-carrying capacity of the blood (BAAQMD, 1999). This results in reduced oxygen reaching the brain, heart, and other body tissues. This condition is especially critical for people with cardiovascular diseases, chronic lung disease, or anemia, as well as for fetuses.

Carbon monoxide emissions from on-road motor vehicles represent approximately 70 percent of the regional inventory of carbon monoxide (CARB, 1998). Carbon monoxide concentrations are expected to continue to decline in the Bay Area into the future due to existing controls and programs as well as the continued retirement of older, more polluting vehicles from the mix of vehicles on the road network.

SUSPENDED PARTICULATE MATTER (PM-10 AND PM-2.5)

PM-10 and PM-2.5 consist of particulate matter that is 10 microns or less in diameter and 2.5 microns or less in diameter, respectively. (A micron is one-millionth of a meter). PM-10 and PM-2.5 represent fractions of particulate matter that can be inhaled into the air passages and the lungs and can cause adverse health effects. One common source of PM-2.5 is diesel emissions. Particulate matter in the atmosphere results from many kinds of dust- and fume-producing industrial and agricultural operations, fuel combustion, and atmospheric photochemical reactions. Some sources of particulate matter, such as demolition and construction activities, are more local in nature, while others, such as vehicular traffic, have a more regional effect. Particulates also can damage materials and reduce visibility.

PM-10 emissions in the project area are mainly from urban sources, dust suspended by vehicle traffic and secondary aerosols formed by reactions in the atmosphere. Particulate concentrations near residential sources generally are higher during the winter, when more fireplaces are in use

and meteorological conditions prevent the dispersion of directly emitted contaminants. Direct PM-10 emissions in Santa Clara County are expected to increase by approximately 12 percent between 2000 and 2010 due to an overall increase in emissions from area sources as well as an increase in vehicle miles traveled within the region.

IMPACTS AND MITIGATION MEASURES

SIGNIFICANCE CRITERIA

As stated in Appendix G of the CEQA Guidelines, a project would generally have a significant effect on the environment if it would:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- Result in a cumulatively considerable net increase of any nonattainment pollutant;
- Expose sensitive receptors to substantial pollutant concentrations; or
- Create objectionable odors affecting a substantial number of people (Governor's Office of Planning and Research, 2002).

The following air quality analysis addresses the first four of these general criteria; the fifth is not discussed since the Master Plan would not include development of the types of land uses generally associated with potential odor impacts. Also, project implemented under the Master Plan are not expected to generate acute or chronic levels of TAC.

Potential impacts are associated with construction-related air emissions and emissions from mobile-sources associated with operation of the park under the Master Plan. The *BAAQMD CEQA Guidelines* (1999) provide specific guidance on evaluating projects under CEQA relative to the above criteria.

For temporary construction-phase impacts, BAAQMD recommends a qualitative approach that focuses on the dust control measures that would be implemented. If appropriate mitigation measures are implemented to control PM-10 emissions, then the impact from construction would be less than significant. The *BAAQMD CEQA Guidelines* provide a list of feasible control measures for construction-related PM-10 emissions.

For project-level impact analysis of long-term impacts to air quality, the BAAQMD provides various thresholds and tests of significance. For ROG, NOx and PM-10, a net increase of 80 pounds per day is considered significant, while for CO, an increase of 550 pounds per day would be considered significant if it leads to a possible local violation of the carbon monoxide standards (i.e. if it creates a "hot spot"). Generally, if a project results in an increase in ROG, NOx, or PM-10, of more than 80 pounds per day, then it would also be considered to contribute substantially to the significant cumulative effect. For projects that would not lead to a significant increase of

ROG, NOx, or PM-10 emissions, the cumulative effect is evaluated based on a determination of the consistency of the project with the regional Clean Air Plan. Generally, a project that is consistent with the applicable General Plan would not contribute in a significant manner to the cumulative regional impact if the General Plan itself is consistent with the Clean Air Plan. To be consistent with the Clean Air Plan, a General Plan must be based on population projections that are consistent with those used in developing the Clean Air Plan and must provide for a rate of increase in vehicle miles traveled (VMT) that does exceed the rate of increase in population.

IMPACT STATEMENTSS AND MITIGATION MEASURES

Impact Air Quality-1: Construction activities would generate short-term emissions of criteria pollutants. This would be a potentially significant impact.

Construction of new park facilities under the Master Plan would occur over the course of 10 years at locations throughout the 4,448 acres of the Park. Construction conducted under the Master Plan could generate substantial amounts of fugitive dust. Dust emissions would vary from day to day, depending on the level and type of activity, silt content of the soil, and the prevailing weather. Primary sources of fugitive dust during construction would include excavation, earth movement, grading, and wind erosion from exposed surfaces.

While most of the dust associated with the construction of various facilities would occur during the first stages of site preparation, dust would also be generated during installation of infrastructure and heavy vehicle movement over unpaved surfaces. Particularly during the initial stages of a construction project, construction activities may result in significant quantities of dust in the absence of mitigation measures, and as a result, local visibility and PM-10 concentrations may be adversely affected on a temporary and intermittent basis. Without mitigation, this could be a significant effect on air quality.

With respect to exhaust emissions from construction equipment (including carbon monoxide and ozone precursors), their related emissions are included in the emissions inventory that is the basis for regional air quality plans and are not expected to impede attainment or maintenance of ozone and carbon monoxide standards in the Bay Area (BAAQMD, 1999). Therefore, construction-related emissions, other than dust, would not be significant.

Mitigation Measure Air Quality-1: During construction of Park facilities requiring grading or excavation, construction contractors shall implement the following dust control program, which is recommended by the BAAOMD.

The following control measures should be implemented at all construction sites:

Water all active construction areas at least twice daily. Watering should be sufficient to
prevent airborne dust from leaving the site. Increased watering frequency may be
necessary whenever wind speeds exceed 15 miles per hour. Reclaimed water should be
used whenever possible.

- Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard (i.e., the minimum required space between the top of the load and the top of the trailer).
- Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction sites.
- Sweep daily (preferably with water sweepers, using reclaimed water if possible) all paved access roads, parking areas, and staging areas at construction sites.
- Sweep streets (preferably with water sweepers, using reclaimed water if possible) at the end of each day if visible soil material is carried onto nearby paved roads.

The following control measures should also be implemented at all construction sites greater than four acres in area:

- Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more).
- Enclose, cover, water twice daily or apply (non-toxic) soil stabilizers to exposed stockpiles (dirt, sand, etc.).
- Limit traffic speeds on unpaved roads to 15 miles per hour.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
- Replant vegetation in disturbed areas as quickly as possible.

The following control measures should also be implemented at construction sites that are large in area, located near sensitive receptors, or which for any other reason may warrant additional emissions reductions:

- Install wheel washers for all exiting trucks, or wash off the tires or tracks of all trucks and equipment leaving a construction site.
- Install wind breaks, or plant trees/vegetative wind breaks at windward side(s) of construction areas.
- Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 mph.
- Limit the area subject to excavation, grading, and other construction activity at any one time.
- Pave all roadways, driveways, sidewalks, etc. as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.
- Designate a person or persons to monitor the dust control program and to order increased
 watering, as necessary, to prevent transport of dust offsite. The name and telephone
 number of such persons shall be provided to the BAAQMD prior to the start of
 construction.

Impact Significance After Mitigation: Less Than Significant.

Impact Air Quality-2: The Park Master Plan would result in an increase in criteria pollutant emissions due to project-related traffic. This would be a less than significant impact.

Over the long-term, the Master Plan would result in an increase in emissions primarily due to an increase in motor vehicle trips. On-site stationary sources and area sources would result in lesser quantities of pollutant emissions. Emissions estimates for the first year of park operation under Phase 1 and for complete build-out under the Master Plan have been prepared using the procedures established by the *BAAQMD CEQA Guidelines* (BAAQMD, 1999). The results of the analysis are shown in Table 3-3. The estimates shown in Table 3-3 are based on an estimate of 413 average daily trips after completion of Phase 1 projects and 1,687 daily vehicle trips upon complete buildout for an average weekend.

TABLE 3-3 VEHICLE EMISSIONS (POUNDS PER DAY)

		Emission Levels ^a	
Pollutant	Threshold (lbs/day)	Phase 1 Projects	Complete Buildout
ROG	80	7	12
NOx	80	17	48
PM-10	80	7	30
CO	550	95	241

a Emission levels were calculated according to procedures established by the BAAQMD CEQA Guidelines (BAAOMD, 1999).

SOURCE: Environmental Science Associates, 2003

Based on the estimates shown in Table 3-3, the contribution to the regional emissions would be below the significance thresholds specified by the BAAQMD for ROG, NOx, PM-10, and CO at complete buildout. Thus, emissions generated by vehicle trips would not have a significant impact on air quality at complete buildout.

Mitigation: None required.

Impact Significance After Mitigation: Less than Significant.

Impact Air Quality-3: The proposed project would contribute to <u>a reduction of</u> cumulative regional air emissions by the operation of the Park under the Master Plan. This would contribute to a net air quality benefit.

According to the BAAQMD CEQA Guidelines, any proposed project that would individually have a significant air quality impact would also be considered to have a significant cumulative air quality impact. For any project that does not individually have significant operational air quality impacts, the determination of significant cumulative impact is based on an evaluation of the consistency of the project with the local general plan and of the general plan with the regional air quality plan. To determine cumulative impacts of the proposed project, the project's consistency with the Clean Air Plan was determined based on its consistency with the 2000 Bay Area Clean Air Plan. The Master Plan, as mitigated, would have a less than significant impact on regional air quality. The nature of the Master Plan is that it will offer high-quality recreation opportunities to residents of the county and nearby counties who would otherwise have to travel longer distances to experience the same recreational opportunities. This would result in a net benefit to air quality in the region.

Tilling to the first to the to the total	Mitigation:	None rec	quired.
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Impact Significance After Mitigation: Beneficial.

REFERENCES – Air Quality

- Bay Area Air Quality Management District (BAAQMD), Association of Bay Area Governments (ABAG), and Metropolitan Transportation Commission (MTC), Final Bay Area 2001 Ozone Attainment Plan, July 18, 2001.
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- California Air Resources Board (CARB), Ambient Air Quality Standards Chart, www.arb.ca.gov/aqs/aqs.htm, updated 1999.
- California Air Resources Board (CARB), National and State Nonattainment Designations, www.arb.ca.gov/aqs/aqs.htm, May 2003.
- California Air Resources Board, www.arb.ca.gov/adam, 2002.
- Governor's Office of Planning and Research, California Environmental Quality Act, CEQA Guidelines, Appendix G, 2002.

BIOLOGICAL RESOURCES

SETTING

DATA SOURCES AND METHODS OF ANALYSIS

This section is based largely on the Natural Resource Management Plan, or NRMP (Rana Creek Habitat Restoration, 2003), which was prepared following extensive field studies and GIS-based resource mapping and analysis. The NRMP describes existing biological resources within Coyote Bear Park to a high level of detail. The NRMP also establishes thresholds of activities proposed in the Master Plan that could adversely affect natural resources, and develops a management-based approach to reducing the scope and severity of those affects. The NRMP is therefore incorporated by reference into this EIR. This section provides a summary of the NRMP findings.

Additional information on existing biological resource conditions also was derived from other previous reports that describe the vegetation and wildlife resources of the park, including the Resource Management Transition Plan (Kephart and Stromberg, 1998), and the 1992 Draft Coyote Lake Master Plan (Planning Collaborative, 1992). Vegetation and wildlife habitats and special status species are described briefly, followed by a discussion of the issues related to by biological resources

REGIONAL SETTING

The Park is situated between the Santa Clara Valley and the north-south trending ridgelines of the Mt Hamilton Range, and includes portions of the valley floor as well as slopes and ridge crest of the first set of hills east of the valley. Although located well inland, habitats and species assemblages within the park are subject to marine influences from the San Francisco Bay, and the area is considered to be within the San Francisco Bay floristic sub-region.

SITE SETTING

The landscape of Coyote Lake-Harvey Bear Ranch Park is comprised of steep grass covered hills, a central ridge covered with oak woodland savanna, and woodland canyons that drain toward Coyote Lake on the east side of the ridge, eventually reaching San Francisco Bay, and to the Pajaro River (Monterey County) to the west side of the ridge. To the west, the property borders low elevation farmland and developed subdivisions. The land ranges in elevation from 300 feet in the lowlands to 1,300 feet along the ridgeline. With a temperate Mediterranean climate, the land is exposed to long, dry, hot summers and seasonal rain.

Fire, drought, grazing and their interactions have influenced the composition the natural landscape. The grasslands, chaparral, and woodland communities are closely associated with soils and hydrology. On drier sites, with nutrient deficient soils, chaparral species thrive. On well-developed soils that retain moisture, forest and native grasslands persist. The plant community composition of the Mt. Hamilton range has been highly altered due to the invasion of exotic

species. Most of these invaders are drought, fire, and grazing-adapted annual grasses and herbaceous plants. Where perennial grass, chaparral, and woodland species dominate, resistance to invasion of annuals is high.

Plant Communities and Wildlife Habitats

The classification and mapping of vegetation illustrated on Figure 3-1 is based on interpretation of aerial photographs and field surveys. Vegetation is typical of the western inner Coast Range, and includes the following plant communities:

Foothill Oak Woodland

Foothill oak woodlands are found on the eastern portions of the property on gently sloping hills, swales and canyons (see Figure 3-1). The woodlands are dominated primarily by coast live oak, blue oak, buckeye, and gray pine. Oak woodlands provide habitat for numerous species of mammals, rodents, reptiles, and nesting and migratory birds, as well as insects and arthropods. The understory is composed of shade tolerant shrubs and herbaceous plants, including California blackberry, snowberry, miner's lettuce, blue wild rye, poison oak, yampah, bed straw and sanicle.

Many changes have occurred to oak woodlands as a consequence of livestock grazing, which is implicated in introducing and spreading non-native annual grass species as well as creating habitat disturbances that are rapidly exploited by the fast-growing and competitive non-natives. The result has been a type-conversion from grasslands dominated by native perennial grasses to annual grasses. Grazing also is identified as contributing to the lack of regeneration (*i.e.* germination and establishment) of oak trees, especially blue and valley oak. Other changes that effect the composition and habitat quality of woodlands throughout California include urban and agricultural development and firewood harvesting.

Diablan Sage Scrub

Diablan sage scrub occurs in a few scattered locations on steep rocky slopes and isolated rock outcrops and as an occasional understory component of the oak woodlands. This dense shrub vegetation is dominated by California sagebrush, coyote brush, and chamise. Herbaceous plants are scattered throughout the shrub understory, and include foothill needlegrass, soap plant, monkey flower, and golden yarrow.

Non-native Grassland

Native grasses and other herbaceous plants (*i.e.* wildflowers) once dominated the grassland and woodland plant communities of the California Coast Ranges. Native grasses have been gradually replaced by non-native introduced grasses and forbs (non-grass herbaceous plants) by soil tillage, farming and intensive grazing. Non-native grasslands in the Park are dominated by ryegrass, slender oats, soft chess, ripgut brome, and rattail fescue, all introduced species. Dominant forbs include filaree, black mustard, bull thistle, rose clover, and yellow star thistle, also all introduced.



The latter species is an especially noxious invasive species that is classified as a List A-1 pest plant (Most Invasive Wildland Pest Plants) by the California Exotic Plant Pest Council (CalEPPC, 1999). Yellowstar thistle is prevalent over large areas of the northern portion of the Park. It also is common at lower elevations and is rapidly colonizing upper elevation grasslands. moving southward toward the Mendoza Ranch. Grazing or other means of vegetation management will be required to prevent this species from becoming dominant throughout the Park's grasslands. Other exotic pest plants that are present in lesser degree are Italian thistle, horehound, and fennel.

Non-native grasslands in the Park provide abundant habitat for burrowing mammals and reptiles that provide a prey base for hawks, owls and other birds, as well as for larger predators, such as coyote and bobcat. The breeding bird survey reported six out of seven indicator species, which are identified as indicators of the avian wildlife habitat value (California Partners in Flight, 2000), are present in grasslands of the site.

Native Grassland

Native grasslands are similar to the non native grasslands, but include a substantial amount of native perennial grasses, such as foothill needlegrass, purple needlegrass, and blue wild rye. This grassland type represents the original vegetation that probably existed over the majority of the non-woodland portions of the park prior to the arrival of grazing livestock. Intact remnants of this type of grassland are scattered throughout the upper slopes of the Park. They typically occupy slopes, glades, and swales where soil moisture retention is higher than the surrounding area. Although small and fragmented, these areas have relatively high diversity of plant species. In addition to the perennial grasses, native plants include dwarf star lily, blue-eyed grass, blue dicks, Johnny jump-ups, and mariposa lily.

Portions of the native grassland on the Mendoza Ranch contain plants species typically associated with coastal grasslands. California oat grass was observed near the large pond at the southern boundary of the Mendoza Ranch, an extension of the known distribution of this species in Central California.

As a result of over 100 years of intensive grazing, soils, and plant composition have been altered in ways that are seen throughout California. Large areas consist of loose bare soil with large populations of pocket gophers. The absence of periodic fire also has likely played a role in the decline of native grasslands. Because they are reduced in geographic extent, fragmented, and altered from their pristine state, native grasslands are classified as threatened in the California Department of Fish and Game Natural Diversity Database (CNDDB, 2001).

From the standpoint of wildlife habitat, native and non-native grasslands provide generally the same habitat values, and are likely to support similar fauna. Exceptions occur where serpentine soils are extensive or particularly dense and infertile, in which case plant cover and ease of excavation of burrows or dens is substantially diminished. However, serpentine soils support a specialized flora that may include host plants for Bay checkerspot butterfly, a federally listed species. Within the

park, one area near the ridge in the northern half of the park has been designated as critical habitat for this species.

Riparian Forest and Scrub

Willow riparian forest and scrub occurs along creeks and drainages at several locations throughout the park. Riparian forests consist of large mature arroyo or red willow trees that are adapted to seasonal or perennial high ground water in streams. Riparian scrub consists of willows and other shrubs, small trees and vines, such as blue elderberry, buckeye, and wild grape. Understory plants in both vegetation types include California blackberry, mugwort, rushes, and, in reaches with slow perennial flows or ponds, watercress and duckweed. In some places, riparian scrub represents an immature state of riparian forest, or it may persist in where repeating disturbance, such as floods or grazing, prevents the willow shrubs from becoming trees. The most extensive area is on Coyote Creek Arroyo near the Bear Ranch house and barns. Other smaller, often fragmented stands of this vegetation are located in smaller creeks and drainages.

Riparian habitats provide important habitat values for nesting, foraging, cover, and source of water for numerous wildlife species. Typically, 90% of the birds and mammals on California ranches occur only in riparian habitat (Kephart and Stromberg, 1998). Many species depend entirely on riparian habitat.

Freshwater Seep

Seasonal wetland springs and seeps originate at mid-elevations on the western and eastern slopes of the Park. Plants observed in these areas include toadrush, spikerush, sedges, rabbit foot grass, popcorn flower, spreading rush, iris-leaved rush, stinging nettles, and watercress. Seeps and springs on the Mendoza Ranch are a source of water for vernal pools and stock ponds. Other ponds on the Bear Ranch are the result of overflowing cattle troughs. Most of these sites also serve as water sources for livestock, therefore the vegetation is either highly disturbed by trampling or absent.

Vernal Pools

Vernal pools are shallow basins or swales within grasslands that pond water during the winter spring. Underlying soil layers are densely compacted and prevent the downward percolation of water. The pools dry slowly through evaporation, and support a specialized suite of plant species adapted to short periods of inundation and a gradual drying of the pool. Plants observed in vernal pools include coyote thistle, flowering quillwort, and prickle grass. No special status plant species associated with vernal pools were observed during surveys conducted during Spring 2001 (Rana Creek Habitat Restoration, 2001).

Vernal pools provide seasonal aquatic habitat for invertebrates, frogs, salamanders and birds. During the dry summer and fall months, these areas are often difficult to distinguish from surrounding grasslands, and therefore assume similar habitat values.

Stock Ponds

Several stock ponds have been developed in the Park and it appears that historic vernal pool basins may have been enlarged for use by livestock as water sources. Stock ponds are typically impacted by livestock, with barren soils or very little vegetation below the high water mark. However, two of the ponds on the Mendoza Ranch supported substantial populations of plant cover and diversity during the Spring surveys due to reduced impact of grazing. These ponds also support non-native bass and bullfrogs, which reduce or eliminate populations of native amphibians (salamanders and frogs).

Wildlife Resources

Common and characteristic wildlife of the habitats in this project area region is described in the preceding discussion of plant communities and wildlife habitats. The remainder of this section focuses on fisheries.

Fisheries

Coyote Lake and Coyote Creek provide fisheries habitat for native and introduced fish, including stocked gamefish and unstocked bluegill, crappie and bass. The CDFG periodically stocks the lake with rainbow trout. The condition of native fisheries in the lake is unknown, although the upstream reaches of Coyote Creek may still support a native trout population. Management of the lake as an emergency domestic water supply and inspection of the earth dam for seismic concerns necessitates draining the lake, which limits the long term viability as a fishery. Downstream, the dam at Anderson Lake presents an insurmountable barrier to anadromous fish passage. Therefore, the lake is excluded from the U.S. Fish and Wildlife Service's designation of critical habitat for steelhead and chinook salmon, which are presumed absent from the lake.

Special Status Species

Special status species are those that are recognized for their statewide or local rarity or vulnerability to various causes of habitat loss or population decline. Some species are formally listed and receive specific protection defined in federal or state endangered species legislation. Other species have no formal listing status as threatened or endangered, but are designated as "rare" or "sensitive" on the basis of policies adopted by federal or state resource agencies, by local governmental agencies such as counties, cities, and special districts to meet local conservation objectives, or by organizations with acknowledged expertise such as the California Native Plant Society. These species are referred to collectively as "special status species," following a convention that has developed in practice but has no official sanction. For the purpose of this environmental assessment, special-status plants are defined as species that are:

- listed or proposed for listing as Threatened or Endangered under the Federal Endangered Species Act (federal ESA) (50 CFR 17.12 for listed plants and various notices in the Federal Register for proposed species);
- Federal Candidates for listing as Threatened or Endangered under the Federal ESA (58 FR 188: 51144-51190, September 30, 1993);

- Federal Species of Concern or California Species of Special Concern;
- listed by the State of California as Threatened or Endangered under the California Endangered Species Act (CESA) (14 CCR 670.5);
- plants listed as rare under the California Native Plant Protection Act of 1977 (California Fish and Game Code, Section 1900 et seq.); and
- plants considered by CNPS to be "rare, Threatened, or Endangered in California" (generally species from Lists 1B and 2; selected List 3 and 4 species are identified in Skinner and Pavlik 1994).

Table 3-2 summarizes the species considered to have reasonable potential to occur on the site based on documented observations, range, and habitat suitability. A more comprehensive list of endangered and threatened species that may occur in the Gilroy quad was provided by USFWS, and is included as Appendix X. Additional species are not considered further in this document because of low potential to occur in the project area (*i.e.*, estuarine, marine and anadromous fish, and shorebirds).

Special Status Plants

The Resource Management Transition Plan (Kephart and Stromberg, 1998) identified 28 special status plant species with potential to occur in the Park based on a search of the California Native Plant Society Inventory. This list is amended here (Table 3-4) to include four additional species that are documented by the California Natural Diversity Data Base as occurring on the Gilroy and Gilroy Hot Springs USGS quads (CNDDB, 2003). Fourteen of these species have low potential to occur in the Park, based on absence of suitable habitat. Seventeen additional species have moderate potential based on suitable habitat in the Park, but were not observed during appropriately-timed botanical surveys. Only one species, big-scale balsam root, has been documented in the Park.

Big-scale balsam root. Of the potentially-occurring plant species, only big-scale balsamroot (*Balsamorhiza macrolepis* ssp. *macrolepis*) has been identified in the Park. This species had previously been documented as occurring in the northern part of Bear Ranch. Appropriately timed surveys in Spring and Summer of 2001 confirmed that it still occurs in this location. This species is a perennial herb up to two feet tall with large yellow flowers. Big-scale balsamroot typically blooms between March and June and may be found on grassy slopes in the northeastern portion of the park. Big-scale balsamroot is a California Native Plant Society List 1B species, meaning that it is rare, threatened, or endangered in California and elsewhere. CNPS List 1B plants meet the definitions of Section 1901, Chapter 10 or Secs. 2062 and 2067 of the CDFG Code and must be fully considered under CEQA.

Special Status Wildlife

A total of seven special status wildlife species were identified as potentially occurring in the Park (Rana Creek Habitat Restoration, 2003). Based on field studies conducted during spring and summer 2001, seven species were determined to be most likely to occur in habitats within or

TABLE 3-4 SPECIAL STATUS PLANT SPECIES WITH POTENTIAL TO OCCUR IN COYOTE-LAKE HARVEY BEAR RANCH COUNTY PARK

Common Name Scientific Name	Listing Status ¹ USFWS/CDFG/ CNPS	General Habitat and Nearest Occurrence	Potential to Occur
Sharsmith's onion Allium sharsmithiae	//1B	Grassland and woodland, on serpentine; known only from the Mt. Hamilton Range	Moderate potential. Not observed during surveys.
big-scale balsamroot Balsamorhiza macrolepis var. macrolepis	//1B	Open grasslands, sometimes on serpentine soil; documented in CNDDB on Bear Ranch, adjacent to parking lot at Coyote Dam.	Present. Observed during surveys.
Brewer's calandrinia Calandrinia breweri	//4	Chaparral and scrub, often after burns or on disturbed sites;	Low potential. Not observed during surveys.
chaparral harebell Campanula exigua	//1B	Chaparral (rocky, usually serpentinite)	Low potential. Not observed during surveys.
Sharsmith's harebell Campanula sharsmithiae	//1B	Chaparral (rocky, serpentinite); known from only approximately five occurrences (CNPS, 2001).	Low potential. Not observed during surveys.
Congdon's tarplant Centromadia parryi ssp. congdonii	//1B	Grasslands with alkaline soils	Moderate potential. Not observed during surveys.
robust spineflower Chorizanthe robusta var. robusta	FE//1B	Coastal scrub, coastal dunes, openings in oak woodlands	Low potential. No suitable habitat present. Not observed during surveys.
fountain thistle Cirsium fontinale var. campylon	//1B	Grassland and openings in chaparral, in serpentinite seeps	Low potential. Not observed during surveys.
Brewer's clarkia Clarkia breweri	//4	Chaparral, cismontane woodland, coastal scrub / often serpentinite	Low potential. Not observed during surveys.
Santa Clara Valley red ribbons Clarkia concinna ssp. automixa	//4	Chaparral, cismontane woodland	Moderate potential. Not observed during surveys.
Santa Clara Valley dudleya Dudleya setchellii	FE//1B	Rocky serpentine outcrops in grassland; occurs on west side of valley	Low potential. Not observed during surveys of serpentine areas.
Brandegee's eriastrum Eriastrum brandegeae	//1B	Chaparral, cismontane woodland / volcanic	Low potential. No suitable habitat with volcanic soil present. Not observed during surveys.
Jepson's woolly sunflower Eriophyllum jepsonii	//4	Chaparral, cismontane woodland, coastal scrub / sometimes serpentinite	Low potential. Not observed during surveys.
Hoover's button celery Eryngium aristulatum var. hooverii	//1B	Vernal pools	Moderate potential. Not observed during surveys.

¹ See notes at end of table for explanation of status codes

TABLE 3-4 (Continued) SPECIAL STATUS PLANT SPECIES WITH POTENTIAL TO OCCUR IN COYOTE-LAKE HARVEY BEAR RANCH COUNTY PARK

Common Name Scientific Name	Listing Status ² USFWS/CDFG/ CNPS	General Habitat and Nearest Occurrence	Potential to Occur
talus fritillary Fritillaria falcate	//1B	Chaparral cismontane woodland; lower montane coniferous forest / serpentinite, often talus	Low potential. Not observed during surveys of serpentine areas.
fragrant fritillary Fritillaria liliacea	//1B	Cismontane woodland, coastal prairie, coastal scrub, valley and foothill grassland / often serpentinite	Moderate potential. Not observed during surveys of grassland serpentine areas.
Legenere limosa	FSC//1B	Vernal pools. Reported in 2002 at Upper Twin Lake, north end of Timber Ridge, east of Coyote Lake, northeast of Gilroy (CDFG, 2003)	Moderate potential. Not observed during surveys in vernal pools.
woolly-headed lessingia Lessingia hololeuca	//3	Coastal scrub, lower montane coniferous forests, grasslands, usually on clay or serpentinite	Moderate potential. Not observed during surveys of grassland serpentine areas.
smooth lessingia Lessingia micradenia var. glabrata	FSC//1B	Chaparral or grassland with barren serpentine soil; west side of Valley; endemic to Santa Clara County	Moderate potential. Not observed during surveys of serpentine areas.
serpentine linanthus Linanthus ambiguus	//4	Cismontane woodland, coastal scrub, grassland, usually on serpentinite	Moderate potential. Not observed during surveys of serpentine areas.
large-flowered linanthus Linanthus grandiflorus	//4	Coastal bluff scrub, closed- cone coniferous forests, cismontane woodland, coastal dunes, coastal prairie, coastal scrub, grasslands	Low potential. No suitable habitat present. Not observed during surveys.
arcuate bush mallow Malacothamnus arcuatus	//1B	Chaparral	Moderate potential. Not observed during surveys.
Hall's bush mallow Malacothamnus hallii	//1B	Chaparral and coastal scrub	Moderate potential. Not observed during surveys.
Gairdner's yampah Perideridia gairdneri ssp. gairdneri	//4	Broadleafed upland forests, chaparral, grasslands, vernal pools, usually in mesic sites	Moderate potential. Not observed during surveys.
hairless popcom flower Plagiobothrys glaber	//1A	Meadows and seeps (alkaline); marshes and swamps (coastal salt); Last confirmed siting in 1954. Possibly relocated near Antioch; identification uncertain. All collections since 1930's located in the Hollister area; plant should also be looked for there (CNPS, 2001)	Low potential. Not observed during surveys.

² See notes at end of table for explanation of status codes

TABLE 3-4 (Continued) SPECIAL STATUS PLANT SPECIES WITH POTENTIAL TO OCCUR IN COYOTE-LAKE HARVEY BEAR RANCH COUNTY PARK

Common Name Scientific Name	Listing Status ³ USFWS/CDFG/ CNPS	General Habitat and Nearest Occurrence	Potential to Occur
hooked popcom flower Plagiobothrys uncinatus	//1B	Chaparral, cismontane woodland; grassland	Moderate potential. Not observed during surveys.
slender-leaved pondweed Potamegeton filiformis	//2	Meadows and seeps; upper montane coniferous forest	Low potential. Not observed during surveys.
Lobb'a aquatic buttercup Ranunculus lobbii	//4	Cismontane woodland; north Coast coniferous forest; grassland; vernal pools / mesic.	Moderate potential. Not observed during surveys.
rock sanicle Sanicula saxatilis	/CR/1B	Broadleaf upland forest; chaparral; valley and foothill grassland (rocky).	Moderate potential. Not observed during surveys.
Metcalf Canyon jewelflower Streptanthus albidus ssp. albidus	FE//1B	Serpentine outcrops in grassland or chaparral; nearest location uncertain (1957 record) but probably on west side of valley.	Low potential. Not observed during surveys.
most beautiful jewelflower Streptanthus albidus ssp. peramoenus	//1B	Serpentine outcrops in grassland or chaparral; occurs on west side of valley.	Low potential. Not observed during surveys.
Mt. Hamilton jewelflower Streptanthus callistus	//1B	Chaparral; cismontane woodland. Known from approximately five occurrences in the Mt. Hamilton Range (CNPS, 2001).	Moderate potential. Not observed during surveys.

STATUS CODES:

FEDERAL: (U.S. Fish and Wildlife Service)
FE = Listed as Endangered (in danger of extinction) by the Federal Government.

FT = Listed as Threatened (likely to become Endangered within the foreseeable future) by the Federal Government.

FSC = Federal Species of Concern. May be Endangered or Threatened, but not enough biological information has been gathered to support listing at this time.

STATE: (California Department of Fish and Game)
CE = Listed as Endangered by the State of California
CSC = California Species of Special Concern

CR = Listed as Rare by the State of California

<u>CALIFORNIA NATIVE PLANT SOCIETY (CNPS)</u> List 1A: Plants presumed extinct

List 2= Plants rare, threatened, or endangered in California but more common elsewhere

List 3= Plants about which more information is needed

List 4= Plants of limited distribution

SOURCES: CDFG, 2003; CNPS 2001; CDFG 2001a; CDFG 2001b; Kephart and Stromberg, 1998; Garth and Tilden, 1986; Hickman, 1993; Jameson, 1988; Page and Burr, 1991; U. S. Department of Commerce, 2000; U. S. Department of the Interior, 1994; USFWS, 2001.

See notes at end of table for explanation of status codes

adjacent to the Park. Of these, two (Bay checkerspot butterfly and California red-legged frog) are listed Threatened or Endangered species or candidate species for listing. These species, their habitats, protection status, and likelihood of occurrence are summarized in Table 3-5.

Mammal species of concern with potential to occur in the project area are limited to bats, predominantly of the genus *Myotis*. Bats establish roosts in tree trunks, under bridges, and in abandoned buildings in habitats near woodlands or in close association with water bodies where they forage for insects. All bat species are Species of Special Concern in California.

Western Pond Turtle. Western Pond Turtle (Clemmys marmorata), a California Species of Concern, occurs in the pond south of Bear Ranch house. Western pond turtles typically live in calm water with aquatic vegetation and suitable logs or rocks for basking sites. They nest in soil and vegetation along wetland margins or in adjacent uplands (Rathburn et al 1992), requiring a buffer of habitat surrounding aquatic habitat. Their food includes aquatic plants, invertebrates, carrion, and fish (Stebbins 1985).

There are two subspecies, the northwestern pond turtle (*Clemmys marmorata marmorata*) and the southwestern pond turtle (*Clemmys marmorata pallida*). The northwestern pond turtle is found north of the San Francisco Bay-Delta Estuary, while the southwestern pond turtle is found south of the San Francisco Bay. The two subspecies intergrade between the San Francisco Bay region and the San Joaquin Valley, therefore the subspecies occurring at Bear Ranch is unknown. Both subspecies are Federal species of concern and California species of special concern.

Western pond turtles lay their eggs April-August in buried nests, usually near water. Although the eggs hatch in 10-12 weeks, the young remain in nests throughout the winter. A number of animals prey on eggs, hatchlings, and juveniles. Predators include raccoons, dogs, coyotes, great blue herons, snakes, largemouth bass, and bullfrogs (Stebbins 1985).

Two subspecies are found in California, the northwestern (*Clemmys marmorata marmorata*) and the southwestern (*Clemmys marmorata pallida*). These two subspecies overlap in range just south of San Francisco Bay.

Bay Checkerspot Butterfly. The Bay checkerspot butterfly was recognized as a threatened species in 1987 (U.S. Fish & Wildlife Service [USFWS], 1987). Critical habitat (U.S. Fish & Wildlife Service, 2001) was recently designated and includes a portion of the northern ridgeline. A Recovery Plan for the butterfly and other serpentine endemic species was published by the U.S. Fish & Wildlife Service (1998). The status of the Bay checkerspot butterfly within the Park is not known, as no surveys for the species have been conducted. The critical habitat designation was based on a brief confirmation of the presence of Bay checkerspot butterfly and aerial survey of potential habitat in the late 1980's (Arnold, pers. comm.). Elsewhere within the Santa Clara Valley, the Bay checkerspot has previously been known to occur at Calero Reservoir (Buggy data base), Uvas Reservoir (Buggy data base), at Tulare Hill (Murphy, 1990) and Santa Teresa County Park (Arnold, 1992).

TABLE 3-5 SPECIAL STATUS WILDLIFE WITH POTENTIAL TO OCCUR IN COYOTE-LAKE HARVEY BEAR RANCH COUNTY PARK

Common Name Scientific Name	Listing Status ⁴ USFWS/CDFG	General Habitat and Nearest Occurrence	Potential to Occur
Invertebrates			
Bay checkerspot butterfly Euphydras editha bayensis	FT/	Restricted to native grasslands on outcrops of serpentine, with dwarf plantain and owl's clover host plants; Critical Habitat designated within park on ridge west of Coyote Lake.	High potential.
Opler's longhorn moth Adela oplerella	FSC/	Serpentine grassland with cream cups host plant; occurs SW of San Martin	Moderate Potential. Potential habitat in serpentine grassland; no surveys conducted for this species.
Amphibians			
foothill yellow-legged frog Rana boylii	FSC/CSC	Shaded shallow streams and riffles with a rocky streambed; known from Coyote Creek 0.5 mile upstream from lake, SE edge of Park.	Moderate potential. More suitable habitat upstream from lake, but frogs may occasionally migrate or wash downstream.
California red-legged frog Rana aurora draytonii	FT/CSC	Breed in stock ponds, pools, and slow-moving streams with emergent vegetation; adjacent upland habitats are often used outside the breeding season. Known from upper Coyote Creek and Coe SP, 2-5 miles east of Park.	Low potential. Potential habitat occupied by bass and bullfrogs, predators on CRLF. None observed during focused amphibian surveys.
California tiger salamander Ambystoma californiense	FC/CSC	Wintering sites occur in grasslands occupied by burrowing mammals; breed in ponds, vernal pools, and slow-moving or receding streams. Known from Coe SP, ~5 miles east of Park.	Low potential. Potential habitat occupied by bass and bullfrogs, predators on CTS. None observed during focused amphibian surveys.
Reptiles			
Western pond turtle Clemmys marmorata	FSC/CSC	Freshwater ponds and slow streams edged with sandy soils for laying eggs.	Observed in pond on Bear Ranch. Freshwater ponds with emergent aquatic vegetation and provide potential habitat.
Birds			
Burrowing owl Athene cunicularia	FSC/CSC	Nests and forages in low- growing grasslands that support burrowing mammals. Known from Vasquez Ranch, NW of Gilroy.	Moderate potential. Suitable habitat exists on Bear Ranch near valley floor. Not observed during breeding bird survey.

⁴ See notes at end of table for explanation of status codes

TABLE 3-5 (Continued) SPECIAL STATUS WILDLIFE WITH POTENTIAL TO OCCUR IN COYOTE-LAKE HARVEY BEAR RANCH COUNTY PARK

STATUS CODES:

FEDERAL: (U.S. Fish and Wildlife Service)

FE = Listed as Endangered (in danger of extinction) by the Federal Government.

FT = Listed as Threatened (likely to become Endangered within the foreseeable future) by the Federal Government. FSC = Federal Species of Concern. May be Endangered or Threatened, but not enough biological information has been gathered to support listing at this time.

STATE: (California Department of Fish and Game)

CE = Listed as Endangered by the State of California

CSC = California Species of Special Concern

SOURCES: CDFG, 2001; CDFG 2001a; CDFG 2001b; Kephart and Stromberg, 1998; Garth and Tilden, 1986;

Hickman, 1993; Jameson, 1988; Page and Burr, 1991; Peterson, 1990; Stebbins, 1985; U. S. Department

of Commerce, 2000; U. S. Department of the Interior, 1994; USFWS, 2001.

Although the Bay checkerspot is usually associated with serpentine grassland vegetation, particularly areas that are characterized by native bunch grasses, the species historically was also known from a few non-serpentine locations. The primary oviposition and larval food plant is dwarf plantain (*Plantago erecta*). In some years the larvae require a secondary food plant, one of two species of owl's clover (*Orthocarpus densiflora* or *O. purpurascens*).

Although the vegetation throughout the slopes and ridge area has been consists largely of non-native annual grassland, patches of perennial grasses and other native vegetation occur on serpentine soils within the area designated as critical habitat for Bay checkerspot butterfly. These locations likely support food plants for serpentine indigenous insects such as the federally-listed Bay checkerspot butterfly (*Euphydryas editha bayensis*) and Opler's longhorn moth (*Adela oplerella*), a federal species of concern. Dwarf plantain (*Plantago erecta*), the primary larval food plant of the Bay checkerspot, were observed during botanical surveys of the Park, including within the vicinity of the trail segment that abuts the critical habitat area.

The adult flight season is typically about four to six weeks in length, starting in late February to mid-March and terminating in late April to early May. Actual starting and ending times can vary by several weeks from year-to-year. Individual adults live approximately one to two weeks, during which time they must mate and reproduce. Adults obtain energy and nutrients from the nectar of various native wildflowers that grow in serpentine grasslands. Lomatium utriculatum, L. dasycarpum, Lasthenia californica, Layia platyglossa, Linanthus adrosaceus, Muilla maritima, Amsinckia intermedia, and Allium serratum are known nectar plants. Mate location occurs primarily on hilltops, where both sexes congregate after eclosion (i.e., adult emergence from the pupal life stage). Upon mating, females disperse throughout the hilltops and away from the hilltops to lay their eggs. The eggs are laid as masses containing as many as 200 eggs, near the base of Plantago erecta plants.

Larvae hatch in about 10-14 days and feed for approximately another 3-4 weeks until their food plants senesce or are defoliated. Young larvae, which have limited mobility at this stage, frequently fail to find sufficient edible food plants and starve. Typically, 90% or more of these young larvae starve to death. As its annual food plant senesces, the partially grown larvae enter a physiological dormant period, known as diapause, which is spent under rocks or in cracks and crevices in the soil to survive the dry season when there is no food for the larvae. The summer diapause ends with the onset of the next rainy season and the germination of *Plantago erecta*. Larvae resume feeding and complete their development by pupating. The pupal stage generally lasts about 2-4 weeks before emergence of the adult butterfly.

Sun exposure, topographic aspect, and microclimatic conditions at ground level affect the developmental rates of the immature stages of the butterfly and the seasonal activity period of the adults. Topographic diversity in conjunction with the abundance of foodplants are important determinants of habitat quality for the checkerspot. Locations with considerable habitat on eastern and northern-facing slopes are more likely to allow populations to persist through periods of drought or other short-term, adverse climatic conditions (Dobkin *et al.*, 1987; Weiss, 1996).

Studies of the Bay checkerspot butterfly by Dr. Paul Ehrlich and his colleagues at Stanford University for the past 35 years have determined that the butterfly has a "metapopulation" type of distribution and population structure. A metapopulation is a network of semi-isolated populations with some level of regular or intermittent migration and gene flow among them, in which individual populations may go extinct but then be re-colonized by dispersing individuals from other populations. Studies of the checkerspot contributed to the formulation of the metapopulation concept that is now widely discussed in conservation biology (Ehrlich *et al.*, 1975, 1980; Harrison, 1994; Murphy *et al.*, 1990).

Raptors and Passerines

Nesting raptors, which are protected under the Bald Eagle Protection Act and the Migratory Bird Treaty Act, may occur in dense oak woodlands on the east facing slope of the main ridgeline. Several raptors were identified during field surveys and are reported in the NRMP, including white-tailed kite, Cooper's hawk, red-shouldered hawk, red-tailed hawk, golden eagle, and American kestrel. Nesting migratory songbirds, which are protected under the Migratory Bird Treaty Act, also were identified during breeding bird surveys (Rana Creek, 2003).

REGULATORY FRAMEWORK

This section briefly describes federal, state and regional regulations, permits, and policies that apply broadly to biological resources and wetlands within the project area. Local ordinances, policies and guidelines (i.e. those set forth in City General Plans) that address biological resources are not discussed in detail in this document. Nonetheless, such local regulations are incorporated into this document by reference and would apply to subsequent activities in the project area and additionally considered in the design of those activities.

U.S. ARMY CORPS OF ENGINEERS AND U.S. ENVIRONMENTAL PROTECTION AGENCY REGULATION OF WATERS OF THE UNITED STATES, INCLUDING WETLANDS

The Corps and Environmental Protection Agency (EPA) regulate the discharge of dredged or fill material into waters of the United States, including wetlands, under Section 404 of the Clean Water Act. Proposed activities that would result in the placement of dredged or fill material into waters of the United States require a Section 404 permit from the Corps. Some classes of fill activities may be authorized under general (Nationwide) permits if specific conditions are met.

Waters of the United States and wetlands are present in the project area, and include Coyote Lake and Coyote Creek (inlet to the lake), as well as numerous small streams that drain toward both the east and west side of the ridge, springs and seeps, seasonal wetlands, and livestock ponds. These wetlands and other waters of the United States are subject to Corps jurisdiction, and may be affected by certain elements of the proposed Master Plan. Nationwide permits, which authorize specific types of activities with low potential for impact to jurisdictional wetlands or other waters may apply to certain proposed activities, such as trails or habitat restoration. However, these permits do not authorize activities that are likely to jeopardize the existence of a Threatened or Endangered species (listed or proposed for listing under the federal ESA) or that may affect properties listed or eligible for listing in the National Register of Historic Places (56 FR 59134-59138, November 22, 1991). In addition to conditions outlined under each nationwide permit, project-specific conditions may be required by the Corps as part of the Section 404 permitting process.

The federal government also supports a policy of minimizing "the destruction, loss, or degradation of wetlands." Executive Order 11990 (May 24, 1977) requires that each federal agency take action to minimize the destruction, loss, or degradation of wetlands and to preserve and enhance the natural and beneficial values of wetlands.

FEDERAL POLICIES ON RIPARIAN HABITAT IN CALIFORNIA

Riparian habitats have a variety of functions, including providing high-quality habitat for resident and migrant wildlife, streambank stabilization, and runoff water filtration. Throughout the United States, riparian habitats have declined substantially in extent and quality compared with their historical distribution and condition. These declines have increased concerns about dependent plant and wildlife species, leading federal agencies to adopt policies to arrest further loss. USFWS mitigation policy identifies California's riparian habitats as belonging to resource Category 2, for which no net loss of existing habitat value is recommended (46 FR 7644, January 23, 1981).

STATE REGULATIONS AND POLICIES ON STREAMS AND WETLANDS

The California Department of Fish and Game (CDFG) regulates activities that would interfere with the natural flow of, or substantially alter, the channel, bed, or bank of a lake, river, or stream. These activities are regulated under the California Fish and Game Code (Section 1601 for public

agencies and Section 1603 for private individuals). Requirements to protect the integrity of biological resources and water quality are often conditions of streambed alteration agreements. Requirements may include avoidance or minimization of the use of heavy equipment, limitations on work periods to avoid impacts on wildlife and fisheries resources, and measures to restore degraded sites or compensate for permanent habitat losses. A Streambed Alteration Agreement will be requested from CDFG for all construction activities that have the potential to result in alteration or fill of areas subject to Section 1603.

The State Water Resources Control Board, acting through the San Francisco Bay Regional Water Quality Control Boards (RWQCB) and the Central Coast RWQCB, must certify that a Corps permit action meets State water quality objectives (Section 401, Clean Water Act). Additionally, the RWQCB enforces pollutant discharges, including discharges of fill, into waters of the state regardless of federal jurisdiction, such as in the case of isolated wetlands that no longer are regulated by the Corps, through the Porter-Cologne Act. The RWQCB also issues permits under the National Pollutant Discharge Elimination System (NPDES) for projects that require over one acre of grading. These permits protect water quality by ensuring Best Management Practices are employed, usually through implementation of a Storm Water Pollution Prevention Plan (SWPPP).

FEDERAL ENDANGERED SPECIES ACT

The USFWS (jurisdiction over plants, wildlife, and resident fish) and National Marine Fisheries Service (NMFS; jurisdiction over anadromous fish and marine fish and mammals) oversee the federal ESA. Section 7 of the Act mandates that all federal agencies consult with the USFWS and NMFS to ensure that federal agencies actions do not jeopardize the continued existence of a listed species or destroy or adversely modify critical habitat for listed species. The federal agency is required to consult with the USFWS and NMFS if it determines a "may effect" situation will occur in association with the proposed project. The federal ESA prohibits the "take5" of any fish or wildlife species listed as Threatened or Endangered, including the destruction of habitat that could hinder species recovery.

Section 3 of the Act requires the USFWS or NMFS to designate critical habitat for Threatened or Endangered species. Critical habitat is defined by Section 3 of the Act as habitat that is "essential to the conservation of the species." Section 7 of the Act protects USFWS- and NMFS-designated critical habitat for listed species and prohibits "destruction or adverse modification" of these designated areas. Under Section 9 of the federal ESA, the take prohibition applies only to wildlife and fish species. However, Section 9 does prohibit the removal, possession, damage or destruction of any endangered plant from federal land. Section 9 also prohibits acts to remove, cut, dig up, damage, or destroy an endangered plant species in nonfederal areas in knowing violation of any state law or in the course of criminal trespass. Candidate species and species that are proposed or currently are being petitioned for listing receive no protection under Section 9 of the federal ESA.

Take is defined as harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, collecting, or attempting to engage in any such conduct.

Section 10 of the federal ESA requires the issuance of an "incidental take" permit before any public or private action may be taken that would potentially harm, harass, injure, kill, capture, collect, or otherwise hurt (i.e., take) any individual of an Endangered or Threatened species. The permit requires preparation and implementation of a habitat conservation plan that would offset the take of individuals that may occur, incidental to implementation of the project by providing for the overall preservation of the affected species through specific mitigation

MIGRATORY BIRD TREATY ACT AND BALD EAGLE PROTECTION ACT

The federal Migratory Bird Treaty Act (16 U.S.C., Sec. 703, Supp. I 1989) prohibits killing, possessing, or trading in migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. This act encompasses whole birds, parts of birds, and bird nests and eggs. Birds of prey are protected in California under the State Fish and Game Code, Section 3503.5 1992). Section 3503.5 states that it is "unlawful to take, possess, or destroy any birds in the order *Falconiformes* or *Strigiformes* (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "taking" by the CDFG. Any loss of fertile eggs, nesting raptors, or any activities resulting in nest abandonment would constitute a significant impact. This approach would apply to red-tailed hawks, American kestrels, barn owls, and other birds of prey. Project impacts to these species would not be considered "significant" in this EIR unless they are known or have a high potential to nest on the site or rely on it for primary foraging.

The federal Bald Eagle Protection Act prohibits persons within the United States (or other places subject to U.S. jurisdiction) from "possessing, selling, purchasing, offering to sell, transporting, exporting or importing any bald eagle or any golden eagle, alive or dead, or any part, nest or egg thereof."

CALIFORNIA ENDANGERED SPECIES ACT

California implemented its own Endangered Species Act in 1984. The state act prohibits the take of Endangered and Threatened species; however, habitat destruction is not included in the state's definition of take. Section 2090 of CESA requires state agencies to comply with endangered species protection and recovery and to promote conservation of these species. The CDFG administers the act and authorizes take through Section 2081 agreements (except for designated "fully protected species").

Regarding rare plant species, CESA defers to the California Native Plant Protection Act of 1977, which prohibits importing of rare and endangered plants into California, taking of rare and endangered plants, and selling of rare and endangered plants. State-listed plants are protected mainly in cases where state agencies are involved in projects under CEQA. In this case, plants listed as rare under the California Native Plant Protection Act are not protected under CESA but can be protected under CEQA.

NATIVE AND HERITAGE TREE ORDINANCES

Some cities and counties have adopted native or heritage tree ordinances or policies to protect large or native trees. The County Tree Preservation and Removal (County Ordinance Code C-16) ordinance requires project applicants to obtain a tree removal permit, and in some cases compensate for the removal of protected trees. Removal and indirect impacts on heritage and native trees will be avoided and minimized to the fullest extent possible during construction.

SANTA CLARA COUNTY GENERAL PLAN POLICIES AND GUIDELINES

The Santa Clara County General Plan (1994) recognizes the importance of natural habitats and biodiversity. In particular, the General Plan emphasizes the role of certain types of habitat, such as riparian areas and serpentine soils, to support proportionally high numbers of special status species. The General Plan outlines several strategies and policies to increase and maintain protection of important habitat areas within the County. The proposed Master Plan incorporates similar strategies and goals, and is consistent with the General Plan by providing for:

- Improved knowledge and awareness of habitats and natural areas (Strategy #1);
- Protection of biological integrity of critical habitat areas (Strategy #2);
- Encouragement of habitat restoration (Strategy #3); and
- Evaluation of the effectiveness of environmental mitigations (Strategy #4).

The General Plan includes specific policies on habitat and biological diversity, which also are addressed within the proposed Master Plan:

- Resource identification, inventory, mapping, and database updates coordinated with local, regional, state and federal resource agencies;
- Acquisition of habitats that are unique or support greater species diversity and richness, and greater numbers of special status species;
- Preservation of critical habitat linkages and wildlife corridors;
- Limitations on land uses in resource conservation areas:
- Promotion of habitat restoration and enhancement, particularly with respect to wetland, riparian, and other habitat types rich in diversity.

WATERS OF THE UNITED STATES (INCLUDING WETLANDS)

For the purpose of this document, the term "waters of the United States" is an encompassing term used by the U.S. Army Corps of Engineers (Corps) for areas that would qualify for federal regulation under Section 404 of the Clean Water Act. Wetlands are a subset of waters of the United States.

Wetlands are defined as areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a

prevalence of vegetation typically adapted for life in saturated soil conditions (33 Code of Federal Regulations [CFR] 328.3[b], 40 CFR 230.3). To meet the Corps' criteria as a Section 404 wetland, a site must be subject to hydrological conditions that result in inundated or saturated soils, and that support vegetation that is adapted to such conditions.

"Other waters of the United States" are sites that typically lack one or more of the three indicators identified above (wetland hydrology, vegetation, or soils). Other waters of the United States that may occur in the project area include drainages and seasonal wetlands that form in shallow, disturbed depressions in ruderal habitat. For the purpose of this document, drainages include all streams, creeks, rivers, and other surface features with defined beds and banks.

Waters of the United States and wetlands are present in the project area, and include Coyote Lake and Coyote Creek (inlet to the lake), as well as numerous small streams, springs and seeps, seasonal wetlands, and livestock ponds. These wetlands and other waters of the United States are subject to Corps jurisdiction, and may be affected by certain elements of the proposed Master Plan. For all program elements described in this EIR, the Parks Department will identify all potentially jurisdictional features in the vicinity of proposed construction operations, and will obtain permits as necessary. Measures outlined in this document to avoid or minimize impacts to wetlands and other waters of the United States will apply to all jurisdictional features identified in work plans proposed by the Park.

IMPACTS AND MITIGATION MEASURES

SIGNIFICANCE CRITERIA

To determine the level of significance of an identified impact, the criteria outlined in the CEQA *Guidelines* were used. The following is a discussion of the criteria used to determine the significance of impacts to biological resources.

CEQA (Section 15206) specifies that a project shall be deemed to be of statewide, regional, or area-wide significance if it would substantially affect sensitive wildlife habitats including, but not limited to, riparian lands, wetlands, bays, estuaries, marshes, and habitats for rare and endangered species as defined by Fish and Game Code Section 903.

Appendix G of the CEQA *Guidelines* indicates that a project would have a significant effect on the environment if it would:

- interfere substantially with the movement of any resident or migratory fish or wildlife species;
- substantially diminish habitat for fish, wildlife or plants; or
- substantially affect a rare or endangered species of animal or plant or the habitat of the species.

CEQA Section 15380 further provides that a plant or animal species, even if not on one of the official lists, may be treated as "rare or endangered" if, for example, it is likely to become endangered in the foreseeable future.

CEQA Section 15065 further directs lead agencies find that a project may have a significant effect on the environment if it has the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish and wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of an endangered, rare or threatened species, or eliminate important examples of the major periods of California history or prehistory.

Pursuant to the Federal Endangered Species Act (Sections 7(a)(3) and (4)) every federal agency is required to confer with the Secretary of the Interior on any action likely to jeopardize the continued existence of a listed or proposed species or adversely affect the critical habitat of those species.

Based on guidelines established by the USFWS and the CDFG, a project is considered to have a significant adverse impact on biological resources if it results in substantial disruption to, or destruction of, any special status species, their habitat, or breeding grounds. A project is also considered to have a significant impact if it results in a substantial loss of important plant or animal species; causes a change in species composition, abundance or diversity beyond that of normal variability; results in the direct or indirect measurable degradation of sensitive habitats (e.g., wetlands, riparian corridors, vernal pools, oak woodlands); or results in loss of a significant plant community.

Local Plans and Policies. CEQA Guidelines (Appendix G) specifies that a project will normally have a significant impact on the environment if it will physically impact communities or species protected by adopted environmental plans and goals of the communities where it is located. For example, both the City and County of Los Angeles have ordinances protecting oak trees. Any action that would conflict with these policies is considered a significant impact.

Less than Significant Impacts. Impacts are generally considered less than significant if the habitats and species affected are common and widespread in the region and the state.

Beneficial Impacts. Impacts are considered beneficial if the action causes no detrimental impacts and results in an increase of habitat quantity and quality.

For the purposes of this EIR, three principal components of the guidelines outlined above were considered:

- Magnitude of the impact (e.g., substantial/not substantial)
- Uniqueness of the affected resource (rarity), and
- Susceptibility of the affected resource to perturbation (sensitivity)

The evaluation of significance must consider the interrelationship of these three components. For example, a relatively small magnitude impact to a State or federal listed species would be considered significant because the species is very rare and is believed to be very susceptible to disturbance. Conversely, a plant community such as California annual grassland is not necessarily rare or sensitive to disturbance. Therefore, a much larger magnitude of impact would be required to result in a significant impact.

IMPACT MECHANISMS

Biological resources could be directly affected by construction activities during construction of Park facilities, by recreational use, or by ongoing operational and maintenance activities within the Park. Direct and indirect disturbance from construction activities could result in the loss or degradation of biological resources in the following ways:

- grading, excavating, or other types of ground-disturbing activities associated with construction of new Park facilities;
- temporary stockpiling of soil or construction materials and side-casting of soil and other construction wastes;
- soil compaction, dust, and water runoff;
- noise disturbance to wildlife species from construction activities;
- effects on nocturnal wildlife from lighting associated with new park facilities;
- effects of current or future land management practices on special status species, sensitive plant communities or wildlife habitat;
- effects of increased recreational use could diminish wildlife habitat value in some locations;
- trail use near potential Bay checkerspot habitat areas during larval stages;
- trail re-alignment effects on oak trees by soil compaction or tree removal; and
- Changes of use (i.e. new facilities or park programs) could disturb or displace open space.

The following analysis identifies activities or Master Plan program elements that could adversely affect biological resources in the Park. The impacts are based on the range of activities covered under the Project Description, although some of these elements have not been developed to a level of detail that would enable a complete analysis. For that reason, the analysis has been subdivided to address those potential impacts and mitigation measure relevant to the Project-level, or Master Plan Phase 1 program elements, i.e., those with the highest likelihood of being implemented in the short term, or within three years of Master Plan adoption. Following this, projects that are at a programmatic level only are evaluated in more general terms, commensurate with the level of detail available at this time.

The mitigation measures are organized in this way as well. For project level elements of the Master Plan, mitigation measures are described in adequate detail to facilitate implementation. At the programmatic level, the mitigation measures are intended to establish criteria and protocols for the eventual crafting and refinement of measures to avoid or reduce specific impacts identified through analysis of subsequent CEQA actions. The eventual impact-specific mitigations shall, at a minimum, include the components described in this document.

The mitigation measures described for potential adverse effects to special-status species have not been developed through formal consultation or coordination with resource agencies (e.g., CDFG and USFWS). The mitigation measures may be modified during coordination with the resource agencies for subsequent activities. Additional mitigation measures that may be identified as part of the permit review process (e.g., Section 404, 1603 streambed alteration agreement, or biological opinion, if needed) would be implemented as part of the project and monitored during construction to ensure compliance.

DEFINITIONS

The term "qualified wildlife biologist" as used below indicates a person with at least an undergraduate degree in wildlife or a related field, and either professionally certified as a Wildlife Biologist (C.W.B.) by The Wildlife Society, or working under the direct supervision of a C.W.B.

The term "qualified botanist" as used below indicates a person with at least an undergraduate degree in botany, plant ecology or a related field, and with a minimum of three years professional field experience within the region or working under the direct supervision of a professional botanist with at least six years field experience in the region.

IMPACTS AND MITIGATION MEASURES

Impact Biological Resources-1: Construction of a new trail segment to replace a portion of the ridgeline ranch road, and subsequent use and maintenance of the segment, could result in impacts to Bay checkerspot butterfly critical habitat and loss of individuals during reproductive periods. Less Than Significant with Mitigation Measures.

Because it is a federally listed threatened species, any impacts to the habitat of the Bay checkerspot butterfly may require a permit for "incidental take" to comply with the Endangered Species Act. While acquisition of lands including and surrounding the critical habitat designated area provides protection of the habitat, activities such as trail construction, periodic blading or other maintenance activities, and trail use could result in take of the butterfly's life stages, most likely larvae, at locations where *Plantago erecta* grows on the trails. For these reasons, the USFWS should be consulted prior to any activity within the area designated as critical habitat.

Project-Level Components

As discussed in Chapter 2, Project Description, project-level components include 1) installation of Phase 1 trails, gates, fencing, staging areas, and signage (Western Flat and Mendoza Area);

2) campground improvements, including reduction of density and addition of shower facilities (Lakeside Area); 3) establishment of hang-gliding launch and landing sites (Slopes and Ridge Area); 4) establishment of equestrian camping at existing overflow parking area (West Flat Area); 5) installation of boat self-launch area for kayaks/non-motorized boats (Lakeside Area); and 6) use of the Mendoza Ranch Area pond for annual Fishability Days event.

The Trails Plan in the proposed Master Plan identifies segments 2 and 5 as Phase 1 priorities, to be implemented as a Project-level component. Phase 1 trails are specifically designed to minimize impacts to sensitive habitats and provide an environmentally superior alternative to existing ranch roads. Phase 1 includes rerouting of a segment of the ridge line ranch road, which is intended to bypass the steep gradients encountered on portions of the ridge road and improve visitor access. The segment passes through the area designated as critical habitat for Bay checkerspot butterfly.

Impacts to Bay checkerspot butterfly and its habitat could occur through loss of larval food plants of the Bay checkerspot butterfly. *Plantago erecta* generally grows in areas of thin soils, rock outcrops, and other places where competition with other plants is minimal. Future maintenance of trails, as well as use by hikers and equestrians, could also result in damage to the food plant, and any butterfly larvae feeding at these patches of food plants.

Program-Level Components

As indicated in Chapter 2, subsequent environmental documentation is required for implementation of program-level components; they are evaluated here on a conceptual level. Development would include construction of an 18-hole golf course, a fishing pond, Phase 2 trails, building and event center, Bicycle Park, and other site-specific use areas. Improvements outside of the West Flat Area include development of picnic areas in the Lakeside Area and minor development in the Mendoza Area.

No program-level components would be located within the Bay checkerspot butterfly critical habitat designated area.

Mitigation Measure Biological Resources-1a: Pre-construction surveys should be performed at locations where, trail construction, maintenance, mowing or other ground-disturbing activities are necessary to prepare or maintain the existing alignments for public use. Surveys should include searches for Bay checkerspot adult and larval life stages. Any ground-disturbing activities in occupied habitat should be limited to the fall months (September through November July through October) and completed prior to the rainy season. At this time of year, partially grown larvae are in diapause and hiding under rocks or in cracks and crevices in the soil, and are considered less vulnerable than when they are actively feeding in the spring. Maintenance and construction may take place at other times along portions of the trails where survey results do not detect the species.

Mitigation Measure Biological Resources-1b: Vegetation management of annual and serpentine grasslands that support the food plants of these insects can improve the habitat quality by reducing weeds and annual grasses. Implementation of the Natural Resource Management Plan (NRMP) included as part of the proposed Master Plan would likely

improve habitat quality and the potential for supporting a population of Bay checkerspot within the Park. Grazing with cattle has been used at other locations in Santa Clara County to effectively manage the butterfly's habitat. The timing and intensity of the grazing program is critical for favoring the growth of the food plants, and would be stipulated in response to monitoring as described in the NRMP.

Thus, implementation of a grazing program to improve habitat may benefit the Bay checkerspot in off-trail locations to such a degree that any impacts from trail and trail use are insignificant by comparison. The grazing program would similarly benefit the Opler's longhorn moth.

Impact Significance After Mitigation: Less Than Significant.

Impact Biological Resources-2: Implementation of the Master Plan could result in direct and indirect disturbance of western pond turtle nesting habitat located near the pond next to the Bear Ranch house.

Western pond turtle, a Federal species of concern and a California species of special concern, occupies the pond near the Bear Ranch house in the northeast corner of the West Flat Area. This is the only pond in the park where pond turtles were detected during reptile and amphibian surveys that included seining. Habitat for the pond turtle at this location includes the pond itself, as well as an indeterminate area of adjacent upland used for nesting. The pond turtle population has persisted in proximity to the Bear Ranch House and past sources of disturbance, including people, domestic pets, and vehicle traffic on the driveway. Under the Master Plan, the footprint of development near the pond would remain essentially unchanged, and there would be the same access by pond turtles to suitable nesting sites with the same level of protective vegetative cover. The type of use near the pond would change from a residence to a family picnic site and scenic overlook, which would introduce larger numbers of people and traffic near the pond.

Project-Level Components

No project-level of the Master Plan would directly impact pond turtles or the pond where they occur. The driveway to the house would be used as a Phase 1 Trail, and is located within 50 feet of the east side of the pond.

Program-Level Components

No program-level components would directly impact pond turtles or the pond where they occur. Indirect impacts to the pond turtle could result from use of the family picnic/overlook located at the Bear Ranch house site. Foot traffic in areas adjacent to the pond that used by pond turtles for nesting could be trampled, and picnic refuse could attract birds, such as ravens, that could prey on hatchlings.

Mitigation Measure Biological Resources-2a: Consistent with the Natural Resources Management Plan, visual surveys should be conducted for pond turtles in late spring (May-

June) and early fall (August-September), during warm days when turtles are likely to be active. Surveys should include counts of adult, juvenile, and hatchling turtles, as well as the presence, absence, or sign of predators (bass, bullfrogs, herons, raccoons or snakes. Although difficult to locate, any potential nest sites also should be documented.

Mitigation Measure Biological Resources-2b: Surveys should assess the adequacy of basking sites, an important habitat element for pond turtles. If shoreline basking sites become limited by vegetation growth, or are otherwise unavailable, then new basking sites should be created. Suitable sites can be provided by placement of a tree trunk or floating platform, secured to remain in the middle of the pond.

Mitigation Measure Biological Resources-2c: Consistent with the Natural Resources Management Plan, park visitors and their pets should be limited to approximately 150 feet from the pond edge to prevent trampling of nests. Nesting season extends from approximately April through August, therefore, the limits to access may be relaxed outside of this period. The family picnic/overlook may be located within the 150 buffer, but would be offset by a larger buffer elsewhere around the pond.

Mitigation Measure Biological Resources-2d: A speed limit of 10 miles per hour during April-August should be established and enforced on the driveway to the family picnic/overlook.

Mitigation Measure Biological Resources-2e: The golf course should be designed to include a buffer, or setback, of 150 feet between the south and west of the pond and the nearest fairway. Fairway margins should retain a high rough that is subject to maintenance only outside of the pond turtle nesting period. The buffer would encompass the slope below the pond with the exposures preferred for nesting. The extensive grassland habitat to the east of the pond will remain in its current natural condition, also available for nesting.

Impact Significance After Mitigation: Less Than Significant.

Impact Biological Resources-3: Implementation of the trails plan in the proposed Master Plan could result in temporary displacement of habitat for big-scale balsam root. Less Than Significant with Mitigation Measures.

Big scale balsam root is known from the northern part of the Park, within the area designated critical habitat for Bay checkerspot butterfly habitat. Trail construction in this area, as described in Impact Biological Resources-1 could adversely affect this plant if undocumented populations of the plant are located in the trail alignment.

Project-Level Components

Under the Trails Plan in the proposed Master Plan, some segments of existing ranch roads would be abandoned and revegetated according to guidelines in the NRMP. One of these segments would be located near the documented occurrence of big-scale balsam root. Potential habitat for

big-scale balsam root extends beyond the documented location. However, because new single-track trail alignments would replace the ranch road segments, and the trails are narrower than the roads, a net gain in grassland habitat with potential to support big-scale balsam root would result.

Program Level Components

No Phase 2 trails would be located within big-scale balsam root habitat.

Mitigation Measure Biological Resources-3a: A qualified botanist should survey the proposed alignment of proposed trail segments 2 and 5, as identified in the trails Plan. The survey should occur during the same season that trail construction would occur, and during the flowering season for the species (March through June) to ensure recognition if big-scale balsam root plants are present. If plants are present within 25 feet of the proposed alignment centerline, then realignment is recommended.

Mitigation Measure Biological Resources-3b: Big-scale balsam root plants located near the trail should be protected during trail construction. Bright orange temporary fencing should be installed to create a buffer and isolate the plants from the work area. Workers should be educated about the presence of plants, and instructed to avoid disturbing it.

Impact Significance After Mitigation: Less Than Significant.

Impact Biological Resources-4: Construction of Park facilities could result in displacement of oak woodland and native grassland. Less Than Significant with Mitigation Measures.

This impact is conditional on trail route alignments in a native grassland or removal of an oak tree to facilitate proper grade control or sight lines. According to the proposed Master Plan, no impacts would occur to these sensitive plant communities. Every effort has been made to avoid these areas using resource sensitivity maps to guide the routing of trails and the siting of other Park improvements. However, implementation of the plan could result in identification of new field conditions or engineering constraints that necessitate exceptions in limited instances from this original intent. In particular, the issue of public safety in the vicinity of large oaks that may be in poor health could necessitate removal of limited numbers of trees.

Removal of oak trees also could result in impacts to nesting raptors, other birds, or bats. These are addressed in subsequent impacts and mitigation measures.

Project-Level Components

The construction of new trails could result in oak tree removal, although this impact would be avoided in foreseeable cases by minor re-routing of the trail. Depending on the final location, size, and need for grading, the campground amphitheatre could potentially necessitate removal of oak trees. Trails and hang-gliding launch and landing sites also could result in the loss of native grassland.

Program-Level Components

Development of facilities in the Western Flat Area, including the golf course, events pavilion, and equestrian center, could result in the need to remove limited numbers of oak trees. Phase 2 trails could result in the loss of native grasslands. Other program components would not likely affect oak trees or native grasslands.

Mitigation Measure Biological Resources-4a: The County would retain a certified arborist to assess the health and vigor of all trees in proximity to proposed facilities planned for intensive public use. The arborist would provide recommendations for the preservation or removal of trees that pose substantial risk of injury to life or property of Park visitors and staff.

Mitigation Measure Biological Resources-4b: In the event that tree removal is necessary, the impacts would be offset through planting of native oak trees elsewhere in the Park. In all cases, ample opportunities exist to plant trees close to the locations of those removed, with identical site conditions and microclimate. In the Western Flat Area, oak trees may be planted near the historic preservation area, events pavilion, equestrian center, picnic areas, along several small seasonal drainages, and elsewhere throughout the golf course. In the Lakeside Area, new trees could be planted in the campground and picnic areas. Trees should be cultivated by a qualified native plant nursery from acorns collected locally (i.e., from within the park, the watershed, or the County, depending on availability) and should be planted and maintained according to standard native plant establishment guidelines to protect them against damage from wildlife or park visitors.

Mitigation Measure Biological Resources-4c: Prior to establishing the final alignments of new trails, a qualified botanist should survey the alignments to determine whether native perennial grasslands would be traversed. Modest re-alignment of at trail should be considered if it would avoid native grasslands without compromising the purpose of the new trail, *i.e.*, to improve connectivity and gradients. The area of displaced native grassland should be quantified to facilitate revegetation or enhancement efforts elsewhere in the Park (see Measure 4-d).

Mitigation Measure Biological Resources-4d: Revegetation of native perennial grassland would be implemented according to recommendations and guidelines in the NRMP in the areas abandoned by reduction of campground density, and in the golf course to establish roughs and buffers along the small seasonal drainages.

Impact Significance Aft	er Mitigation: Les	ss Than Significant.
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Impact Biological Resources-5: Construction of Park facilities could result in loss of raptor nests and other bird nesting habitat in oak woodland. Less than Significant with Mitigation Measures.

Construction of park facilities may involve the removal of nesting habitat for raptors and other birds protected by the Federal Migratory Bird Treaty Act (MBTA), Federal Bald Eagle Protection

Act (BEPA), and CDFG Code Section 3503.5. Facility construction activities also could disturb nesting or roosting behavior of non-listed special status nesting raptors, other nesting birds (passerines) during the breeding season.

Project-Level Components

The construction of new trails could result in oak tree removal, although this impact would be avoided in foreseeable cases by minor re-routing of the trail. Trails and hang-gliding launch and landing sites also could result in the loss of native grassland.

Program-Level Components

Development of facilities in the Western Flat Area, including the golf course, events pavilion, and equestrian center, could result in the need to remove limited numbers of oak trees. Depending on the final location, size, and need for grading, the program-level campground amphitheatre could potentially necessitate removal of oak trees. Other program components would not likely affect oak trees or native grasslands.

Mitigation Measure Biological Resources-5: Construction that results in removal of nests during the non-breeding season (generally September 1 through January 31) does not require mitigation. To the extent feasible, construction of park facilities in proximity to areas identified during the breeding bird survey as active nesting areas will take place outside the period February 15 through August 31.

In the event that the breeding season cannot be avoided, pre-construction surveys for nesting activity would be conducted under the direction of a Certified Wildlife Biologist. If nesting activity of raptors or migratory songbirds protected under the MBTA and BEPA are identified, then construction should be suspended and consultation with the California Department of Fish and Game should be initiated. Subject to agreement with the CDFG, a breeding season monitoring protocol should be implemented during construction, or until the young have fledged.

<u>During construction activities</u>, there is a possibility of impact to individual burrowing owls, a special-status species currently at very low population levels in the Santa Clara Valley. Therefore, in additional to the general measure described above, the following protection measures for the burrowing owl shall be implemented:

- A pre-construction survey shall be conducted in all areas providing suitable habitat at least 30 days prior to construction according to the most recent CDFG Burrowing Owl Survey Protocol and Mitigation Guidelines (CDFG, 1995) or the approved methodology at the time surveys are conducted. Surveys shall include grassland areas within a 500-foot buffer around the project area, checking for burrowing owls and owl sign. If owls are found to be using the site and avoidance is not feasible, a passive relocation effort (displacing the owls from the site) may be conducted as described below, subject to the approval of CDFG.
- Establish areas around any occupied burrows where no disturbance may occur. The sensitive areas shall extend 160 feet around the occupied burrows during the non-breeding season of September 1 through January 31, and shall extend 250 feet around occupied burrows during the breeding season from February 1 through August 31.

- If the above avoidance requirements cannot be met, passive relocation of on-site owls may be implemented as an alternative, but only during the non-breeding season and with the approval of CDFG. Passive relocation shall be accomplished by installing one-way doors on the entrances of burrows located within 160 feet of the project area alignment. The one-way doors shall be left in place for 48 hours to ensure that the owls have left the burrow.
- For each burrow that will be excavated by project construction, one alternate unoccupied natural or artificial burrow shall be provided outside of the 160-foot buffer zone. The alternate burrows shall be monitored daily for one week to confirm that owls have moved and acclimated.
- Burrows within the construction area shall be excavated under the supervision of a
 biological monitor using hand tools and then refilled to prevent reoccupation. If any
 burrowing owls are discovered during excavation, the excavation shall cease and the owl
 will be allowed to escape. Excavation may be completed when the biological monitor
 confirms that the burrow is empty.

Impact Significance After Mitigation: Less Than Significant.

Impact Biological resources-6: Implementation of the proposed Master Plan could result in loss of up to 210 acres of raptor foraging habitat. Less Than Significant.

Project-Level Components

Approximately 10 acres of grassland habitat used for foraging by raptors would be displaced as a result of construction of re-routed trails, staging areas at the West Flat Area and Mendoza Areas, and construction of replacement campgrounds at the Lakeside Area. Foraging habitat quality at a hang gliding launch area in the northern part of the Park would be diminished by periodic use, but would not be displaced. The foraging habitat that would be displaced or reduced in value by these facilities represents a very small proportion of the total available foraging habitat in the vicinity of the Park, which will be preserved as open space in perpetuity. Therefore, this impact is not considered significant.

Program-Level Components

Raptor foraging habitat totaling approximately 200 acres would be displaced as a result of development of the park facilities in the Western Flat Area, including the golf course, events pavilion, picnic areas, and, to a lesser extent, the equestrian campground. The extensive savannah of the Western Flat, which is contiguous with grassland habitat of the western slope and with agricultural lands to the west, likely is well-used by foraging raptors. In the context of the anticipated development in this rural region of the Santa Clara Valley, the proposed park facilities would represent an incremental loss of raptor foraging habitat, but would not, in and of itself, result in a significant reduction in the availability of such habitat. Furthermore, the remaining 3,600 acres of the Park (excluding the lake) and adjoining public lands will be preserved as open space in perpetuity, ensuring a persistent prey base and providing high-quality raptor foraging habitat.

Mitigation: No mitigation required.

Impact Significance After Mitigation: Less Than Significant.

Impact Biological Resources-7: Construction within or adjacent to habitat that supports bat roosts may disrupt breeding behavior and cause roost abandonment and loss of young. Less than Significant with Mitigation Measures.

Construction of park facilities may involve the removal of large trees with cavities that harbor bat roosts. Pre-construction surveys conducted according to Mitigation Measure Biological Resources-5 will identify potential roosting habitat for special status bats in the project area prior to construction, and would inform construction plans about the potential for this impact to occur. If roosts are detected and roost removal occurs during the breeding season, direct mortality to these species and their young may occur. In addition, human disturbances from construction activities and noise could cause roost abandonment and death of young or loss of reproductive potential at active roosts located near the project construction areas.

Project-Level Components

The construction of new trails could result in oak tree removal, although this impact would be avoided in foreseeable cases by minor re-routing of the trail. Depending on the final location, size, and need for grading, the campground amphitheatre could potentially necessitate removal of oak trees. Trails and hang-gliding launch and landing sites also could result in the loss of native grassland.

Program-Level Components

Development of facilities in the Western Flat Area, including the golf course, events pavilion, picnic area and equestrian center, could result in the need to remove limited numbers of large trees that may have cavities that harbor bat roosts. Other program components would not likely affect trees.

Mitigation Measure Biological Resources-7: If construction activities are scheduled during the non-breeding season (generally September through January, but this is subject to case-by-case consideration of the breeding activity) within or adjacent to habitats that may support protected nesting bird or roosting bat species, mitigation is not required. Measures such as avoidance and passive relocation of species, which are included in these protocols, will be required for construction activities within or adjacent to suitable habitat.

Impact Significance After Mitigation: Less Than Significant.

Impact Biological Resources-8: Development of Park facilities could result in temporary and permanent impacts to jurisdictional wetlands and other waters of the U.S. under jurisdiction of the U.S. Army Corps of Engineers, and streams under regulatory authority of the California Department of Fish and Game and the Regional Water Quality Control Board and Santa Clara Valley Water District. Less than Significant with Mitigation Measures.

Jurisdictional wetlands and other waters of the U.S. (*i.e.*, seasonal intermittent streams) are mapped and documented in the NRMP. Several low-order seasonal streams that drain the western slopes of the Park and flow across the West Flat Area eventually join Llagas Creek, which is a tributary to the Pajaro River. An estimated 11,000 total linear feet of streams are located in the West Flat Area, or approximately 1.5 acres assuming an average streambed width of 6 feet. The streams cross lands that have historically been used for agriculture and livestock grazing, and do not currently provide riparian habitat values in the portion of the Western Flat Area that is proposed for the most intensive development of new park facilities. However, it is unlikely that the proposed park facilities could be developed without varying levels of temporary fill or realignment of the streams.

In addition, park facilities proposed at Coyote Lake would result in small-scale impacts to jurisdictional areas, including the lake bed and shore. No vernal pools or freshwater seeps would be adversely impacted by implementation of Master Plan program elements.

Project-Level Components

No Phase 1 trails would be routed through jurisdictional wetlands. The trails plan within the Master Plan routes identifies new trails to be constructed during Phase 1 to replace segments of the existing ranch roads. The routes of these new trails have been specifically selected to avoid jurisdictional wetlands and other waters of the U.S. to avoid impacting these habitats. Staging areas in the Western Flat and Mendoza Areas also have been located outside of jurisdictional areas.

Launching areas for non-motorized watercraft would result in minimal impact to jurisdictional areas associated with Coyote Lake. The floating docks would cover approximately 100 square feet each, and would require several pilings to be driven into the shoreline.

Program Level Components

Although the proposed Master Plan depicts the course of several seasonal streams as unchanged, the proposed development of the Western Flat Area may result in the temporary disturbance or re-alignment of portions of the streams. In addition, bridge crossings for the golf course and for pedestrian circulation through the Western Flat Area may likely be necessary. The proposed Master Plan also depicts native vegetation (oak or riparian woodlands and native grasslands) bordering the streams to act as buffers between the natural stream and the manicured golf course. Enhancement and restoration of these riparian corridors also may require temporary impacts to the bed and bank of the streams to provide for adequate storm conveyance and channel and bank stability.

No Phase 2 or Phase 3 trails would be routed through jurisdictional wetlands. The trails plan within the Master Plan routes identifies new trails to be constructed during Phase 1 to replace segments of the existing ranch roads. The routes of these new trails have been specifically selected to avoid jurisdictional wetlands and other waters of the U.S. to avoid impacting these habitats.

Mitigation Measure Biological Resources-8a: Disturbance of the seasonal streams or the lake bed or shore will require a jurisdictional delineation of wetlands and other waters of the U.S. and of the State, and regulatory permits from the U.S. Army Corps of Engineers, the California Department of Fish and Game, and the Regional Water Quality Control Board and Santa Clara Valley Water District.

Each agency discharges its authority through permits it issues; the permits ensure compliance with the regulations concerning habitat, endangered species, conveyance and water quality. The eventual disposition of the streams in the Western Flat will need to comply with the standard conditions, as well as special conditions attached to each regulatory permit. Typical conditions include:

- No net loss of wetland or riparian area, or of its ecological functions and values;
- Replacement of area, functions and values of temporarily disturbed jurisdictional wetlands or streams at a minimum ratio of 1:1;
- Compensation of permanently disturbed wetlands or streams through creation or enhancement of additional area at ratios of up to 3:1;
- Preparation of detailed mitigation plans describing the habitat to be created or enhanced, the process by which it will be accomplished (see Measure 7b), and setting performance standards and schedules for attaining a certain level of habitat function and value:
- Long-term monitoring (*i.e.*, 5 years) to ensure the successful implementation of the mitigation plan, with quantitative data collection and analysis and annual reports to the permitting agencies.
- Contingency plans to redress any portion of the mitigation effort that does not meet the performance standards.

Measure Biological Resources-8b: Depending on final layout and implementation plan for the golf course and other Park amenities in the West Flat Area, a plan may be required, as a condition of regulatory permits, for restoration of the riparian corridors associated with the seasonal streams in the West Flat Area.

Restoration and revegetation plans are routinely incorporated as conditions of approval in permits issued by the agencies that regulate wetlands and streams. The intent of these plans is to ensure no net loss of habitat functions and values, which is achieved through avoidance, minimization and compensation of impacts to jurisdictional areas, as well as the surrounding, non-jurisdiction upland habitat to the extent that it is essential to the integrity of the wetland or stream.

If required, the restoration and revegetation plan should be prepared as a component of the golf course (and other facilities) design process, and should specifically address impacts that would occur as a result of the construction of these facilities, including: temporary or permanent realignment of streams, bank stabilization, erosion control, bridge crossings (*i.e.* along golf course paths), and incorporation of any water features, such as the fishing pond, into natural drainages. The plan should conform to the County's Design Guidelines for Golf Courses (County of Santa Clara, 1996), in particular the "Habitat - Streams" element, that recommends the following:

- The golf course design should attempt to minimize the number of stream crossings. Stream
 crossings should be designed in such a way as to minimize erosion and harmful effects to
 significant habitat and migration corridors.
- Bridges should minimize alteration of the stream environment.
- Design should create and restore riparian habitat, especially in previously degraded habitat areas, and should reduce the impact of alterations necessitated by design and construction of the course.
- The course design should employ vegetated buffer strips of sufficient width to mitigate impacts to riparian corridors and other significant habitat which may result from surface drainage of the golf course, cart paths, and other developed areas. In certain circumstances where riparian vegetation has been degraded or does not exist, turf grass and rough areas may be located in closer proximity to the stream bank.
- In areas proposed for structures, paved roadways, or parking lots, setbacks of less than the 75-150 feet recommended by the General Plan should be allowed only when mitigations are possible which adequately address habitat and stream quality impacts.
- Cart paths should be graded such that runoff from them generally does not flow directly into any stream.
- Construction fencing/siltation barriers should be utilized during the construction phase where needed to protect habitat and stream areas.

Restoration and monitoring plans prepared as a condition of a permit from the Corps typically include the following (Department of the Army, 1991):

- Schedule and timing of implementation of the mitigation plan, with important milestones identified;
- Responsibilities and authorities of parties involved in implementation of the plan:
- Location, type and quantity (area) of habitat to be created or enhanced, including maps and other detail drawings as necessary.
- Plant species to be used, including quantities, size, type and origin of genetically appropriate material;
- Methods of installation and cultivation after planting;
- Methods of protecting the habitat from future disturbance:

- Maintenance requirements and schedule, including how problems with habitat development will be corrected;
- Monitoring methods and frequency, including a description of analytical methods to be used and what the methods are intended to demonstrate;
- Reporting requirements and frequency.

Impact Significance After Mitigation: Less Than Significant.

Impact Biological Resources-9: Implementation of the Master Plan would ensure preservation of regional wildlife corridors. Beneficial Impact.

The Park preserves a significant tract of undeveloped land between the valley and other protected open space to the north and east, and is used by wide-ranging mammals. Developments proposed in the Slopes and Ridge, Mendoza and Lakeside Areas would be low-density, and would have a positive effect on the long-term preservation of these migratory corridors for wildlife movement. The majority of the Western Flat Area would consist of a golf course. The introduction of a manicured open space between undeveloped parklands and rural/agricultural lands to the west would not substantially deter wildlife that are habituated to these environments, such as deer and raccoon, from continuing to move between them.

Mitigation: No mitigation required.

Impact Significance After Mitigation: Beneficial.

Impact Biological Resources-10: Construction of Park facilities could contribute to erosion or result in discharge of sediment to surface waters, which would adversely affect aquatic habitat quality. Less Than Significant with Mitigation Measures.

This impact and measures to mitigate it is addressed in the Hydrology, Floodplains and Water Quality Section. No additional mitigation measures required.

Impact Significance After Mitigation: Less Than Significant.

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CULTURAL RESOURCES

SETTING

METHODOLOGY

The inventory of cultural resources located within Coyote Lake-Harvey Bear Ranch County Park is largely incomplete. The 796 acres comprising the original configuration of the Park have been subjected to limited archaeological survey, resulting in a handful of recorded historic and prehistoric sites. The approximately 3,650 acres of land recently annexed to the Park, including the former Bear Ranch and Mendoza Ranch, have been held in private ownership providing little opportunity for cultural resource identification and management. While these lands have been operating as cattle ranches for well over 100 years and contain a number of potential historic buildings and possible archaeological deposits, only one building has been evaluated for historical significance. To date no effort has been made to identify, record, or evaluate the larger historical complex of these ranching operations.

A cultural resources assessment, including site reconnaissance, was conducted to determine the disposition of cultural resources, assess the quality and coverage of the existing record, and provide limited predictions as to the location and nature of unidentified resources. The assessment commenced with a search of records held by the Northwest Information Center at Sonoma State University. This search yielded a variety of materials including archaeological site records, maps of previous survey coverage, survey reports, historic maps, and a catalog of properties listed on the Historic Property Data File held by the State Office of Historic Preservation. Numerous survey and recording efforts for agencies including the U.S. Bureau of Reclamation (King and Hickman, 1973) and the California Department of Transportation (Hildebrandt and Mikkelsen, 1991) have significantly enhanced the inventory of known resources the region. The formal records search was supplemented by a limited search of materials and information provided by knowledgeable individuals, special interest groups and involved agencies. Information gathering concluded with consultation with interested Native American groups, an effort that entailed a search of the Sacred Lands Data Base managed by the Native American Heritage Commission, and letters of request for information to twelve representatives of the Native American community believed to have knowledge of cultural resources in the Park.

REGIONAL SETTING

Human Occupation of the Region

Prehistory

Archaeological studies indicate that southern Santa Clara Valley was occupied as early as 10,000 years ago. The earliest period of occupation is thought to be the result of overpopulation in the coastal areas of southern California (King and Hickman, 1973). Archaeological evidence for this period reveal low artifact counts, few radiocarbon dates, and poor depositional integrity (Hildebrandt and Mikkelsen, 1991:34). Tool assemblages from a cluster of sites located near

Coyote Creek just north of Morgan Hill (CA-SCL-178, 237, and 167) reveal a preponderance of small, informal flake tools, handstones and milling slabs, and an absence of beads and ornaments (Hildebrandt, 1983). Radiocarbon assays from one site (CA-SCL-178) range from 10,000 – 8,500 Before Present (B.P).

The next period identified may have been more permanent in nature. Population densities may have increased during this time, stimulating dependence on a stored food economy with an emphasis on acorn processing. Archaeological evidence from the Coyote Creek sites indicates that acorn processing did indeed grow in importance sometime between 4000 and 2750 B.P. This is evidenced in an increase in the number of mortars and pestles recovered from sites dating to this time (Hildebrandt and Mikkelsen, 1991: 34). Settlements between 4000 and 1500 B.P. may have been more permanent in nature than during the previous period (King and Hickman, 1973); however, artifact collections from the Coyote Creek area dating to this time are very similar to the previous interval. Flake tools continue to dominate assemblages, and there is continued absence of bone tools, beads and ornaments. Investigations of components dating between 1450 and 2700 B.P. indicate a decline in artifact density and assemblage diversity at a time when some research predicts a peak in large, permanent settlements.

Ethnographic Period

Native inhabitants of the region were first encountered by Spanish explorers in 1770 when Pedro Fage's expedition from Monterey to San Francisco crossed the San Felipe plain just south of the Park. Additional exploration groups may have included Anza and Font (1776) and Dante and Sal (1795). Aboriginal groups of the San Francisco and Monterey Bay area came to be known collectively as Costanoan, a word derived from the Spanish word *Costaños* meaning 'coast people' (Levy, 1978:485). During the mission period, A.D. 1770-1835, the Costanoan people were recruited into nearby missions and their traditional subsistence economy was replaced by an agricultural economy. Analyses of mission baptismal records demonstrate that the last Costanoan tribelets living a traditional existence had disappeared by 1810 (Levy, 1978). The population experienced dramatic decline due to the introduction of European diseases, which consequently caused lower birth rates. The secularization or abandonment of the missions by the Mexican government in 1832 caused people to relocate to different areas and establish small settlements, thus, separating them farther away from their cultural heritage. It is believed that the Costanoan languages were probably not spoken after the year 1935 (Levy, 1978).

Most of what is know about native inhabitants of the region is based on information from the Spanish exploring expeditions, ethnographic accounts in the 1920s and 1930s (Krober, 1925), and archaeological research. The Costanoan territory was occupied by approximately 50 separate triblets, each one occupying one or more permanent village sites. The Coyote Lake-Harvey Bear Ranch County Park property is located within the boundaries of the area inhabited by the *Uñijaimas* tribe, which occupied the Gilroy Valley (Milliken et al, 1993).

Contact period Costanoans were hunter-gatherers who managed their resources to insure a sustained livelihood. They lived in sedentary communities in domed structures covered with thatched roofs, and relied on nuts and seeds from various trees and plants, local fauna, and fish,

particularly salmon, from the rivers and Pacific Ocean for subsistence. Materials crafted by the Costanoan used in subsistence activities included baskets, manos, metates, mortars, nets, net sinkers, anchors, and a variety of chipped stone tools. Trade with the surrounding Plains Miwok, Sierra Miwok, and Yokuts allowed nonindigenous materials and food (i.e. Piñon nuts) to be brought into the area as well. In exchange, the Costanoan are thought to have exported bows, salt, and salmon to neighboring groups (Levy, 1979:488). Economic reciprocity, in addition to intermarriage, is thought to have linked villages together and provide a forum for conflict dispute. Overall population density along this part of the coast is though to be very sparse, probably no more than 2-people/square mile; however, Spanish accounts indicate some villages contained as many as 200 people (Milliken, 1995).

Early Mission Period and Spanish-Mexican Period

Early Spanish explorers came to Santa Clara Valley in search of a location for a new mission to be built between Mission San Carlos Borremeo de Carmel and Mission Santa Clara. While large-scale colonization never took place, the area did experience an influx of people from what is now Mexico. During this time large tracts of land held by the Spanish crown were granted to a number of individuals in the area, creating a class system that included a powerful landed aristocracy and support laborers. Rancho owners relied on Spanish-Mexican *vaqueros* and the Christianized Indian population to manage and work the lands. Most of the ranchos in the Santa Clara Valley operated as open cattle range. This pattern of land distribution and use prevailed throughout the remainder of the Mission Period and into the Spanish-Mexican Period.

American Control

By the beginning of the Early American Period (1846-1870) Mexican landholders began to lose their holdings to American settlers. Land ownership became very concentrated during this time. It is estimated that by 1871 three land holding organizations controlled more than 800,000 acres of the Santa Clara Valley. With this consolidation, land use patterns changed from open cattle ranging to more intensive controlled pasturing. Support facilities such as barns and feed sheds were also constructed. One of the large landholders was Martin Murphy who arrived in California 1845 as part of the Townsend-Stevens-Murphy party, the first successful pioneering group to cross over the Sierra Nevada Mountains. The Martin Family is considered one of the most influential pioneering families and played a key role in the history of the southern Santa Clara Valley. The Murphy Family homestead is believed to be located on present day Bear Ranch at the end of San Martin Road in San Martin.

The extension of the Southern Pacific Railroad to the area in the late 1860's was a catalyst for a local population boom, resulting in the founding of local communities including Gilroy and San Martin. With the growing population, significant changes in land use took place. By the turn of the century, much of the original rancho holdings were subdivided into orchards, wheat fields, and row crops.

ARCHAEOLOGICAL RESEARCH

Relatively little is known about the archaeological resources contained within the Coyote Lake Harvey Bear Ranch property. Archaeological inquiry within the Park has been limited to a handful of reconnaissance projects conducted for Park expansion (Cartier, 1991), proposed development of privately held lots (Breschini and Haversat, 1981; Cartier, 1984), or linear utility construction (King and Hickman, 1973; Breschini and Haversat, 1978; and Van Horn, 1980).

A study by Cartier (1991) included survey of approximately 1,000 acres along the western banks of Coyote Lake conducted to identify resources that could potentially be impacted during Park improvements proposed at that time. The survey identified three prehistoric sites, a number of isolated prehistoric artifacts, and four historical resources adjacent to the lake. Additional resources are likely located below the current water level. Based on examination of surface materials, the three prehistoric sites were found to be significant and therefore subject to mitigation prior to construction activity associated with the Park improvements project. None of the historic resources were found to be significant. To date, none of these sites have received further archaeological evaluation.

Given the lack of survey coverage within the Park, large-scale investigations conducted in adjacent regions provide invaluable data, and facilitate integration and interpretation of archaeological data amassed from various parts of Santa Clara Valley. Settlement and chronology models developed in these studies provide a useful framework for interpreting the potential for archaeological data to exist within unexplored portions of the Park. For instance, the Bureau of Reclamation's San Felipe Division Central Valley Project has amassed an extensive dataset that has been extremely useful in understanding prehistoric occupation the Southern Santa Clara Valley (King and Hickman, 1973; Van Horn, 1980). Only a small fraction of the survey corridors for the San Felipe project passed through what is now Coyote Lake-Harvey Bear Ranch County Park, resulting in the recording of one prehistoric site within the Park, and three immediately outside the Park.

Other data accumulated from areas north, east, and south of the Park provides an important basis for assessing the potential for archaeological deposits within the Park. For instance, a 12,000-acre survey of southern Santa Clara Valley resulted in the recording of fifty prehistoric sites (King and Hickman, 1973). A number of the sites, including one adjacent to the Park, were subjected to limited testing to discover information on site function and chronology. In addition, Bergthold conducted a study that incorporated an additional 179 sites throughout the Santa Clara Valley. Both studies included predictive distribution modeling, with differing results regarding potential site types and context.

Although often fraught with theoretical issues, cross-tabulation of site type by environmental context provided the basis for King and Hickman's predictive resources distribution model. They proposed that large occupation sites were permanent, or near permanent settlements situated close to a variety of resources, and are most likely to be found near canyon mouths and to a lesser extent adjacent to marsh and upper canyon contexts. Small occupation sites, viewed as relatively temporary camps, are predicted to be located near specific resources (i.e. acorns and water fowl)

in a variety of environments, but are most likely to be found in upper canyon and marsh environments. Special use sites (i.e. milling stations and debitage scatters) are expected to be found near large occupation sites in upper canyon contexts (Please see King and Hickman (1973) for more detail regarding the predictive model they proposed).

In addition to the above study, Hildebrandt and Mikkelsen conducted an investigation 1991 that comprised of test excavations at fourteen sites along Highways 101 and 152 in Santa Clara and San Benito Counties. The excavations produced an array of materials resulting in a sizable database for interpreting broad patterns of prehistoric settlement and subsistence, sociopolitical organization, ethnicity and exchange. The study identified numerous occupation sites in canyon mouth contexts (Hildebrandt and Mikkelsen, 1991:191-196).

HISTORICAL RESEARCH

The area contained within the Coyote Lake-Harvey Bear Ranch County Park has a rich history dating back to prehistoric times and continuing through the Early Mission Period (1797-1822), Spanish-Mexican Period (1822-1845), Early American Period (1846-1870), and Later American Period (1870-1940). Because few studies focusing on these eras have been conducted in the Park vicinity, much of what is known about the history of the project area can be garnered from investigations conducted in surrounding areas (King and Hickman, 1973; Milliken et al., 1993). To date most of what is known about the Park holdings relates to the Early American and Late American Periods, with an emphasis on documentation of land acquisition and histories of founding members of local communities such as Gilroy, San Martin, and Morgan Hill (Hunter, 1978; Wyman 1982; Mason, 1999).

A number of land grant and real estate maps have been published, providing information on specific land holdings and locations of structures. These resources are extremely useful in illustrating broad trends in historic settlement distribution. A number of maps containing information on the Park exist, including Rancho Plats for San Francisco de la Llagas (1863), General Land Office Plat Maps (1869), Bailey and Phillips Real Estate Maps (1887), and Santa Clara County Records Maps (1876 and 1989).

Two historic resources inventories (both structures and historic archaeological deposits) have been conducted in the Park, including Cartier's 1991 study along the western shore of Coyote Lake and a significance evaluation of the Foreman's House at Bear Ranch (Mineweaser and Associates, 1999).

SITE SETTING

The following provides a summary of known prehistoric and historic resources within the Park, as well as an assessment of the possibility for anticipated (e.g. predicted) resources.

Prehistoric Resources

Inventory

The few archaeological surveys conduced with the Park boundaries have resulted in five recorded prehistoric sites, only one of which has been subjected to further subsurface testing.

CA-SCL-711 was recorded during an archaeological reconnaissance for proposed expansion and development of recreation facilities along Coyote Lake (Cartier, 1991). The site is located on the western shore of Coyote Lake, approximately 3.75 miles north of Roop Road and consists of a dense concentration of fire cracked rock, chert debitage and groundstone tools. The purported habitation site has likely been impacted by fluctuating lake water levels over the years. An isolated scatter of prehistoric lithic material was noted approximately northwest along Coyote Lake Road. These materials were not formally recorded but their location was mapped in Cartier's report. Cartier interpreted these remains as a remnant prehistoric village containing tools associated with food preparation, tool manufacture, and likely inhumations (Cartier, 1991:4). The deposit was deemed significant based solely on examination of surface materials.

CA-SCL-713 is located just south of CA-SCL-711, approximately 3.5 miles north of Roop Road on the west side of Coyote Lake. The site is situated approximately 6 meters below the high water line on a small knoll 30 meters from the lake's edge. A dense scatter of fire-cracked rock, ground stone artifacts, and chert debitage comprises the site. This site was interpreted as a small prehistoric village with lithic tools representing tool manufacture and food processing activities. Like CA-SCL-711, it was deemed significant.

CA-SCL-712 is located at the south end of Coyote Lake, approximately 1.5 miles off of Roop Road, within the Lakeview Campground and comprised of a scatter of fire-cracked rock, chert debitage, and a single piece of groundstone. In addition, three isolated artifacts (a metate, one complete and one fragmented mortar, and an unidentified groundstone artifact) were noted southeast of the site (Cartier, 1991:7). The site was interpreted as a significant prehistoric village.

CA-SCL-102 is located approximately 600 meters southeast from the east end of Church Avenue in San Martin and was recorded during archaeological survey for the San Felipe Division, Central Valley Project (King and Hickman, 1973). The site consists of a surface scatter of groundstone materials, chert debitage, and a flaked stone tool. Groundstone materials include five manos, a double-sided basin metate, and a single pestle. The site is located in an upper canyon environment, adjacent to a steep, oak-lined drainage and spring. Additional lithic materials were noted on nearby by knolls, but were not mapped. As feed bins are located in the immediate vicinity, cattle ranging activities have significantly disturbed the site. While the site was found to be outside the area of potential affect for the San Felipe Project, investigators did recognize the resource as potentially significant and recommended additional subsurface testing at a future date.

CA-SCL-320 is located east of Foothill Avenue, approximately 0.5 miles north of its intersection with San Martin Avenue. The site was first recorded during a reconnaissance for the San Felipe Division Central Valley Project (Breschini and Haversat, 1978), and was later the focus of test excavations for the same project (Van Horn, 1980). Initially, the resource was described as a

small occupation site characterized by dark midden soils, several pieces of groundstone and a single retouched chert flake tool. Additional groundstone materials are reported to have been collected from an adjacent property, and may have once been associated with this site. Subsequent test excavations focused on areas within the project's area of potential effect, but did not include the sites central midden. Four units yielded a very sparse and mixed accumulation of chert debitage, a Franciscan chert projectile point fragment, and a sandstone pestle. Cultural materials were found to a depth of 110 cm, with the first 40 cm highly disturbed by agricultural activities. Based on materials recovered, the site was interpreted as a seasonal short-term occupation site.

Known Sites in Immediate Park Vicinity

Three additional sites are located immediately adjacent to the Coyote Lake-Harvey Bear Ranch Park property and provide information for predicting the location and kinds of resources that may be located within the Park.

CA-SCL-99 is located on the northwest side of the east end of Howell Lane. The resource is located in an upper canyon environment, situated an open grassy area just west of Skillet Creek, less than 400 meters from the Park property boundary. Surface materials were interpreted as a special use site relating to tool manufacture.

CA-SCL-101 is located north east of CA-SCL-320 approximately 50 meters southeast of Robin Lane off of Foothill Ave. The site is an extensive scatter of flaked and groundstone materials situated on a southeast-facing slope adjacent to a spring fed, oak and willow lined gully (King and Hickman, 1973). No midden soils were reported. A number of disturbances were noted including evidence of periodic flooding, agricultural use, and cattle ranging. In addition, several groundstone artifacts are reported to have been collected from the site area by the landowner. Recovered materials include eight chert flakes, three flake tools, two cores, and a single mammal bone fragment. From this limited test, it was concluded that the site made up of largely flaked stone materials represented an early local economic adaptation prior to the intensive use of acorns. For this reason the site was found significant.

CA-SCL-103/H is located just east of the intersection of Jeanie Lane and New Avenue and comprises a large old Live Oak tree with a cross carved on its trunk. Locally, it is known as the "Mission Tree" or "Witness Tree." It is reported to be associated with either a Mission outlier building or possibly a witness point used by earlier surveyors (Basin Research and Associates, 1984). The tree may mark an Indian cemetery associated with the old St. Martin's Church. Reports describe "headboards" from the cemetery were collected by a farmer prior to planting the area. No additional evidence for this scenario was noted when the site was recorded in 1984, and its significance remains speculative.

Predicted Resources

The current archaeological record of the Park and its immediate surroundings provide a preliminary framework from which to assess the potential for archaeological resources. The Park contains most of the environmental zones outlined in the King-Hickman model including upper

canyon, canyon mouth, alluvial plain, and marsh areas. Recoded sites within the Park are located primarily in upper canyon environments (CA-SCL-102, 711, 712, and 713) and alluvial plain (CA-SCL-320). Sites immediately adjacent to the Park are also found in upper canyon (CA-SCL-99 and 101) and alluvial contexts (CA-SCL-103/H). All of the prehistoric sites recorded in the Park have been interpreted as either extensive or short-term occupation sites. Given these data, it can be assumed that most of the areas contained within the Park have some potential for archaeological resources. Based on known distribution of sites in the area, the property can be divided up into four general sensitivity zones, as discussed below (Figure 3-2).

High Sensitivity. These areas are considered highly sensitive for prehistoric cultural resources and include areas where most known sites in the Park may be located. Areas of high sensitivity include: (1) all areas around springs and natural watercourses west of the ridge paralleling Coyote Lake; (2) the current shore line of Coyote Lake, and areas currently under water; (3) upper canyon environments on east and west side of the ridge; and (4) areas around all recorded prehistoric sites.

Moderate Sensitivity. Based on the current archaeological record, areas designated as moderate sensitivity are likely to contain sites; however, few of these areas are known to contain sites. Areas of moderate sensitivity include: (1) flat open areas at the interface between canyon mouths and the valley floor on the western portion of the Park; (2) the alluvial plain between the valley floor and the base of the hills on the western portion the Park property; and (3) low areas at the south end of Coyote Lake, including marsh areas above the lake.

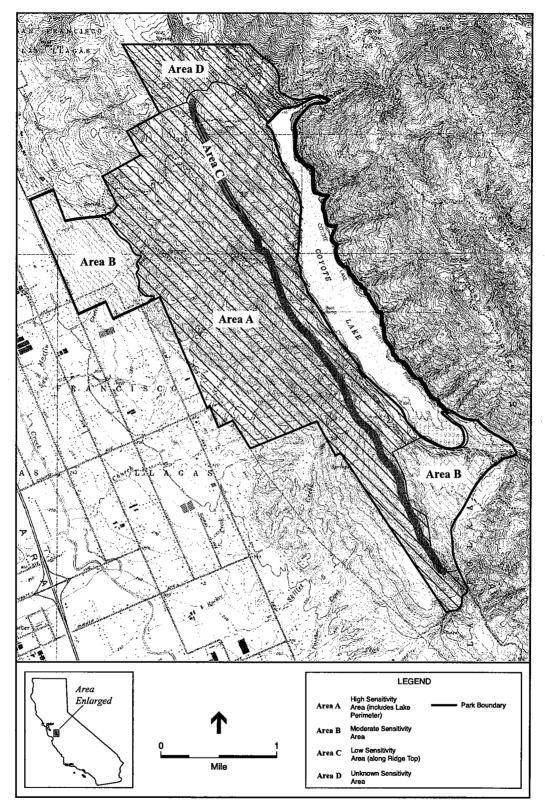
Low Sensitivity. While no area can be completely ruled out, areas of highest elevation (i.e. ridge tops) have the lowest potential for archaeological deposits. These areas generally lack natural water sources and occupation sites are not likely. However, special use sites centered on resources such as acorns and raw lithic material may be found here.

Unknown Sensitivity. The area designated as unknown sensitivity has not been classified under the preceding categories. This area, confined to the northern part of the Park, is relatively unknown and encompasses numerous drainages leading into Coyote Creek, below the dam at the north end of the lake. Given that the area encompasses upper canyon environments, the likelihood for sites is potentially high. A large survey was conducted adjacent to this portion of the Park and revealed no resources (Cartier, 1988). However, this does not preclude the presence of sites with the Park boundary.

Historic Resources

Inventory

To date, two historical resource studies have been conducted within the Park including Cartier's 1991 survey along the western banks of Coyote Lake, and an evaluation of the Foreman's House at Bear Ranch (Mineweaser and Associates, 1999). In addition to the three prehistoric resources previously described, Cartier's (1991) reconnaissance revealed four potential historic resources situated adjacent to Coyote Lake. The resources included two residential structures, a stone house foundation or retaining wall, and a trash dump. The features were described as follows:



- Coyote Lake - Harvey Bear Ranch County Park Master Plan EIR / 201017
Figure 3-2

Historic Resource 1 is a residential structure in the Minimal Traditional architectural style popular from 1935-1950. The structure features a cross-gabled roof with close rake and open eaves. The house is clad with both vertical and channeled siding, and has a concrete foundation. A detached two-car garage of compatible design is located near by.

Historic Resource 2 is a stone house foundation or retaining wall possibly associated with Historic Resource 1.

Historic Resource 3 is a side gabled vernacular cottage that may have served as a summer residence. The structure date to the 1920s or 30s, and has a low-pitched roof with open eaves and rake. The house is situated on concrete piers. Also noted were two associated brick buildings and a mortared stone retaining wall.

Historic Resource 4 is a trash dump with refuse dating from 1930-1990.

Cartier estimated that all of the features dated between 1920 and 1940, and did not appear to have outstanding or unique architectural value. He further concluded that the resources were not associated with an early or significant period of historical development, and therefore did not require further treatment.

Upon acquisition of the Bear Ranch property, Santa Clara County Department of Parks and Recreation requested a historical assessment of the Foreman's House located on the Bear Ranch property at the end of San Martin Avenue. It is commonly believed that the Bear Ranch was once part of the Martin Murphy holdings acquired around 1845. However, no documentation exists indicating which buildings, if any, on the ranch were associated with Murphy. The purpose of the study was to determine the age of the building and assess its historical significance (Mineweaser 1999). Other structures located on the ranch were not evaluated.

Due to the lack of specific historical records of the building, the 1999 assessment was based solely on examination of the features and construction of the actual building. From these observations, it was determined that the structure was constructed sometime in the 1940s. Its current configuration appears to have been the result of combining two older structures and finishing the interior. The report indicated that the two original structures were built between 1850 and 1920 (Mineweaser and Associates Addendum, 2000:3). The building lacks a stud wall in the building frame; rather the exterior walls were constructed by placing 1x12 boards vertically on a post-and-beam frame. This is considered a typical construction technique for the period. The evaluation concluded that given the construction technique employed, the Foreman's house constituted a significant resource on the state and local level (Criteria C). The structure was not considered significant enough for listing on the National Register of Historic Places; however, the report did indicate that further research of the larger ranch complex as well as possible archaeological deposits could indeed alter the finding and elevate the property to national significance.

Predicted Historic Resources

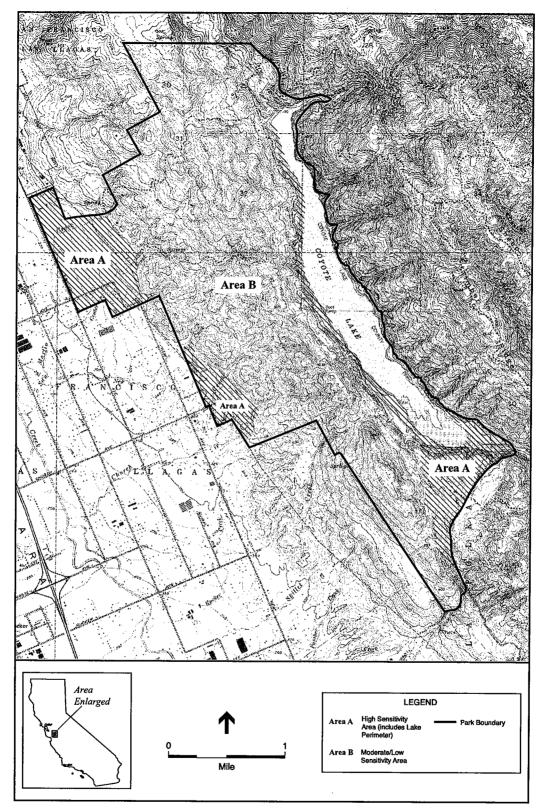
While much has been written on broad regional historic themes and important individuals of Santa Clara County, almost nothing is known about the material record of those histories. For

most areas of the Park (other than Bear Ranch), historic maps provide some of the most reliable understanding of changes in settlement configurations and possibly identify historic resources. Broad patterns expressed in these maps are useful in developing predicative statements about where historic resources may be located over the Park. From limited investigation, it appears that the location of Bear Ranch contains the most visible concentration of potential historic resources. as well a high potential for historic archaeological deposits. In addition to the recently evaluated Foreman House, the property contains a number of structures of unknown age including a shed, a chicken coop, two additional houses, and a barn. Most of these structures were probably built post-1950; however the barn is reported to have been built sometime in the 1890s. In addition to the standing structures, the property is also reported to have contained a house built by Martin Murphy soon after he purchased the property (circa 1850). Bear family members remember that the old house was still standing near the Foreman's House and a cluster of oaks when the family moved to the ranch in the early 1960s. A 1955 photo of the home has been published (Hunter 1978:36). As the house stood vacant for a number of years and was routinely vandalized, it was dismantled in the late 1960s. Parts of the house are reported to have been recycled in the construction of additional houses and a chicken coop. The second story wooden railings in the 1955 photo are still stored on the property. While it is widely believed that this structure was the home of Martin Murphy, there is no evidence that confirms this belief and historic maps provide only vague indications as to the location of Murphy's houses.

Activities associated with each of the historic occupation periods have made their mark on the local landscape. These include tangible remains such as standing and collapsed buildings, vestiges of irrigation systems, and old road cuts. Historical archaeological deposits may also constitute an important resource for the project vicinity. These resources are generally subsurface deposits that develop over the course of time (i.e. privies or trash dumps), or the buried remains of structural features such as foundations, footings and cellars. Based on the existing record and on information on changing settlement distribution contained in various related maps, it can be assumed that most of the areas contained within the Park have some potential for historic resources, as discussed below (Figure 3-3).

High Sensitivity. These areas are at present considered highly sensitive for historic resources, including archaeological deposits. It includes areas where known and potential historic structures are located, and areas likely to support activities carried out on the property through history, including: (1) all flat open areas below the hills west of the ridge; (2) the current shore line of Coyote Lake, and areas currently under water; (3) flat open areas along the south end of Coyote lake; (4) the Bear Ranch complex of buildings at the end of San Martin Ave; and (5) Mendoza ranch complex off Roop Road.

Moderate-Low Sensitivity. These areas comprise the more rugged parts of the Park, including the ridge top and adjacent slope to the east and west, or any area contain steep slopes and ravines. While these areas are not likely to contain large ranch complexes or homesteads, they may contain resources related to ranch support activities including irrigation systems, cattle troughs, branding stations, and trash dumps.



Coyote Lake - Harvey Bear Ranch County Park Master Plan EIR / 201017 Figure 3-3

Figure 3-3
Historic Archaeological
Sensitivity Map

Paleontological Resources

The project region is generally composed of Great Valley Sequence (ancient sea floor sediments) and Franciscan Assemblage bedrock (flooded and faulted sea floor sediments) (see Geology, Geohazards, and Soils). Marine sediments deposited on the ocean floor eventually hardened into rock and were uplifted to form the region. This sand, gravel, and mud includes animal remains such as shells, teeth, and bones, and plant remains such as leaves and wood. Over time, ancient plant and animal remains became fossils (molds, impressions, and other traces of past life). While evaluation of fossiliferous deposits within the Park has not been conducted, the geology of the area indicates that there is potential for fossiliferous deposits to occur within the Park.

IMPACTS AND MITIGATION MEASURES

SIGNIFICANCE CRITERIA

The project may result in a significant impact, if it would:

- Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Section 15064.5.
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Section 15064.5.
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.
- Disturb human remains, including those interred outside of formal cemeteries.

IMPACTS AND MITIGATION MEASURES

Impact Cultural Resources-1: Implementation of the Master Plan has Potential to Adversely Affect Archaeological and Historical Resources. Less Than Significant with Mitigation Measures.

Project-Level Components

In order to determine the potential for cultural resources that may exist in the boundaries of the Park, the cultural resources setting for the Park was evaluated, including the identification of cultural resource sensitivity areas. Improvements and facilities planned in the West Flat and Lakeside areas are located in the vicinity of known archaeological and historical resources. In addition, project-level components are located in zones of high and moderate sensitivity for cultural resources that could be present, but may not have been identified at this time. Given the presence of these resources within the vicinity of project sites, proposed ground disturbance activities could unearth known and as-yet unknown sensitive archaeological resources, resulting in a potentially significant archaeological resources impact. While significant historic resources have not been identified within the Park, based on existing information regarding use of the property and on structures contained within (see Historic Resources, above), it can be assumed

that the Park contains significant historic resources. Proposed park improvements and new facilities could alter or damage potential historic resources, resulting in a potentially significant impact. While a comprehensive survey and evaluation of all the properties within the area of potential effects for National Register of Historic Properties eligible properties has not been conduced, a standard treatment approach to all properties, features, or structures that might be eligible would be applied throughout the construction process. That is, the predictive value of the preliminary research would be used to provide mitigations that allow for the avoidance of adverse effects as the project proceeds. Implementation of Mitigation Measures Cultural Resources 1a and 1b would reduce potential impacts to a less than significant level.

Program-Level Components

There are several known archaeological and historic sites within and near the Park. Implementation of the proposed Master Plan could result in the addition of new facilities or improvement of existing facilities. Excavation and improvements related to the park development (new trails, events center, parks, environmental education center, etc.) may yield archaeological resources, not previously discovered. Implementation of Mitigation Measure Cul-1 would reduce the potential impact to less than significant at the program level. Because implementation information, such as locations of specific facilities and development of project-specific development plans, is not yet known, specific facilities and plans would be reviewed at the time they are proposed for implementation to determine the potential for project-specific impacts and to identify appropriate mitigation measures.

Mitigation Measure Cultural Resources-1a: The County shall implement a Cultural Resource Protection Program.

Where work will take place in locations where prehistoric or historic sites have been previously documented, or has been determined to have a high probability for archaeological resources, pedestrian surveys shall be conducted within an area of potential effect. If deemed necessary and feasible, archaeological subsurface testing (such as shovel test pits) will be implemented to determine the presence and significance of archaeological materials in these locations, prior to the start of construction. If significant resources are identified, specialized studies would be performed, consistent with professional archaeological standards and State and County requirements. If it is determined that materials are of a prehistoric nature, procedures outlined in the State Resources Code pertaining to the protection of Native American remains and associated goods shall be implemented and a most-likely descendant shall be contacted.

If archaeological data recovery is insufficient to adequately protect the cultural significance of any find, the qualified archaeologists or most-likely descendants assigned to the project will consult with the Project Manager(s) to determine alternative project design, construction, or operation necessary to avoid significant adverse impacts to the resource. The site of the find, including an adequate buffer zone, will be secured (fenced or flagged) and no work will occur within that area without the approval of the lead project archaeologist.

A report of the findings from the excavations would be completed and copies distributed to the Santa Clara Parks & Recreation Department.

Project construction sites will be photo-documented before, during, and after construction and photos added to historical records (archives) for the Park.

All ground-disturbing work will be monitored by a qualified cultural resource specialist or construction monitor assigned by the County. In the event previously undocumented cultural resources are encountered during project construction (including but not limited to dark soil containing shellfish, bone, flaked stone, groundstone, or deposits of historic trash), work within the immediate vicinity of the find will stop until procedures outlined in the County Ordinance Relating to Indian Burial Grounds (County of Santa Clara, 1987) and State Public Resources Code can be implemented and most likely descendants notified for site investigation.

The appropriate tribal representative will be contacted prior to ground disturbance to occur in areas within the ancestral territory that are sensitive for prehistoric resources.

Mitigation Measure Cultural Resources-1b. The County shall implement a <u>Historic</u> Cultural Resource Protection Program.

Historic significance evaluations shall be performed on historic resources in the park prior to design development. All work on identified or potential historic resources will be conducted in a manner consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings (1995), Weeks and Grimmer (36 CFR 67) and the California Historical Building Code.

Any rehabilitation work on historic resources will be monitored by a qualified cultural resource specialist.

Mitigation Measure Cultural Resources-1c: The County shall conduct site-specific review of program-level Master Plan components.

Potential archaeological and historic resources impacts should be reviewed at the project-level for specific facilities or development plans proposed under the Coyote Lake-Harvey Bear Ranch County Park Master Plan and mitigation measures shall be considered, including but not limited to:

- Subject projects to site-specific planning and compliance in accordance with cultural resource protection laws.
- Site and design facilities/actions to avoid adverse effects to sensitive cultural resources. Subject projects to site-specific planning and compliance in accordance with cultural resource regulations. Conduct archeological site monitoring and routine protection. Conduct data recovery excavations at archeological sites threatened with destruction, where protection or site avoidance during design and construction is infeasible.

- Avoid or mitigate impacts to ethnographic resources. Mitigation could include identification of and assistance in accessing alternative resource gathering areas, continuing to provide access to traditional use and spiritual areas, and screening new development from traditional use areas.
- Continue and formalize ongoing consultations with culturally associated Native American descendants. Formalize a parkwide gathering plan and discovery plan for Native American human remains. Protect known burial sites, and protect sensitive traditional use areas to the extent feasible.
- Conduct surveys for archeological sites, traditional resources, historic sites, structures, and cultural landscape resources as warranted. Surveys and reports shall be prepared in compliance with the recommendations of the Native American Heritage Commission.
- Where significant sites have been identified, the County shall provide a qualified archaeologist, Native American monitor, or most-likely descendant to monitor any subsurface operations, including but not limited to grading, excavation, trenching, or removal of existing features of the subject property. The archaeologist shall be on site during any activity when new soils are to be moved or exported. The archaeologist shall be authorized to halt the project in the area of the finding and mark, collect, and evaluate any archaeological materials discovered during construction. Copies of any archaeological surveys, studies, or reports of field observation during grading and land modification shall be prepared and certified by the attendant archaeologist and submitted to the California State University Archaeological Information Center. Any artifacts recovered during mitigation shall be deposited in an accredited and permanent scientific or educational institution for the benefit of current and future generations.
- In the event cultural resources are encountered on the park during the course of construction; the findings shall be examined by a qualified archaeologist. If the finding is determined to be an historical or unique archaeological resource, avoidance measures or appropriate mitigation shall be implemented. Recommendations can then be made for any appropriate procedures to either further investigate or mitigate impacts to those cultural resources that have been encountered. As provided in the CEQA Guidelines, Section 15064.5(f), work could continue on other parts of the park while historical or unique archaeological resource mitigation (if necessary) takes place.

Implementation of the requirements described above would reduce the potential program-level archaeological and historic resources impacts associated with the implementation of the Coyote Lake-Harvey Bear Ranch County Park Master Plan. However, the County would require examination of many specific facilities and development plans included in the Master Plan at the at a more

Impact Significance After Mitigation: Less Than Significant	
detailed project-specific and site-specific level were necessary.	
time they are proposed for implementation to determine if further environmental review	v a

Impact Cultural Resources-2: Implementation of the Master Plan has Potential to Adversely Affect Paleontological Resources. Less Than Significant with Mitigation Measures.

Project-Level Components

The geology of the area indicates that there is potential for fossiliferous deposits within the project area. Given the relatively shallow depths of construction proposed for the project the probability of encountering paleontological resources is reduced. However, significant fossil discoveries could be made even in areas designated as having low potential, and could result from the excavation activities related to the proposed project. This potential impact would be reduced to a less than significant level with the implementation of Mitigation Measures included herein.

Program-Level Components

Geologic formations underlying the project area could contain fossils. Implementation of the proposed Management Plan could result in the construction of additional public use and support facilities. Excavation in the project area could unearth significant fossil remains. Implementation of Mitigation Measure Cultural Resources-2b would reduce the potential impact to less than significant at the program level. Because implementation information, such as locations of specific facilities and development of project-specific development plans, is not yet known, specific facilities and Plans would be reviewed at the time they are proposed for implementation to determine the potential for project-specific impacts and to identify appropriate mitigation measures.

Mitigation Measure Cultural Resources-2a: The County shall implement a paleontological resource protection program.

In the event of an unanticipated discovery of a breas, true, and/or trace fossil during construction, excavations in the immediate area of the find will be temporarily halted or diverted until identification and proper treatment are determined and implemented by a qualified cultural resource specialist.

Impact Significance After Mitigation: Less Than Significant.

Impact Cultural Resources-3: Implementation of the Master Plan has Potential to Adversely Affect Human Remains. Less Than Significant with Mitigation Measures.

Project-Level Components

No human remains or burial sites have been documented or are known to exist on or near the project site. However, as noted in Impact Cultural Resources-1 above, there are indications of several historic and prehistoric archaeological sites with the project vicinity and therefore, human remains or burial artifacts could be present within the project area. Subsurface excavation

required for construction of the proposed project could potentially disturb or destroy human remains from both prehistoric and historic time periods, including those interred outside of formal cemeteries. This is considered a potentially significant impact that would be reduced to a less than significant level by implementation of Mitigation Measures.

Program-Level Components

No historic cemeteries are known to have existed from Coyote Lake-Harvey Bear Ranch County Park. However, there is a potential Indian cemetery associated with the "Mission Tree" or "Witness Tree" (CA-SCL-103/H) located near the Park. The existence of burials of any kind could be identified on the park during construction or maintenance, should development occur as a result of General Plan implementation. Implementation of Mitigation Measure Cul-3 would reduce the potential impact to less than significant at the program level. Because implementation information, such as locations of specific facilities and development of project-specific development plans, is not yet known, specific facilities and Plans would be reviewed at the time they are proposed for implementation to determine the potential for project-specific impacts and to identify appropriate mitigation measures.

Mitigation Measure Cultural Resources-3a: The County shall implement a human remains protection program.

In the event that human remains are discovered, work will cease immediately in the area of the find and the project manager/site supervisor will notify the appropriate County personnel. The authorized representative will notify the County Coroner, in accordance with §7050.5 of the California Health and Safety Code. If the coroner determines the remains represent Native American interment, the Native American Heritage Commission will be consulted to identify the most likely descendants and appropriate disposition of the remains. Work will not resume in the immediate area of the find until proper disposition is complete (PRC §5097.98).

Mitigation Measure Cultural Resources-3b: The County shall implement a human remains protection program.

Potential human remains disturbance impacts should be reviewed at the project-level for specific facilities or development plans proposed under the Coyote Lake-Harvey Bear Ranch County Park Master Plan and mitigation measures shall be considered, including but not limited to:

• In the event human remains are encountered; the Santa Clara County Coroner shall be contacted to determine whether or not investigation of the cause of death is required. In the event the remains are of Native American origin, the Native American Heritage Commission shall be contacted to determine necessary procedures for protection and preservation remains, including reburial, as provided in the CEQA Guidelines, Section 15064.5(e).

Implementation of the requirement described above would reduce the potential program-level human remains disturbance impacts associated with the implementation of the Coyote Lake-Harvey Bear Ranch Master Plan. However, the County would require examination of many

specific facilities and development plans included in the Master Plan at the time they are proposed for implementation to determine if further environmental review at a more detailed project-specific and site-specific level were necessary.

Impact Significance After Mitigation: Less Than Significant.

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GEOLOGY, GEOHAZARDS, AND SOILS

SETTING

GEOLOGICAL SETTING

Coyote Lake-Harvey Bear Ranch County Park (Park) is situated on the western flanking foothills of the Diablo Range, between Timber Ridge and the floor of the Santa Clara Valley. The Diablo Range is part of the Coast Ranges geomorphic province, a region of California characterized by discontinuous northwest trending mountain ranges and valleys. Extending along the west side of the San Joaquin Valley 170 miles from the Carquinez Straits South to Coalinga, the Diablo Range includes Mount Diablo, the Oakland–Berkeley Hills, Mount Hamilton, and the mountains that form the eastern boundary of the Santa Clara Valley. The Diablo Range in southern Santa Clara County contains a series of ridges including Palassou Ridge, Sheep Ridge, and Timber Ridge. Timber Ridge peaks at approximately 2,000 feet above mean sea level (amsl) east of the Park, with elevations decreasing westward to 754 feet amsl at Coyote Lake and dropping to 300 feet amsl along the eastern portion of the Park. The Park therefore contains considerable topographic relief, with hill slopes ranging in gradient from gradual to very steep.

The Diablo Range is composed of Great Valley Sequence and the Franciscan Assemblage bedrock (also referred to as its "basement"). The Great Valley sequence is a thick section of ancient sea floor sediments laid down during the Cretaceous Period, while the Central Valley was covered with water and the eroding Sierra Nevada deposited sediments westward. The Franciscan Assemblage is the name applied collectively to the folded and faulted sea floor sediments that were wedged against the continent during subduction to form much of the Coast Ranges province.

In the region surrounding the Park, the Great Valley Sequence rocks, exposed on the east side of Coyote Lake, consist of eastward-dipping sandstone along Timber Ridge and older Cretaceous Period shale (about 70 million years old), which are thought to belong to the Berryessa Formation. Franciscan Assemblage basement rocks are not found in abundance in the area of the Park, but rather, the foothills in this area are composed of younger basalt (about 3.5 million years old) and even younger non-marine deposits of gravel, sand, and clay of the Santa Clara Formation. Previous mapping west of Coyote Lake (Dibblee, 1973) have identified rocks containing serpentine which is commonly found in conjunction with Franciscan Assemblage rocks. Young alluvial deposits, especially those generated by landslide activity, overlie the major bedrock formations throughout the area of the Park.

Serpentine rock or serpentinite, is the California State rock and is apple-green to black, often with light and dark colored areas. Serpentine is usually fine-grained and compact with shiny or wax-like appearance and a slightly soapy feel. Serpentine occurs in central and northern California—in the Coast Ranges, the Klamath Mountains, and in the Sierra Nevada foothills (CDMG, 1996).

Mineral Resources

The California Division of Mines and Geology (CDMG) has classified lands within the San Francisco-Monterey Bay Region into Mineral Resource Zones (MRZs) based on guidelines adopted by the California State Mining and Geology Board, as mandated by the Surface Mining and Reclamation Act (SMARA) of 1974 (Stinson et al., 1983). No portion of the Park has a MRZ designation according to Special Report 146 (Stinson et al., 1983).

SEISMIC SETTING

The geology of the entire San Francisco Bay Area is in part controlled by both active and potentially active faults and is considered a region of high seismic activity due to its location on a tectonic plate boundary denoted by the San Andreas Fault Zone.² The U.S. Geological Survey (USGS) Working Group on California Earthquake Probabilities has evaluated the probability of one or more earthquakes of Richter magnitude 6.7 or higher occurring in the San Francisco Bay Area within the next 30 years. The result of the evaluation indicated a 70 percent likelihood that such an earthquake event will occur in the Bay Area between 2000 and 2030 (USGS, 1999).

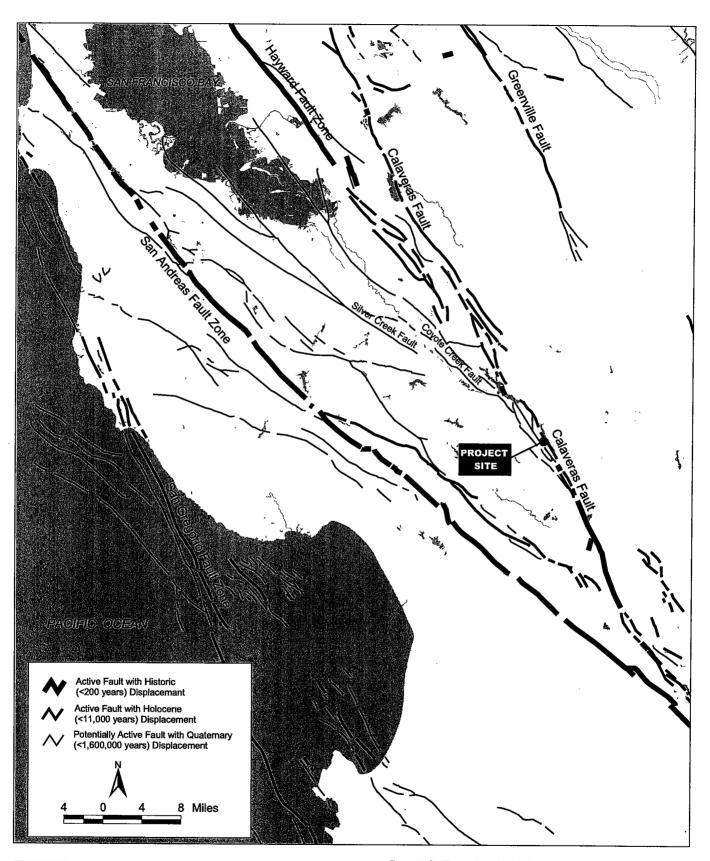
Regional Faults

Perhaps the most significant geologic feature of the Park is the Calaveras fault, which extends in a northwest direction through Coyote Lake and the Coyote Lake Dam. The Calaveras fault is approximately 175 miles long and extends from south of Hollister to near Dublin as shown on Figure 3-4. The Calaveras fault, like the Hayward fault and San Andreas faults, exhibits "strike-slip" movement, and has undergone displacement within the last 150 years. The Calaveras fault has experienced several earthquakes in recent history, including an estimated moment magnitude (M) 6.2 in 1984, an M 5.9 in 1979, and an M 6.2 in 1911. The epicenters of the 1979 and 1984 earthquakes were located only slightly South of Coyote Lake (Jennings, 1994). In the southern portion of the Calaveras fault near the Calaveras Reservoir, micro-earthquakes are common due to a slip-rate ranging from 6 to 15 mm/yr. (CDMG, 1996). An M 6.8 earthquake is the largest seismic event anticipated to occur along the Calaveras fault; the USGS Working Group has estimated there is an 18% chance of this magnitude earthquake occurring within the next 30 years (USGS, 1999).

An active fault is defined by the State of California as a fault that has had surface displacement within Holocene time (approximately the last 10,000 years). A potentially active fault is defined as a fault that has shown evidence of surface displacement during the Quaternary (last 1.6 million years), unless direct geologic evidence demonstrates inactivity for all of the Holocene or longer. This definition does not, of course, mean that faults lacking evidence of surface displacement are necessarily inactive. Sufficiently active is also used to describe a fault if there is some evidence that Holocene displacement occurred on one or more of its segments or branches (Hart, 1997).

A strike-slip fault is a fault on which movement is parallel to the fault's strike (Bates and Jackson, 1980).

Moment magnitude is related to the physical size of a fault rupture and movement across a fault. Richter magnitude scale reflects the maximum amplitude of a particular type of seismic wave. Moment magnitude provides a physically meaningful measure of the size of a faulting event (CDMG, 1997b). The concept of "characteristic" earthquake means that we can anticipate, with reasonable certainty, the actual damaging earthquake that can occur on a fault.



SOURCE: California Department of Conservation, Division of Mines and Geology (After Jennings, 1994)

Coyote Lake-Harvey Bear Ranch County Park Master Plan EIR / 201017■

In addition to the Calaveras fault, the potentially active Silver Creek and Coyote Creek faults are located within the Park. These faults roughly parallel the Calaveras fault trace to the west, as shown on Figure 3-4. Movement on the Silver Creek and Coyote Creek faults are thought to have occurred within the last 1.6 million years.

Other principal faults capable of producing significant ground shaking at the Park are listed on Table 3-6, and include the San Andreas, Hayward, Concord-Green Valley, Marsh Creek-Greenville, San Gregorio-Hosgri, and Rodgers Creek Faults. A major seismic event on any of these active faults could cause significant ground shaking at the site, as experienced during earthquakes in recent history, namely the 1906 San Francisco earthquake, and the 1989 Loma-Prieta earthquake (ABAG, 2003b). The estimated (moment) magnitudes (Table 3-7) represent characteristic earthquakes on particular faults.⁵

Ground movement during an earthquake can vary depending on the overall magnitude, distance to the fault, focus of earthquake energy, and type of geologic material. The composition of underlying soils, even those relatively distant from faults, can intensify ground shaking. The Modified Mercalli (MM) intensity scale (Table 3-7) is commonly used to measure earthquake effects due to ground shaking. The MM values for intensity range from I (earthquake not felt) to XII (damage nearly total), and intensities ranging from IV to X could cause moderate to significant structural damage.⁶

GEOLOGIC AND SEISMIC HAZARDS

The Park is located on the Calaveras fault and is therefore in an area susceptible to ground shaking and related ground failures, including surface fault rupture. Slope failures through both static and seismically induced forces are possible considering the underlying bedrock and hill slopes within the Park. In addition, excessive soil erosion caused from the action of wind and water on exposed surficial materials and landslide debris is considered a potential geologic hazard, especially in areas adjacent to Coyote Lake.

SURFACE FAULT RUPTURE

Seismically induced ground rupture is defined as the physical displacement of surface deposits in response to an earthquake's seismic waves. The magnitude, sense, and nature of fault rupture can vary for different faults or even along different strands of the same fault. Surface rupture can damage or collapse buildings, cause severe damage to roads and pavement structures, and cause

Moment magnitude is related to the physical size of a fault rupture and movement across a fault. Richter magnitude scale reflects the maximum amplitude of a particular type of seismic wave. Moment magnitude provides a physically meaningful measure of the size of a faulting event (CDMG, 1997b). The concept of "characteristic" earthquake means that we can anticipate, with reasonable certainty, the actual damaging earthquake that can occur on a fault.

The damage level represents the estimated overall level of damage that will occur for various MM intensity levels. The damage, however, will not be uniform. Some buildings will experience substantially more damage than this overall level, and others will experience substantially less damage. Not all buildings perform identically in an earthquake. The age, material, type, method of construction, size, and shape of a building all affect its performance (ABAG, 1998a).

TABLE 3-6 MAJOR ACTIVE FAULTS IN VICINITY OF COYOTE-HARVEY BEAR RANCH COUNTY PARK

Fault	Distance and Direction from Coyote Lake- Harvey Bear Ranch County Park	Recency of Movement	Fault Classification ^a	Historical Seismicity ^b	Maximum Moment Magnitude Earthquake (Mw) ^c
Calaveras	0 miles	Historic (1861 rupture) Holocene	Active	M5.6-M6.4, 1861 M4 to M4.5 swarms 1970, 1990	6.8
San Andreas	12 miles southwest	Historic (1906; 1989 ruptures) Holocene	Active	M7.1, 1989 M8.25, 1906 M7.0, 1838 Many <m6< td=""><td>7.9</td></m6<>	7.9
Hayward	18 miles north	Historic (1836; 1868 ruptures) Holocene	Active	M6.8, 1868 Many <m4.5< td=""><td>7.1</td></m4.5<>	7.1
Marsh Creek- Greenville	24 miles northeast	Historic (1980 rupture) Holocene	Active	M5.6 1980	6.9
San Gregorio- Hosgri	36 miles west	Holocene – Late Quaternary	Active	Many M3-6.4	7.3

a An active fault is defined by the State of California as a fault that has had surface displacement within Holocene time (approximately the last 10,000 years). A potentially active fault is defined as a fault that has shown evidence of surface displacement during the Quaternary (last 1.6 million years), unless direct geologic evidence demonstrates inactivity for all of the Holocene or longer. This definition does not, of course, mean that faults lacking evidence of surface displacement are necessarily inactive. Sufficiently active is also used to describe a fault if there is some evidence that Holocene displacement occurred on one or more of its segments or branches (Hart, 1997).

SOURCES: Hart, 1997, Jennings, 1994, Peterson, 1996.

b Richter magnitude (M) and year for recent and/or large events. Richter magnitude scale reflects the maximum amplitude of a particular type of seismic wave.

c Moment magnitude is related to the physical size of a fault rupture and movement across a fault. Moment magnitude provides a physically meaningful measure of the size of a faulting event (CDMG, 1997b). The Maximum Moment Magnitude Earthquake (Mw), derived from the joint CDMG/USGS Probabilistic Seismic Hazard Assessment for the State of California, 1996. (CDMG OFR 96-08 and USGS OFR 96-706).

TABLE 3-7 MODIFIED MERCALLI INTENSITY SCALE

Intensity value	Intensity Description	Average Peak Acceleration
I	Not felt except by a very few persons under especially favorable circumstances.	< 0.0015 0017 g ^a
II	Felt only by a few persons at rest, especially on upper floors on buildings. Delicately suspended objects may swing.	< 0.0015 014 g
III	Felt noticeably indoors, especially on upper floors of buildings, but many people do not recognize it as an earthquake. Standing motor cars may rock slightly, vibration similar to a passing truck. Duration estimated.	< 0.0015 014 g
IV	During the day felt indoors by many, outdoors by few. At night, some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.	0.015014–0.02 04 g
V	Felt by nearly everyone, many awakened. Some dishes and windows broken; a few instances of cracked plaster; unstable objects overturned. Disturbances of trees, poles may be noticed. Pendulum clocks may stop.	0.0304–0.04 09 g
VI	Felt by all, many frightened and run outdoors. Some heavy furniture moved; and fallen plaster or damaged chimneys. Damage slight.	0.0609–0.07 18 g
VII	Everybody runs outdoors. Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable in poorly built or badly designed structures; some chimneys broken. Noticed by persons driving motor cars.	0.1018–0.15 34 g
VIII	Damage slight in specially designed structures; considerable in ordinary substantial buildings, with partial collapse; great in poorly built structures. Panel walls thrown out of frame structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned. Sand and mud ejected in small amounts. Changes in well water. Persons driving motor cars disturbed.	0.2534-0.30 .65 g
IX	Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb; great in substantial buildings, with partial collapse. Buildings shifted off foundations. Ground cracked conspicuously. Underground pipes broken.	0.5065–0.55 1.24 g
X	Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations; ground badly cracked. Rails bent. Landslides considerable from riverbanks and steep slopes. Shifted sand and mud. Water splashed (slopped) over banks.	> 0.601.24 g
XI	Few, if any, (masonry) structures remain standing. Bridges destroyed. Broad fissures in ground. Underground pipelines completely out of service. Earth slumps and land slips in soft ground. Rails bent greatly.	> 0.601.24 g
XII	Damage total. Practically all works of construction are damaged greatly or destroyed. Waves seen on ground surface. Lines of sight and level are distorted. Objects are thrown upward into the air.	> 0.601.24 g

a g is (gravity) = 980 centimeters per second squared. 1.0 g of acceleration is a rate of increase in speed equivalent to a car traveling 328 feet from rest in 4.5 seconds.

SOURCE: Bolt, Bruce A., *Earthquakes*, W.H. Freeman and Company, New York, 1988 and the California Geological Survey.

failure of overhead as well as underground utilities. Future faulting is generally expected along different strands of the same fault (CGS, 1997). Ground rupture is considered more likely along active faults, which are referenced above.

Portions of the Park are located within an Alquist-Priolo Fault Rupture Hazard Zone (discussed below) for fault rupture hazards, as designated through the Alquist-Priolo Earthquake Fault Zoning Act and shown on Figure 3-5. The Calaveras fault transects Coyote Lake and its dam, and the associated Alquist-Priolo Fault Rupture Hazard Zone encompasses the Lakeside Area and a portion of the Mendoza Area (CDMG, 1982). There is a potential that fault rupture attributable to the known and mapped traces of the Calaveras fault would occur within the Park.

Ground Shaking

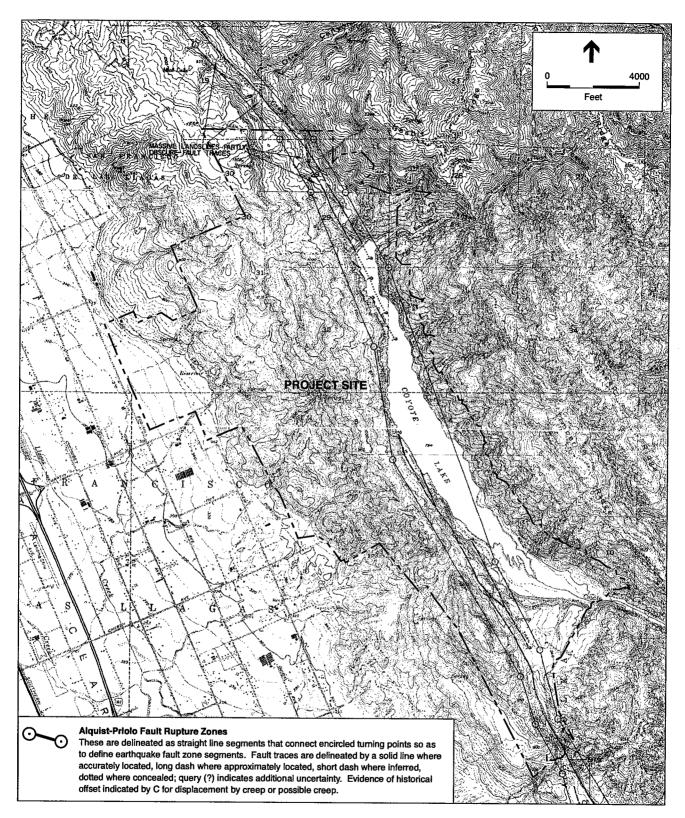
Ground movement during an earthquake can vary depending on the overall magnitude, distance to the fault, focus of earthquake energy, and type of geologic material. The composition of underlying soils located relatively distant from faults, can intensity ground shaking. Portions of the Bay Area that experienced the worst structural damage during the 1989 Loma Prieta earthquake were not necessarily those closest to the fault, but rather those with soils that magnified the effects of ground shaking. Areas that are underlain by bedrock tend to experience less ground shaking than those underlain by unconsolidated sediments such as artificial fill. At the Park, subsurface sediments consist primarily of native clays and loams that are unlikely to magnify ground shaking intensity. An earthquake on the Calaveras fault is likely to generate exceptionally high intensity ground shaking if the epicenter is on the Calaveras fault in the proximity of the Park. Ground shaking intensities would be similar to that experienced in the vicinity of the 1989 Loma Prieta epicenter near Santa Cruz, 0.64 g ("g" is the force of gravity).

Landslide Hazards

The susceptibility of land (slope) failure is dependent on the slope and geology as well as the amount of rainfall, excavation or seismic activities. A landslide is a mass of rock, soil, and debris displaced down-slope by sliding, flowing, or falling. Steep slopes and down-slope creep of surface materials characterize areas most susceptible to landsliding. Landslides are least likely in topographically low alluvial fans and at the margin of the San Francisco Bay. However, the undulating foothills and steeply sloped areas with fractures bedrock have a high susceptibility to slope failure. Previous mapping has identified many landslides on the slopes surrounding the Park area (Nilsen, 1972). Slope failures including debris flows can take place as single, isolated landslides or part of large complexes consisting of multiple failures occurring over a long period of time. Within the Park, steep slopes and human disturbance of sediments and drainage patterns have created several existing landslides.

Liquefaction

Liquefaction is a phenomenon whereby unconsolidated and/or near saturated soils lose cohesion and are converted to a fluid state as a result of severe vibratory motion. The relatively rapid loss of soil shear strength during strong earthquake shaking results in the temporary fluid-like



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Figure 3-5
Alquist - Priolo Fault
Rupture Hazard Zone

behavior of the soil. Soil liquefaction causes ground failure that can damage roads, pipelines, underground cables, and buildings with shallow foundations. Liquefaction can occur in areas characterized by water-saturated, cohesionless, granular materials at depths less than 40 feet. In addition, liquefaction can occur in unconsolidated or artificial fill sediments. The depth of groundwater influences the potential for liquefaction in this area, the shallower the groundwater, the higher potential for liquefaction. Potential liquefaction within the Park would be expected where susceptible materials are saturated by high groundwater or by surface water such as along the margin of Coyote Lake.

Seiche

A seiche is the sloshing of a closed body of water resulting from earthquake shaking. This phenomenon frequently occurs during an earthquake on a small scale in swimming pools. At the Park, a significant earthquake on the Calaveras fault could potentially result in a severe seiche in Coyote Lake. Seiche's can cause flooding and damage to areas located along shorelines that would be inundated by wave action.

Expansive Soils

Expansive soils possess a "shrink-swell" characteristic. Shrink-swell is the cyclic change in volume (expansion and contraction) that occurs in fine-grained clay sediments from the process of wetting and drying. Structural damage may occur over a long period of time, usually the result of inadequate soil and foundation engineering or the placement of structures directly on expansive soils. Expansive soils are likely present throughout the Park, as surficial soils are primarily clays and loams (Figure 3-6).

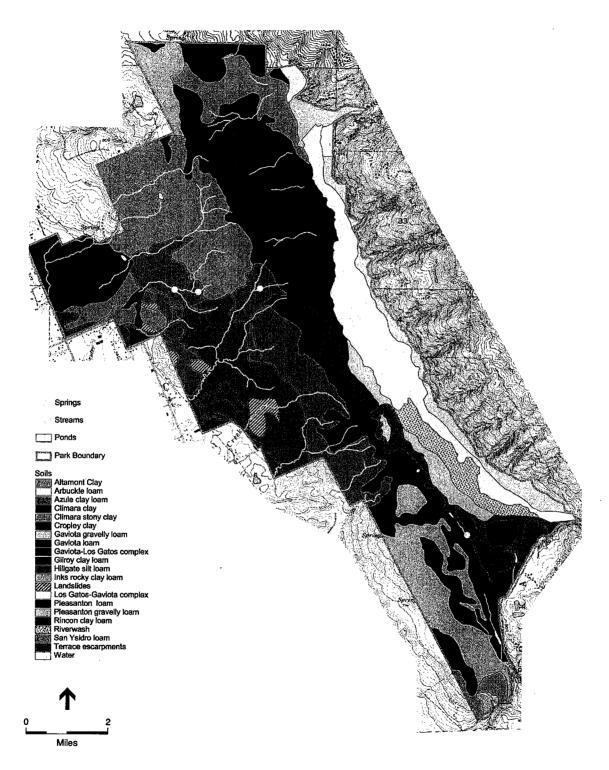
Soil Erosion

Soil erosion is a process whereby soil materials are worn away and transported to another area either by wind or water. Rates of erosion can vary depending on the soil material and structure, placement and human activity. The erosion potential for soils is variable; soil containing high amounts of silt can be easily eroded while sandy soils are less susceptible. Erosion is most likely on areas with exposed soil, and soil erosion hazards can therefore often be higher during the construction phase. Typically, the soil erosion potential is reduced once the soil is graded and covered with concrete, structures or asphalt. Overlying soil materials at the Park consist of alluvial clays and loams, landslide debris, and fractured, weathered rock and are therefore susceptible to erosion by wind and water. Construction activities can accelerate soil erosion. Soil materials could be susceptible to erosion, especially when graded and temporarily exposed to wind or water.

REGULATORY FRAMEWORK

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act (formerly the Alquist-Priolo Special Studies Zone Act), signed into law December 1972, requires the delineation of zones along active faults



Coyote Lake - Harvey Bear Ranch County Park Master Plan EIR / 201017 **Figure 3-6**

in California. The purpose of the Alquist-Priolo Act is to regulate development on or near fault traces to reduce the hazard of fault rupture and to prohibit the location of most structures for human occupancy across these traces. Cities and counties must regulate certain development projects within the zones, which includes withholding permits until geologic investigations demonstrate that development sites are not threatened by future surface displacement (Hart, 1997). Surface fault rupture is not necessarily restricted to the area within an Alquist-Priolo Zone. A portion of the Park is located with an Alquist-Priolo Earthquake Hazard Zone.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act was developed to protect the public from the effects of strong ground shaking, liquefaction, landslides, or other ground failure, and from other hazards caused by earthquakes. This act requires the State Geologist to delineate various seismic hazard zones and requires cities, counties, and other local permitting agencies to regulate certain development projects within these zones. Before a development permit is granted for a site within a seismic hazard zone, a geotechnical investigation of the site must be conducted and appropriate mitigation measures incorporated into the project design. The Park and surrounding region have not yet been investigated for potential designation as a seismic hazard zone.

Building Codes

The California Building Code is another name for the body of regulations known as the California Code of Regulations (CCR), Title 24, Part 2, which is a portion of the California Building Standards Code (CBSC, 1995). Title 24 is assigned to the California Building Standards Commission, which, by law, is responsible for coordinating all building standards. Under state law, all building standards must be centralized in Title 24 or they are not enforceable (Bolt, 1988).

Published by the International Conference of Building Officials, the Uniform Building Code is a widely adopted model building code in the United States. The California Building Code incorporates by reference the Uniform Building Code (UBC) with necessary California amendments. About one-third of the text within the California Building Code has been tailored for California earthquake conditions (ICBO, 1997).

IMPACTS AND MITIGATION MEASURES

SIGNIFICANCE CRITERIA

A geologic, seismic, or mineral resource impact is considered significant if it would result in any of the following, which are adapted from the current CEQA Guidelines (Appendix G):

• Exposure of people or structures to geologic hazards, soils, and/or seismic conditions so unfavorable that they could not be overcome by special design using reasonable construction and/or maintenance practices;

- Construction on substrate that consists of material subject to liquefaction in the event of ground shaking;
- Construction on excessively steep slopes that could result in slope failure or landslides;
- Deformed foundations from exposure to expansive soils, differential settlement, poorly engineered fill, or soil creep; or
- Depletion of a valuable aggregate or mineral resource.

This impact analysis therefore, focuses on potential project impacts related to seismicity, slope failure, and soil erosion. The evaluation considered program and project plans, current conditions at the project site, and applicable regulations and guidelines.

IMPACTS AND MITIGATION MEASURES

Impact Geology, Geohazards, and Soils-1: In the event of a major earthquake on the Calaveras fault portions of the Park could be susceptible to surface fault rupture due to excessive seismic ground motion. Such an event could expose people and property to the hazards associated with lateral and/or vertical ground offset. Less Than Significant with Mitigation Measures.

The Alquist-Priolo Earthquake Fault Zoning Act delineates areas near active faults to prohibit the location of most structures on an active fault trace, thereby mitigating potential hazards of fault rupture. Alquist-Priolo Fault Rupture Hazard Zones (FRHZs) are intended to encompass known fault traces and are established based on a prescribed distance from the known or inferred fault trace. Within the Park, the Alquist-Priolo FRHZ encompasses Coyote Lake and the surrounding shoreline.

Project-Level Components

As discussed in Chapter 2, Project Description, project-level components include 1) installation of trails, gates, fencing, staging areas, and signage (Western Flat and Mendoza Area); 2) campground improvements, including reduction of density, addition of shower facilities, and 3) establishment of hang-gliding launch and landing sites (Slopes and Ridge Area); 4) establishment of equestrian camping at existing overflow parking area (West Flat Area); 5) installation of boat self-launch area for kayaks/non-motorized boats (Lakeside Area); and 6) use of pond for annual Fishability Days event (near Mendoza Ranch).

The campground improvements, and boat self-launch area are located within the Alquist-Priolo FRHZ. As discussed earlier, the Alquist-Priolo Fault Rupture Hazard Act regulates certain types of development within this zone. Specifically, the Act applies to any new structure that is expected to have a human occupancy rate of more 2,000 person-hours per year (Hart, 1997). Due to the seasonal-use patterns and nature of the boat self-launch facility and shower facility structures, project-level developments would likely not be subject to Alquist-Priolo regulations. However, Santa Clara County may require that structures meet Alquist-Priolo geotechnical and

seismic design requirements to minimize the potential for injury or structural damage resulting from fault rupture.

Program-Level Components

As indicated in Chapter 2, subsequent environmental documentation is required for implementation of program-level components; they are evaluated here on a conceptual level. Development would include construction of an 18-hole golf course, campground amphitheater, a fishing pond, trails, building and events center, Bicycle Park, and other site-specific use areas. Improvements outside of the West Flat Area include development of picnic areas in the Lakeside Area and minor development in the Mendoza Area.

The proposed Lakeside picnic areas are located within the Alquist-Priolo FRHZ, but are not subject to regulation by the Alquist-Priolo Act. Creation of Lakeside picnic areas would not include construction of new structures, reducing the potential for people to be exposed to hazards associated structural damage or collapse resulting from surface fault rupture. The proposed Mendoza Area Environmental Education Center, and Lakeside entrance kiosk-expanded maintenance facility are located with the Alquist-Priolo FRHZ, and would be subject to regulation under the Alquist-Priolo Act. Prior to construction, a geologic investigation would be required to determine the location of proposed structures relative to the Calaveras fault. The potential conversion of an existing Mendoza Ranch building into an Environmental Education Center may not be feasible without extensive seismic retro-fitting, or may be completely unfeasible should it be determined during geologic investigations that the building is directly on the Calaveras fault.

Mitigation Measure Geology, Geohazards, and Soils-1: Comply with applicable engineering and design rules and regulations.

The proposed amphitheatre, boat-self launch facility, and shower facility shall comply with all applicable Santa Clara County engineering and design rules and regulations. At a minimum, geotechnical and seismic design criteria shall conform to engineering recommendations in accordance with seismic requirements of Zone 4 of the 1997 Uniform Building Code (UBC) and the California Building Code (Title 24) additions.

Impact Significance After Mitigation: Less Than Significant.

Impact Geology, Geohazards, and Soils-2: In the event of a major earthquake in the region, seismic ground shaking could potentially injure people and cause collapse or structural damage to existing and proposed structures. Less Than Significant with Mitigation Measures.

The San Francisco Bay Area would likely experience at least one major earthquake (M 6.7 or higher) within the next 30 years which that would affect the project site. The intensity of such an event would depend on the causative fault and the distance to the epicenter, the moment

magnitude, and the duration of shaking. A seismic event in the Bay Area could produce ground shaking intensities at the proposed project site ranging from violent (MM IX) to moderate (MM VI).

A characteristic earthquake on the Calaveras fault with an estimated M 6.8 could violent (IX) shaking intensities throughout the majority of the Park with very violent (X) shaking in areas adjacent to Coyote Lake (ABAG, 2003a). Based on the Modified Mercalli scale, an earthquake of this intensity would cause considerable structural damage, even in well-designed structures, and collapse in poorly designed structures. Substantial cracks could appear in the ground, and the shaking could cause other secondary damaging effects such as the failure of underground pipes. As a comparison, the great 1906 San Francisco earthquake, with an M 7.9, produced moderate (VI) to strong (VII) shaking intensities at the Park, while the 1989 Loma Prieta event, with an moment magnitude of M 6.9, produced moderate (VI) shaking intensities (ABAG, 2003b). A characteristic earthquake on any of the active faults listed in Table 3-4, with the exception of the Calaveras fault, could produce light (V) to strong (VII) shaking intensities (ABAG, 2003a).

Project-Level Components

Project-level components include the construction of a new showering facility, boat self-launch facility, and campground improvements along Coyote Lake. As discussed above in Mitigation Measure Geology, Geohazards, and Soils-1, geotechnical and seismic design criteria for the proposed structures shall conform with Santa Clara County engineering and building regulations in accordance with seismic requirements of Zone 4 of the 1997 Uniform Building Code (UBC) and the California Building Code (Title 24) additions. Compliance with Mitigation Measure Geology, Geohazards, and Soils-1 would reduce potential ground shaking effects to a less than significant level.

Program-Level Components

Program-level components include the construction of new structures throughout the Park, and the potential conversion of several existing ranch structures in the Mendoza Area and West Flat Area into Park facilities. Conversion of existing structures without an evaluation of their capability of withstanding seismic ground shaking, and completion of seismic upgrades, if needed, could expose Park visitors to hazards associated with severe structural damage or collapse.

Mitigation Measure Geology, Geohazards, and Soils-2: Implement Mitigation Measure Geology, Geohazards, and Soils-1.

Impact Significance	After Mitigation:	Less Than Significant.

Impact Geology, Geohazards, and Soils-3: In the event of a major earthquake in the region, seismic ground shaking could potentially expose people and property to seismic-related hazards, including liquefaction and seiche. Less Than Significant with Mitigation Measures.

Project-level development will include construction of several new structures along the shoreline of Coyote Lake and will likely result in an increased number of visitors to Coyote Lake. The potential for new structures to be exposed to liquefaction from underlying saturated lakeside sediments. The Park and surrounding areas have not yet been evaluated by the California Geologic Survey (formerly the California Division of Mines and Geology) for potential designation as a Seismic Hazard Zone for liquefaction, as previously discussed. To address potential liquefaction hazards, Mitigation Measure Geology, Geohazards, and Soils-2 should be incorporated into project plans.

Mitigation Measure Geology, Geohazards, and Soils-3: Conduct appropriate geologic and hazard assessments and implement necessary measures to reduce impacts.

Geologic and seismic assessments associated with proposed lakeside structures shall include an evaluation of potential liquefaction hazards. This assessment shall, at a minimum, include an analysis of subsurface soils, groundwater depth, and anticipated ground shaking intensities in accordance with CDMG Special Publication 117, Guidelines for Evaluating and Mitigating Seismic Hazards in California.

The Lakeside Area may be inundated during a seiche on Coyote Lake. Waves and subsequent flooding that may result from a seiche could result in some damage to proposed project-level lakeside structures and injury. This is a potentially significant, inherent impact associated with public use of Coyote Lake. In order to quantify seiche hazards and reduce potential impacts, the following Mitigation Measure should be incorporated:

A study shall be conducted to evaluate seiche potential on Coyote Lake. This study shall incorporate recent data regarding potential fault rupture and ground shaking hazards associated with the Calaveras fault, and shall include a determination of shoreline areas that may be inundated/flooded by seiche wave action. Reduction of campground density should incorporate relocation of sites to outside seiche inundation/flooding areas.

Lakeside Area program-level components could potentially expose Park visitors and staff to liquefaction and seiche hazards. Analyses of potential liquefaction hazards for the proposed entrance kiosk/expanded maintenance facility is recommended. In addition, seiche study results should be considered prior to finalizing potential structure locations.

Impact Geology, Geohazards, and Soils-4: Construction activities may result in soil erosion, and expose visitors and staff to geologic hazards associated with expansive soils. Less Than Significant with Mitigation Measures.

Project-level components includes construction of staging areas, trails, and several Lakeside structures. Work at these locations would be limited to clearing of the site, with limited grading activities at the launch area and along the trails. Construction would be most intensive at the campground improvements area, particularly associated with the construction of an amphitheatre. Project-level components have the potential to result in short-term, construction-related soil erosion. In addition, newly constructed trails have the potential to create long-term soil erosion problems by altering drainage patterns, traversing existing erosion or landside areas, or improperly traversing slopes.

Short-term construction-related erosion of surficial soils would be mitigated by Mitigation Geology, Geohazards, and Soils 1, compliance with SWRCB General NPDES Permit to minimize erosion, as discussed in the Hydrology, Floodplains and Water Quality Section. In addition, trail design would conform with guidelines outlined in the Countywide Trails Master Plan. As noted in the proposed Master Plan, some trails may be closed seasonally due to soil conditions. To further reduce potential long-term erosion hazards, the following mitigation measures shall be incorporated:

Mitigation Measure Geology, Geohazards, and Soils-4: Proposed trails shall be constructed to avoid existing erosion and landside areas within the Park, and shall incorporate trail location recommendations identified in the Trails Plan component of the proposed Master Plan and the Draft Natural Resource Management Plan: Coyote-Lake-Harvey Bear Ranch County Park (Rana Creek Habitat Restoration, 2002).

Program-level components would involve extensive grading associated with golf course, Bicycle Park, and other West Flat Area construction. Completion of a grading plan in accordance with Santa Clara County regulations, compliance with NPDES permit requirements, and incorporation of topographic information, erosion, drainage, and landslide areas identified in the Natural Resource Management Plan into trail and road design plans would reduce potential short- and long-term erosion impacts.

Expansive soils are located likely located throughout the Park, as the majority of soils are fine-grained clays and loams. Appropriate preparation of site soils and foundation design, as required by compliance with UBC codes in Mitigation Measure Geology, Geohazards, and Soils-1, would reduce potential expansive soil hazards for proposed project-level components. Similar measures for program-level components would likely address potential expansive soil hazards.

Impact Significance After Mitigation: Less Than Significant.	
for program-level components would likely address potential expansive soil haz	zards.
reduce potential expansive soil hazards for proposed project-level components.	Similar mea

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HAZARDOUS MATERIALS

SETTING

SUMMARY OF EXISTING CONDITIONS

The 4,448-acre Park is the former location of the 2,970-acre Bear Ranch in San Martin and the 711-acre Mendoza Ranch in Gilroy. Although the majority of the Park does not have a history of hazardous materials use, the limited areas associated with ranching residences, equipment fueling, pesticide application, and agricultural chemical storage have been impacted by former ranching operations. Environmental Site Assessment's were conducted at the both Bear Ranch and Mendoza Ranch at the time of property acquisition by the Trust for Public Land, in coordination with the Santa Clara County Department of Parks and Recreation. ¹

Underground and Aboveground Storage Tanks

A 1,000-gallon split gasoline/diesel aboveground storage tank (AST) is located near the existing Park maintenance facility near Coyote Lake. The tank is used for fueling Park vehicles, and various maintenance equipment (Kloster, 2003). The former Bear Ranch operated one 500-gallon diesel aboveground storage tank (AST) and one 500-gallon gasoline underground storage tank (UST). The UST was removed from the property the early 1980's, and the AST was removed in 1996. As part of the property transfer to the Trust for Public Land, an investigation was conducted by Erler & Kalinowski, Inc. to assess soil and groundwater conditions in the vicinity of the former UST and AST. Soil samples were collected in 1996 near the former locations of the AST and UST, and analyzed for total petroleum hydrocarbons as diesel (TPH-d), total petroleum hydrocarbons as gasoline (TPH-g), benzene, toluene, ethylbenzene, and total xylenes (BTEX).

Soil samples collected in 1996 near the former AST detected concentrations of TPH-d at 2 feet and 4 feet below ground surface (feet bgs), however deeper soil samples did not detect concentrations of TPHd above the laboratory detection limit, indicating the extent of soil impact is limited to shallow soils. Soil samples collected near the former UST detected concentrations of TPHg and BTEX in soil samples up to 100 feet bgs.²

One groundwater monitoring well was installed near the former UST following collection of soil samples; groundwater was encountered approximately 115 feet bgs during soil boring activities. Groundwater beneath the site was found to contain negligible concentrations of benzene, toluene, and xylenes that do not exceed California maximum contaminant levels (MCLs) for drinking water.

Information regarding site environmental conditions was derived from reports prepared by ATC Environmental, Inc., and Erler and Kalinowski, Inc.

Benzene, toluene, ethylbenzene, and xylene are referred to as "aromatic hydrocarbons" and are present in gasoline. Benzene is a confirmed carcinogen.

Landfills

Two household dumps were identified on the Bear Ranch and Mendoza Ranch. Subsurface soil investigation of the Bear Ranch household dump, or refuse area, was investigated (ATC Environmental, 1996b) following removal of woody plant debris, lumber, and household trash, and found to have total recoverable petroleum hydrocarbons (TRPH) at a level slightly above the reporting limit. Given that TRPH has low mobility and is non-toxic, no further investigation or remediation was warranted.

Concentrations of 4,4'-DDT, 4,4'-DDD, and 4,4'-DDE were detected in soil samples collected at the former household dump area at the Mendoza Ranch³. Subsurface soil investigation and remedial activities at the Mendoza Ranch were conducted by Erler and Kalinowski, Inc., as detailed in their October 13, 1997, *Report of Completion of Remedial Activities and Request for Closure*. Soil remediation criteria for the Mendoza Ranch were based upon U.S. EPA industrial soil screening standards Preliminary Remediation Goals (PRGs), as approved by the Santa Clara County Department of Environmental Health (SCCDEH). Remedial activities included the excavation and removal of approximately 323 tons of impacted soil.

Following excavation of impacted soil, additional samples were collected at the limit of excavated areas to determine potential remaining concentrations of organopesticides in soil. Organopesticide concentrations detected in soil samples collected at the limits of the excavation were below the established remedial criteria.

Pesticide Spray Areas

Concentrations of 4,4'-DDT, 4,4'-DDD, 4,4'-DDE, and toxaphene were detected in soil samples collected at former pesticide application areas at the Mendoza Ranch Barns area. Following excavation of impacted soil, additional soil samples were detected at the limit of the excavated areas to determine potential remaining concentrations of organopesticides in soil. Organopesticide concentrations detected in soil samples collected at the limits of the excavation were below the established remedial criteria.

Former Ranch Buildings

Numerous buildings associated with former ranching activities are located on the Bear Ranch and Mendoza Ranch. Investigations have not been conducted to assess the potential presence of lead-based paint, asbestos, or PCBs in these structures. However, ATC Environmental, Inc.'s Phase I Site Assessment at the Bear Ranch indicated that the majority of structures likely contained lead-based paint and asbestos. The potential presence of lead-based paint and asbestos has not been assessed at the Mendoza Ranch.

^{3 4,4&#}x27;-DDT, 4,4'-DDD, 4,4'-DDE are organopesticides.

Surrounding Properties

The Phase I investigations for the Bear Ranch and Mendoza Ranch properties identified potential on- and off-site sources of hazardous substances that could affect soil and groundwater quality at the Park. The identified off-site locations are downgradient (west) of the Park, based on the reported groundwater flow direction (westerly). Based upon their locations relative to the Park, the Phase I investigations concluded it was unlikely that constituents from these sites have affected soil or groundwater quality at the Park (Erler & Kalinowski, Inc., 1996).

REGULATORY SETTING

Definitions

Hazardous Materials

Hazardous materials are substances with certain physical properties that could pose a substantial present or future hazard to human health or the environment when improperly handled, disposed, or otherwise managed. Hazardous materials are grouped into the following four categories, based on their properties: toxic (causes human health effects), ignitable (has the ability to burn), corrosive (causes severe burns or damage to materials), and reactive (causes explosions or generates toxic gases).⁴ Hazardous materials have been and are commonly used in commercial, agricultural, and industrial applications, as well as in residential areas to a limited extent.

Hazardous Waste

A hazardous waste is any hazardous material that is discarded, abandoned, or is to be recycled. Hazardous materials and wastes can result in public health hazards if released to the soil, groundwater, or air.

The California Environmental Protection Agency (Cal-EPA), Department of Toxic Substances Control (DTSC) regulates the generation, transportation, treatment, storage, and disposal of hazardous waste. At the Park, investigation or remediation of releases from underground or aboveground petroleum storage tanks are performed under the direction of the local oversight agencies (LOP), the Santa Clara County Department of Environmental Health or the Santa Clara Valley Water District. Other types of hazardous substance release sites may be overseen by the LOP with proper notification and authorization from the California Regional Water Quality Control Board (RWQCB), San Francisco Bay Region or Central Coast Region, and the DTSC.

Santa Clara County requires a Hazardous Materials Management Plan be prepared for businesses that use or store hazardous materials in excess of threshold quantities. Installation and removal of USTs and ASTs are overseen by the Santa Clara County Department of Environmental Health. Installation and operation of USTs and ASTs must also meet standards set forth in the California Code of Regulations and California Health and Safety Code.^{5,6}

Title 22 of the California Code of Regulations, Division 4.5, Chapter 11, Article 3.

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USTs: Title 23 of the California Code of Regulations, Division 3, Chapter 16; ASTs: California Health and Safety Code, Chapter 6.67.

Worker Safety

Occupational safety standards are set forth in federal and state laws to minimize safety risks in the workplace from both physical and chemical hazards. The California Division of Occupational Safety and Health (Cal-OSHA) and the federal Occupational Safety and Health Administration are the agencies responsible for assuring worker safety in the workplace. Cal-OSHA assumes primary responsibility for developing and enforcing standards for safe workplaces and work practices.

IMPACTS AND MITIGATION MEASURES

SIGNIFICANCE CRITERIA

The CEQA Guidelines provide standards for determining whether the effects of a potential impact should be considered significant. Appendix G of the CEQA Guidelines provides that a project may be deemed to have a significant impact if it would:

- Create a significant hazard to the public or environment through the routine transport, use, or disposal of hazardous materials;
- Create a significant hazard to the public or environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment;
- Result in a safety hazard for people residing or working in the project area (for a project located within the vicinity of a private airstrip or 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);
- Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan; or
- 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.

This impact analysis focuses on potential effects of hazardous materials associated with construction activities, the proposed golf course, and historic ranching operations. The project site is not located near an airport. The potential effects of wildland fires at the Park, and adopted

AST regulation is dependent upon tank capacity. ASTs used to store petroleum products with a storage capacity that does not exceed 660 gallons are not regulated by the state.

emergency response or emergency evacuation plans are discussed in Public Services and Utilities section.

IMPACTS AND MITIGATION MEASURES

Impact Hazardous Materials-1: Construction workers and future visitors in the West Flat Area may encounter hazardous materials in impacted soil associated with historic ranching operations at the Bear Ranch. Less Than Significant with Mitigation Measures.

Improper handling, storage, or disposal of contaminated soil could pose health hazards to construction workers, the public, and the environment. Potential hazardous materials impacts to soil and groundwater associated with historic operations at the Mendoza Ranch have been investigated, and remedial activities, including the excavation of impacted soil, have been completed. However, hazardous materials impacts at the Bear Ranch have not been fully quantified. As discussed above, historic operations included a UST, AST, and household dump. Shallow soil samples collected from an area with visible surface staining contained concentrations of TPH-d, petroleum hydrocarbon impacts to soil at the former UST location have not been defined laterally at depth in soil. The Bear Ranch household dump, or refuse area, was similarly investigated (ATC Environmental, 1996b) and found to have total recoverable petroleum hydrocarbons (TRPH) at a level slightly above the reporting limit. Given that TRPH has low mobility and is non-toxic, no further investigation or remediation was warranted.

Project-Level Components

As discussed in Chapter 2, Project Description, project-level components include 1) installation of trails, gates, fencing, staging areas, and signage (Western Flat and Mendoza Area);

- 2) campground improvements, including reduction of density, addition of shower facilities;
- 3) establishment of hang-gliding launch and landing sites (Slopes and Ridge Area); 4) establishment of equestrian camping at existing overflow parking area (West Flat Area);
- 5) installation of boat self-launch area for kayaks/non-motorized boats (Lakeside Area); and 6) use of pond for annual Fishability Days event (near Mendoza Ranch). Work at most of these sites would be limited to clearing of the site, with limited grading activities at the launch area and along the trails. Construction would be most intensive at the campground improvements area. Project-level components are not located on or adjacent to previously identified potentially impacted areas of the Bear Ranch. Therefore, the potential for construction workers to encounter hazardous materials during project-level work is minimal. However, the creation of trails in the West Flat Area and subsequent influx of visitors may result in public exposure to the former Bear Ranch household dump located near an existing ranch road on the banks of Center Creek. The extent of potential soil or surface water impact associated with the Bear Ranch household dump has been investigated, and debris from the dump has been removed.

Program-Level Components

As indicated in Chapter 2, subsequent environmental documentation is required for implementation of program-level components; they are evaluated here on a conceptual level.

Construction of program-level components would likely include handling and use of hazardous materials, as the proposed facilities would require a substantial amount of construction activities associated with development of the West Flat Area. Development would include construction of an 18-hole golf course, a fishing pond, trails, building and events center structures, Bicycle Park, and other site-specific use areas. Improvements outside of the West Flat Area include development of picnic areas in the Lakeside Area and minor development in the Mendoza Area.

Construction associated with program-level components will be located adjacent to the former UST (identified in the Master Plan as "Historic Area"). Shallow soil samples collected in the former UST and AST region from ground surface to depths of 10 feet below ground surface (bgs) did not contain concentrations of TPH-g and BTEX, but did contain concentrations (up to 12 mg/kg) of TPH-d. Concentrations of TPH-g and BTEX were encountered in the former UST region at depths up to 100 feet bgs, and were not defined laterally in soils below 10 feet bgs.

Construction activities will likely not encounter petroleum hydrocarbon impacted groundwater, as depth to water is over 90 feet bgs in the former UST region, however the potential for grading activities to encounter petroleum impacted soils has not yet been adequately defined. In addition, there is the potential for future visitors to be exposed to petroleum hydrocarbon impacted soils.

Mitigation Measure Hazardous Materials-1a: The County shall continue investigation and remediation of the former UST, AST, and household dump in accordance with Santa Clara County Environmental Health Department regulations. This may include the excavation and removal of petroleum hydrocarbon impacted soils.

Mitigation Measure Hazardous Materials-1b: The County shall develop and implement an environmental site health and safety plan to address worker safety hazards that may arise during project- and program-level construction activities.

The Health and Safety Plan shall contain specific language identifying potentially hazardous materials associated with ranching activities that may be encountered. In addition, the contractor shall be required to comply with all applicable OSHA regulations regarding worker safety. The OSHA-specified method of compliance would be dependent on the severity of impact to soil. Appropriate measures could include a vapor monitoring program, eye protection, and specific handling requirements.

Impact Significance After Mitigation: Less Than Significant.

Impact Hazardous Materials-2: Demolition or renovation of existing structures on the Bear and Mendoza Ranches could expose construction workers and the public to lead-based paint and asbestos. Less Than Significant with Mitigation Measures.

Phase I investigations on the Bear and Mendoza Ranches did not include an assessment of the existing ranch structures for lead-based paint or asbestos. Based on the age and nature of the structures, these facilities are believed to contain these substances. Asbestos is regulated both as

a hazardous air pollutant under the Clear Air Act and as a potential worker safety hazard under the authority of Cal-OSHA. Lead-based paint is classified as a hazardous waste if the lead content exceeds 1,000 parts per million. Additionally, lead-based paint chips can pose a hazard to workers and adjacent sensitive land uses.

Project-Level Components

Project-level components would not include demolition or renovation of existing structures, nor would it include grading or construction activities immediately adjacent to existing structures. Therefore, potential impacts associated with lead-based paint and asbestos in existing structures are negligible, and mitigation measures are not required.

Program-Level Components

Program-level components may include demolition of Mendoza Ranch structures or conversion of the ranch house into an Environmental Education Center. In the West Flat Area, structures will be converted for Park use, demolished, or maintained for their historic value. Program-level components therefore may have the potential to expose construction workers and the public to lead-based paint and asbestos associated with existing Ranch structures. Implementation of the following mitigation measures are therefore recommended for incorporation into program-level plans.

Mitigation Measure Hazardous Materials-2a: The County shall assess historic ranch structures on the Mendoza and Bear Ranches for the potential presence of lead-based paint and asbestos prior to implementation of program-level components that involve the destruction, renovation, or maintenance of existing structures.

An assessment shall be conducted to determine the potential extent of lead-based paint and asbestos in existing structures. Should this assessment determine that lead-based paint and/or asbestos are present, the following mitigation measures shall be implemented for identified structures.

Mitigation Measure Hazardous Materials-2b: The health and safety plan described above in Mitigation Measure Hazardous Materials-1b shall apply to potential lead-based paint risks present during construction.

Both the federal OSHA and Cal-OSHA regulate worker exposure during construction activities that affect lead-based paint. The Interim Final Rule found in 29 *Code of Federal Regulations*, Part 1926.62 covers construction work where employees may be exposed to lead during such activities as demolition, removal, surface preparation for repainting, renovation, cleanup, and routine maintenance. The OSHA-specified method of compliance includes respiratory protection, protective clothing, housekeeping, hygiene facilities, medical surveillance, and training. No minimum level of lead is specified to activate the provisions of this regulation.

Mitigation Measure Hazardous Materials-2c: A lead-based paint abatement plan containing, but not limited to, the following elements shall be implemented:

- Develop an abatement specification approved by an Interim-Certified Project Designer;
- Acquire necessary approvals from the Santa Clara County Environmental Health Department for specifications or commencement of abatement activities;
- Prepare a site health and safety plan, as needed;
- Contain all work areas to prohibit off-site migration of paint chip debris;
- Remove all peeling and stratified lead-based paint on building surfaces and on non-building surfaces to the degree necessary to safely and properly complete demolition activities according to recommendations of the survey. The demolition contractor shall be responsible for the proper containment and disposal of intact lead-based paint on all equipment to be cut and/or removed during the demolition;
- Provide on-site air monitoring during all abatement activities and background monitoring to ensure no contamination of work areas or adjacent properties;
- Cleanup and/or HEPA of vacuum paint chips;
- Collect, segregate, and profile waste for disposal determination; and
- Provide appropriate disposal of all waste.

Mitigation Measure Hazardous Materials-2d: Asbestos abatement shall be conducted prior to demolition or renovation of the existing buildings.

Prior to renovation or demolition of buildings containing asbestos, contractors licensed to conduct asbestos abatement work must be retained, and the Bay Area Air Quality Management District must be notified ten days prior to initiating construction and demolition activities. Asbestos encountered during demolition of the existing building would be disposed of at an appropriate facility.

Impact Hazardous Materials-3: Hazardous materials used onsite during construction activities (i.e., petroleum products) could be spilled through improper handling or storage. Less Than Significant.

Construction activities associated with project-level and program-level components may involve the use of certain hazardous substances and/or petroleum products. Inadvertent release of these materials could result in adverse impacts to soil, surface water, and/or groundwater. However, the onsite storage and/or use of large quantities of materials capable of impacting soil and groundwater are not typically required for a project of the proposed sizes and types.

Project-Level Components

Work associated with project-level components sites would be limited to clearing of the site, with limited grading activities at the launch area and along the trails. Construction would be most intensive at the campground improvements area. The onsite storage and/or use of large quantities of materials capable of impacting soil and groundwater are not typically required for projects of the proposed sizes and types. Hazardous materials used would likely be associated with the operation of construction equipment (i.e. fuels, oil and grease).

Program-Level Components

Construction of program-level components would likely include handling and use of hazardous materials, as the proposed facilities would require a substantial amount of construction activities associated with development of the West Flat Area, with minor construction in the Mendoza and Lakeside Area. Construction will be more extensive and wide-spread than project-level work, however, the types and nature of hazardous material usage would likely be similar.

Mitigation Measure Hazardous Materials-3: Apply best management practices during construction of project- and program-level facilities.

The use of hazardous materials best management practices (BMPs) is required pursuant to National Pollutant Discharge Elimination System permits for construction activities associated with both project-level and program-level components, as discussed in Hydrology, Floodplains and Water Quality Section. BMPs typically include the following:

- Follow manufacturer's recommendations on use, storage, and disposal of chemical products used in construction.
- Avoid overtopping construction equipment fuel gas tanks.
- During routine maintenance of construction equipment, properly contain and remove grease and oils.
- Properly dispose of discarded containers of fuels and other chemicals.

Implementation of BMPs would minimize potential adverse impacts to groundwater and soils resulting from hazardous materials used during construction, and additional mitigation measures are therefore not necessary.

Impact Significance After Mitigation: Less Than Significant.

Impact Hazardous Materials-4: Long-term storage and use of hazardous materials associated with golf course operation and maintenance could result in adverse impacts to soil, groundwater, and nearby surface water bodies. Less Than Significant with Mitigation Measures.

Program-Level Components

Creation of an 18-hole golf course is a program-level component of the Park's Master Plan. Typically, operation and maintenance of a golf course includes the use of pesticides and herbicides to manage grasses and other vegetation. Poor storage or application of these substances have the potential to adversely impact subsurface conditions and nearby surface waters. The creation of a hazardous materials management plan for golf course operation would therefore be recommended. This plan should, at a minimum, define and require storage methods for chemical products and hazardous materials, and require adherence to manufacturer's recommendations on use, storage, and disposal of these products. In addition, adherence to a Pesticide and Herbicide Application Plan, as discussed in Hydrology, Floodplains and Water Quality Section, is recommended to protect sensitive hydrologic areas on or near the course.

Mitigation Measure Hazardous Materials-4: The golf course would be operated in conformance with the County of Santa Clara's guidelines for golf course design (County of Santa Clara, 1996) and the County's Integrated Pest Management Ordinance (County of Santa Clara, 2002). These guidelines set strict limits on types and quantities of allowable use of pesticides and herbicides. and also establish standards for groundwater and surface water quality in vicinity of their use.

Impact Significance After Mitigation: Less Than Significant.

REFERENCES - Hazardous Materials

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HYDROLOGY, FLOODPLAINS AND WATER QUALITY

SETTING

SUMMARY OF EXISTING CONDITIONS

Watershed and Drainage

Coyote Lake-Harvey Bear Ranch County Park incorporates 4,448 acres of the western foothills of the Diablo Range, west of Timber Ridge, sloping west onto the eastern edge of Coyote Valley. The Park includes the entirety of Coyote Lake, which was formed by damning a portion of Coyote Creek in 1936. In addition, numerous springs are located throughout the property, and the Park incorporates the headwaters of Skillet Creek, Church Creek, New Creek, Center Creek, San Martin Creek, and a branch of Little Llagas Creek.

Drainage within the Park is divided, with the eastern edge draining into Coyote Creek, which flows northwest along the Diablo Range before eventually emptying into San Francisco Bay. A small ridge divides Coyote Creek, Coyote Lake, and several unnamed tributaries from the remainder of the Park hydrologically. The springs and creeks which originate along the western flank of the foothills flow west down onto the floor of the Coyote Valley near the towns of San Martin and Gilroy, and become tributaries of Llagas Creek, eventually draining into the Pajaro River and the Pacific Ocean in Monterey Bay.

Flooding

Due to its elevated topographic status, the majority of the Park is located outside of the 100-year and 500-year flood zone, as designated by the Federal Emergency Management Administration's (FEMA) National Flood Insurance Program. However, the shoreline around Coyote Lake, particularly the south end of the lake, is located with the 100-year flood zone. The boundaries of the 100-year flood zone are determined from a combination of precipitation data and land use characteristics, and is used as a design criterion to ensure a factor of safety from flood hazard. During any given year, there is a one percent chance a 100-year flood will occur and a 0.2 percent chance of a 500-year flood.

Water Quality

The California Regional Water Quality Control Board, San Francisco Bay Region (SFRWQCB), California Regional Water Quality Control Board, Central Coast Region (CCRWQCB), and Santa Clara Valley Water District (SCVWD) are responsible for protecting and regulating water quality in the Park. The division in Regional Board regulatory oversight is due to the different watersheds incorporated within the Park. Coyote Creek and Coyote Lake are within SFRWQCB jurisdiction, while the remainder of the Park which drains into Llagas Creek is regulated by CCRWQCB. SCVWD is the primary water resources agency for Santa Clara County, and provides local oversight of surface and groundwater quality within the County and throughout the entire Park.

Coyote Lake

Coyote Lake is a 4.8 mile long, 648-acre artificial reservoir with a capacity to store 22,925 acrefeet of water (Santa Clara Valley Water District, 2001). The volume of water stored by the reservoir varies seasonally, in conjunction with cyclic precipitation patterns. As the recreational focal point of the Park, Coyote Lake is used by visitors for swimming, boating, water skiing, jet skiing, and fishing. Among the various recreational pursuits the lake supports, motorized boating and jet-skies have the highest potential to degrade water quality. Methyl tertiary butyl ether (MTBE), an oxygenate added to gasoline fuel, has been detected in several County reservoirs. In recognition of this, Santa Clara County Department of Parks and Recreation now requires non-MTBE fuel be used for all vessels in County reservoirs, including Coyote Lake (Santa Clara County Department of Parks and Recreation, 2001).

Non-Point Source Pollution

Non-point source pollution is a concern whenever there is a potential that proposed or existing activities will increase the amount of urban runoff and therefore increase the quantities of polluted runoff from paved surfaces such as streets and parking lots (referred to as non-point source pollutants). Under its existing conditions, the Park represents a minor contribution of non-point source pollution to the Coyote Creek and Llagas Creek watersheds reservoirs.

Soil Erosion

Erosion and sedimentation are natural processes driven by surface runoff that can be accelerated by human activities such as grading or vegetation removal. Removal of vegetation or impervious areas (concrete, asphalt, etc.) expose soils to precipitation and surface runoff and can accelerate surface soil erosion. Erosion potential is determined by four principal factors: the characteristics of the soil, extent of vegetative cover, topography, and climate.

Erosion at the Park is currently minimized by the existing vegetation. However, areas of the foothills with steep slopes and water bodies or springs may be susceptible to erosion hazards during periods of intense rainfall or removal of existing vegetation.

Groundwater

Depth to groundwater varies throughout the Park, with some areas containing active springs, while in other regions depth to groundwater has been estimated at 115 feet below ground surface (ATC Environmental, Inc., 1997). Groundwater quality within the region is regulated by the SCVWD, SFRWQCB, and CCRWQCB.

Existing groundwater quality problems in the region include elevated concentrations of nitrates and perchlorate. Nitrate is naturally formed by the combination of nitrogen and oxygen in soils, and then transmitted to groundwater through the downward migration of precipitation or

MTBE has been identified as a potential carcinogen. The California Department of Health Services has designated a primary maximum contaminent level (MCL) for MTBE in drinking water of 13 micrograms per liter. In addition, a secondary MCL has been established for MTBE of 5 micrograms per liter. Secondary MCLs address taste, odor, and appearance of drinking water (California Department of Health Services, 2001).

irrigation water.² Elevated concentrations of nitrate in groundwater can be caused by several factors, including livestock waste, sewer systems, and fertilizers. Portions of the Llagas Groundwater Basin have nitrate concentrations that exceed California drinking water standards (Santa Clara Valley Water District, 2003).

Perchlorate contamination of groundwater in southern Santa Clara County is being investigated by the CCRWQCB.³ The perchlorate plume is presently known to extend from Tennant Avenue in Morgan Hill southward along Highway 152 to Masten Road, and is bordered on the east and west by Center Avenue and the Monterey Highway. Additional testing of groundwater wells in the region is being conducted as part of the ongoing investigation to better define the existing extent of contamination, wells as far south as Holsclaw Road and as far east as Foothill Avenue have been found to contain perchlorate concentrations in excess of California drinking water standards (Santa Clara Valley Water District, 2003).

REGULATORY FRAMEWORK

Regulatory authorities exist on both the state and federal levels for the control of water quality in California. The major federal legislation governing the water quality aspects of the Park is the Clean Water Act, as amended by the Water Quality Act of 1987. The objective of the act is "to restore and maintain the chemical, physical, and biological integrity of the nation's waters." The State of California's Porter-Cologne Water Quality Control Act (Division 7 of the California Water Code) provides the basis for water quality regulation within California. The State Water Resources Control Board (SWRCB) administers water rights, water pollution control, and water quality functions throughout the state, while the Regional Water Quality Control Boards (RWQCBs) conduct planning, permitting, and enforcement activities.

State and Regional Water Quality Control Board

The primary responsibility for the protection and enhancement of water quality in California has been assigned by the California legislature to the SWRCB and the nine RWQCBs. The SWRCB provides state-level coordination of the water quality control program by establishing statewide policies and plans for the implementation of state and federal laws and regulations. The RWQCBs adopt and implement water quality control plans (basin plans) that recognize the unique characteristics of each region with regard to natural water quality, actual and potential beneficial uses, and water quality problems.

As earlier discussed, the Park is within the jurisdiction of both the SFWRQCB and the CCRWQCB. The SFRWQCB and CCRWQCB have set water quality objectives and established beneficial uses for all surface waters in the region. Due to the extensive reliance on groundwater

Nitrate interferes with the body's ability to transport oxygen in blood, and can cause adverse health effects in infants. The California Department of Health Services has designated a primary MCL for nitrate in drinking water of 45 micrograms per liter (California Department of Health Services, 2003).

Perchlorate is used in the manufacturing of rocket fuel and highway flares and can cause adverse health effects, including interference with thyroid gland functions (Santa Clara Valley Water District, 2003). The California Department of Health Services has designated a primary MCL for perchlorate in drinking water of 4 micrograms per liter (California Department of Health Services, 2003).

for water supply purposes in the region, the SCVWD monitors groundwater conditions in the County, including water depth, subsidence, and groundwater quality. Groundwater monitoring wells are tested for a variety of constituents depending upon well location, and historic and current land use.

Construction Activity Permitting

The SFRWQCB and CCRWQCB monitor and enforce the National Pollutant Discharge Elimination System (NPDES) stormwater permitting for their regions. The SWRCB administers the NPDES Permit Program through its General NPDES Permit. Construction activities of one acre or more are subject to the permitting requirements of the NPDES General Permit for Discharges of Storm Water Runoff Associated with Construction Activity (General Construction Permit). The County must submit a Notice of Intent to the SWRCB in order to be covered by the General Permit prior to the beginning of construction. The General Construction Permit requires the preparation and implementation of a stormwater pollution prevention plan (SWPPP), which must be prepared before construction begins. Components of SWPPPs typically include specifications for best management practices (BMPs) to be implemented during project construction for the purpose of minimizing the discharge of pollutants in stormwater from the construction area. In addition, a SWPPP includes measures to minimize the amount of pollutants in runoff after construction is completed, and identifies a plan to inspect and maintain project BMPs and facilities.

Santa Clara County and Santa Clara Valley Water District

The Santa Clara County Department of Parks and Recreation is responsible for constructing and maintaining drainage facilities in the Park in accordance with Santa Clara County and SCWVD criteria. The SCVWD is the water resources agency established for the purposes of providing comprehensive water management for all beneficial uses and protection from flooding within Santa Clara County. The SCVWD is authorized to take action to carry out is specified purposes, which include the enhancement, protection, and restoration of streams, riparian corridors, and natural resources. As such, the SCVWD is responsible for managing groundwater and surface water supplies and quality, and for providing flood protection and stream stewardship services with Santa Clara County.

In Santa Clara County, storm water discharge from thirteen cities and towns in the Santa Clara Valley, including the portion of the Park located within SFRWQCB jurisdiction, the Coyote Creek watershed, is regulated by the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP). As a member of SCVURPPP, storm water runoff generated this portion of the Park is discharged under an NPDES permit issued by the SFRWQCB. The SFRWQCB recently renewed SCVURPPP's NPDES Permit on October 17, 2001. This permit renewal included revising Provision C.3 to require to require on-site treatment and storage of storm water runoff, and reduced discharge of storm water pollutants to the maximum extent possible (MEP) for development projects that fall under certain use and size characteristics.

In San Martin and surrounding unincorporated areas of Santa Clara County, storm water discharge is regulated under an NPDES Discharge of Storm Water from Small Municipal Separate Storm Sewer System (Small MS4 General Permit) issued by the SWRCB to Santa Clara County. The Small MS4 General Permit requires discharges to develop and implement a Storm Water Management Plan (SWMP) to reduce discharge of storm water pollutants to the MEP. Surface water discharge generated from areas within the park under CCRWCB jurisdiction, including the West Flat Area, would be required to comply with South Santa Clara County's Small MS4 General Permit and SWMP.

IMPACTS AND MITIGATION MEASURES

SIGNIFICANCE CRITERIA

The CEQA Guidelines establish that a significant impact would be expected to occur if the project would:

- Violate any water quality standards or waste discharge requirements;
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted);
- 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 that would result in substantial erosion or siltation on or off the site;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off the site;
- Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems;
- Otherwise substantially degrade water quality;
- Place within a 100-year flood hazard area structures that would impede or redirect flood flows;
- Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of failure of a levee or a dam; or
- Result in inundation by seiche, tsunami, or mudflow.

Due to the location of the Park, certain impacts are not anticipated to effect the area. Located approximately 20 miles from Monterey Bay, the Park would not be inundated during a tsunami. Potential flooding associated with seiche hazards are addressed in the Geology, Geohazards and Soils Section.

IMPACTS AND MITIGATION MEASURES

Impact Hydrology, Floodplains and Water Quality-1: Construction activities could result in soil erosion and increase levels of suspended sediments and contaminants in stormwater run-off, resulting in adverse impacts to surface water quality. Less Than Significant with Mitigation Measures.

Construction activities adjacent to waterways could result in soil erosion and decreased water quality unless erosion control and sedimentation precautions are employed. Excavation, grading, stockpiling, and other earth-moving operations could potentially result in erosion and sedimentation to waterways, especially during the rainy season. Sedimentation to the waterways would degrade water quality for beneficial uses by increasing channel sedimentation and suspended sediment, reducing the flood-carrying capacity, and affecting associated aquatic and riparian habitats, reducing reservoir storage capacity, and increasing the cost of drinking water treatment.

Project-Level Components

As discussed in Chapter 2, Project Description, project-level components include 1) installation of trails, gates, fencing, staging areas, and signage (Western Flat and Mendoza Area); 2) campground improvements, including reduction of density, addition of shower facilities; 3) establishment of hang-gliding launch and landing sites (Slopes and Ridge Area); 4) establishment of equestrian camping at existing overflow parking area (West Flat Area); 5) installation of boat self-launch area for kayaks/non-motorized boats (Lakeside Area); and 6) use of pond for annual Fishability Days event (near Mendoza Ranch). Work at most of these sites would be limited to clearing of the site, with limited grading activities at the launch area and along the trails. Grading and construction would be most intensive at the campground improvements area.

Program-Level Components

As indicated in Chapter 2, subsequent environmental documentation is required for implementation of program-level components; they are here evaluated on a conceptual level. Construction of program-level components would result in impacts to hydrology and water quality, as the proposed facilities would require a substantial amount of construction activities associated with development of the West Flat Area. Development would include construction of an 18-hole golf course, a fishing pond, trails, building and events center structures, Bicycle Park, and other site-specific use areas. In particular, construction of the golf course, equestrian center, events pavilion, and fishing pond could result in temporary and permanent realignment of several small seasonal drainages in the Western Flat area (also addressed in Biological Resources Section). Improvements outside of the West Flat Area include development of picnic areas in the Lakeside Area and minor development in the Mendoza Area.

Construction of program-level components would involve earthmoving and grading, potentially resulting in soil erosion that could affect the water quality of Coyote Lake and other surface water bodies. Compliance with the SWRCB General NPDES Permit and SCVWD Ordinance 83-2, as discussed below, would reduce this impact to a less-than-significant level.

Mitigation Measure Hydrology, Floodplains and Water Quality-1<u>a</u>: The County shall comply with the SWRCB General NPDES Permit and SCVWD regulations to minimize erosion and subsequent transport of sediments and contaminants to nearby surface water bodies.

Construction-related grading and other activities would be required to comply with the Association of Bay Area Governments' (ABAG) Manual of Standards for Erosion and Sediment Control Measures (ABAG, 1995) and with the California Stormwater Quality Association (CASQA), Stormwater Best Management Practice Handbook for Construction (CASQA, 2003a). The County is also required to apply for coverage under the SWRCB's General Construction NPDES permit and The County will-prepare a SWPPP prior to construction activities, as required by the SWRCB's General Permit for Construction Activities.

Implementation of the <u>SWPPP</u>plan starts with the commencement of construction and continues though the completion of the project. Upon completion of the project, the sponsor must submit a Notice of Termination to the SWRCB to indicate that construction is completed. At a minimum, this plan will include the following requirements:

- Excavation and grading activities will be scheduled for the dry season only (April 15 to October 15), to the extent possible. This will reduce the chance of severe erosion from intense rainfall and surface runoff, as well as the potential for soil saturation in swale areas.
- If excavation occurs during the rainy season, storm runoff from the construction area will be regulated through a stormwater management/erosion control plan that may include temporary onsite silt traps and/or basins with multiple discharge points to natural drainages and energy dissipaters. Stockpiles of loose material will be covered and runoff diverted away from exposed soil material. If work is stopped due to rain, a positive grading away from slopes will be provided to carry the surface runoff to areas where flow can be controlled, such as the temporary silt basins. Sediment basin/traps will be located and operated to minimize the amount of offsite sediment transport. Any trapped sediment will be removed from the basin or trap and placed at a suitable location onsite, away from concentrated flows, or removed to an approved disposal site.
- Temporary erosion control measures will be provided until perennial revegetation or landscaping is established and can minimize discharge of sediment into nearby waterways.
 For construction within 500 feet of a water body, <u>fiber rolls and/or gravel bags-straw bales</u> will be placed upstream adjacent to the water body.
- After completion of grading, erosion protection will be provided on all cut-and-fill slopes.
 Revegetation will be facilitated by mulching, hydroseeding, or other methods and should be initiated as soon as possible after completion of grading and prior to the onset of the rainy season (by October 15November 1).
- Permanent revegetation/landscaping will emphasize drought-tolerant perennial ground coverings, shrubs, and trees to improve the probability of slope and soil stabilization without adverse impacts to slope stability due to irrigation infiltration and long-term root development.

- BMPs selected and implemented for the project will be in place and operational prior to the onset of major earthwork on the site. The construction phase facilities will be maintained regularly and cleared of accumulated sediment as necessary.
- Hazardous materials such as fuels and solvents used on the construction sites will be stored
 in covered containers and protected from rainfall, runoff, and vandalism. A stockpile of
 spill cleanup materials will be readily available at all construction sites. Employees will be
 trained in spill prevention and cleanup, and individuals will be designated as responsible
 for prevention and cleanup activities.

Mitigation Measure Hydrology, Floodplains and Water Quality-1b: The County shall minimize temporary or permanent realign of streams or drainage swales associated with the project to the maximum extent possible. Designs for proposed permanent stream realignments shall be prepared by a California-registered geologist or civil engineer experienced in streambed restoration and fluvial processes. All stream realignment activities, both temporary and permanent, shall comply with federal, state, and local agency requirements in order to minimize potential adverse short-term and long-term water quality impacts.

The County is required by SCVWD to obtain a permit prior to commencing any work in and within 50 feet of streams or drainage swales. In addition, permanent alteration of drainages may require a Clean Water Act Section 404 Nationwide permit from the U.S. Army Corps of Engineers and a Clean Water Act Section 401 Water Quality Certification from the CCRWQCB, as discussed in detail in Section 3, Biological Resources. Compliance with CCRWQCB and U.S. Army Corps of Engineers permit requirements would minimize potential degradation of water quality in drainages associated permanent stream realignments. The County shall also obtain a the County shall prepare an erosion control plan specifying measures to prevent erosion/sedimentation problems during project construction immediately adjacent to or within streams or drainage swales. This plan shall include a map of the project site delineating where erosion control measures will be applied, and shall include the following minimum criteria:

- <u>Construction equipment shall not be operated in flowing water, except as may be necessary to construct crossings or barriers.</u>
- <u>Stream diversion structures shall be designed to preclude accumulation of sediment. If this is not feasible, an operation plan shall be developed to prevent adverse downstream effects from sediment discharges.</u>
- Where working areas are adjacent to or encroach on live streams, barriers shall be constructed that are adequate to prevent the discharge of turbid water in excess of specified limits. The discharged water shall not exceed 110 percent of the ambient stream turbidity of the receiving water, if the receiving water is a flowing stream with turbidity greater than 50 nephelometric turbidity unit (NTU), or 5 NTU above ambient turbidity for ambient turbidities that are less than or equal to 40 NTU. If the water is discharged to a dry streambed, the discharged water shall not exceed 50 NTU.
- Material from construction work shall not be deposited where it could be eroded and carried to the stream by surface runoff or high stream flows.
- Riparian vegetation shall be removed only when absolutely necessary.

Compliance with the Clean Water Act, SCVWD requirements, and the SWRCB's NPDES requirements, which include the creation of a project-specific SWPPP as discussed above, compliance with CCRWQCB and U.S. Army Corps of Engineers permits, and development of an erosion control plan would ensure that potential adverse impacts to surface water associated with project construction would be less than significant. minimize or eliminate potential water quality impacts associated with surface water runoff during construction activities, resulting in a less than significant impact.

Impact Significance After Mitigation: Less Than Significant.

Impact Hydrology, Floodplains and Water Quality-2: Creation of new trails may increase erosion by altering existing drainage patterns. Less Than Significant with Mitigation Measures.

Project- and Program-Level Components

Increased turbidity and contamination from runoff and soil erosion is a primary concern in regards to water quality impacts from Park development. Trails frequently result in a change to drainage patterns that create erosion issues. <u>As noted in the proposed Master Plan, some trails may need to be closed seasonally due to soil conditions.</u> Potential erosion associated with proposed trails is addressed in Geology, Geohazards and Soils Section.

Mitigation Measure Hydrology, Floodplains and Water Quality-2: Implement Mitigation Measure Geology, Geohazards and Soils-4. Trails shall be designed to minimize alterations to existing drainage patterns, prohibit trail short-cutting, and protect water quality in Coyote Lake. In addition, the County shall post information in equestrian staging areas to educate park users about potential adverse water quality impacts associated with undesignated trail use.

Impact Significance After Mitigation: Less Than Significant.

Impact Hydrology, Floodplains and Water Quality-3: An increase in impervious surfaces associated with construction of project- and program-level components may increase surface water run-off, potentially exceeding drainage system capacities, resulting in downstream flooding. Less Than Significant with Mitigation Measures.

Project- and Program-Level Components

The majority of project-level components will not create newly impervious surfaces. The proposed shower facility in the Lakeside Area would cover a relatively small area and would result in a less than significant increase in surface water run-off to Coyote Lake. Program-level

components may significantly increase surface water run-off due to construction of an events pavilion, Satellite Ranger Station, Bicycle Park, golf course, and paved parking lots.

Project- and program-level components would not be built within the 100-year floodplain around Coyote Lake, therefore construction of these facilities would not impede or redirect floodwater flows. No proposed project-level components would have an impact on flooding that could affect State Highway 152.

Mitigation Measure Hydrology, Floodplains and Water Quality-3<u>a</u>: Potential mitigation may include installation of a new subsurface storm drainage system in the West Flat Area, and evaluation of San Martin's adjoining existing storm drain system to incorporate increased flow volumes originating from the Park.

Mitigation Measure Hydrology, Floodplains and Water Quality-3b: Existing pervious surfaces shall be preserved to minimize the amount of newly generated storm runoff to the greatest extent possible, in accordance the recommendations provided in the Bay Area Stormwater Management Agencies Association's (BASMAA) Start at the Source Design Guidance Manual for Stormwater Quality Protection (BASMAA, 1999). The County shall also comply with Santa Clara County's Storm Water Drainage Manual, and South Santa Clara County and Martin's Small MS4 NPDES permit and SWMP requirements in order to minimize increases in stormwater discharge associated with project and program level components located within the CCRWQCB jurisdiction.

The County shall prepare an erosion control plan specifying measures to prevent erosion/sedimentation problems during project construction. Include a map of the project site delineating where erosion control measures will be applied. Include the following minimum criteria:

- Construction equipment shall not be operated in flowing water, except as may be necessary to construct crossings or barriers.
- Where working areas are adjacent to or encroach on live streams, barriers shall be constructed that are adequate to prevent the discharge of turbid water in excess of specified limits.
- Material from construction work shall not be deposited where it could be eroded and carried to the stream by surface runoff or high stream flows.
- All permanent roads shall be surfaced with materials sufficient to maintain a stable road surface.
- All disturbed soil and fill slopes shall be stabilized in an appropriate manner.
- Surface drainage facilities shall be designed to transport runoff in a nonerosive manner.
- Riparian vegetation shall be removed only when absolutely necessary.
- There shall be no discharge of petroleum products, cement washings, or other construction materials.

- Erosion control measures shall be in place prior to dam removal and maintained in good repair.
- Stream diversion structures shall be designed to preclude accumulation of sediment. If this
 is not feasible, an operation plan shall be developed to prevent adverse downstream effects
 from sediment discharges.
- Erosion control measures shall be inspected daily during dam removal and monthly following removal, and repaired as required.
- Implement stormwater management measures to reduce nonpoint source pollution discharge. This could include measures such as oil/sediment containment or street sweeping.
- Remove hazardous waste materials generated during implementation of the project from the project site immediately.
- Dispose of volatile wastes and oils in approved containers for removal from the project site to avoid contamination of soils, drainages, and watercourses. Keep absorbent pads, booms, and other materials onsite during projects that use heavy equipment to contain oil, hydraulic fluid, solvents, and hazardous materials spills.

Impact Significance After Mitigation: Less Than Significant.

Impact Hydrology, Floodplains and Water Quality-4: Proposed program-level components, including those resulting in increased impervious surface area, may result in long-term adverse water quality impacts. Less Than Significant with Mitigation Measures.

As previously noted, program-level components may also significantly increase surface water run-off due to construction of an events pavilion, satellite ranger station, bicycle park, golf course, and paved parking lots.

Program-Level Components

Program-level equestrian facility elements and trail use potentially considered in the Master Plan document may contribute to an increase in water quality contamination in Park waterways and the reservoir. Equestrian facilities result in high levels of fecal coliforms and nitrate concentrations in surface runoff from the manure. Impacts to water quality of Coyote Lake, which is classified as an emergency domestic water supply, would not result from equestrian use as no equestrian use is allowed on trails adjacent to the lake. Multi-use trails would be horizontally separated from the lake by a minimum of 500 feet, and vertically separated by a minimum of 50 feet Additionally, the trail would be located upslope of the lakeside road, and no direct access would be available from the trail to the lake shore. Preventing equine trails from traversing directly through waterways will also decrease potential impacts.

The equestrian/agricultural education center may include an arena, animal showing areas, stalls and barns that would be used for events, as well as facilities to support the ongoing grazing

program throughout the park. Concentration of livestock will require appropriate methods for disposal of animal waste.

The Golf Course element of the Master Plan also creates potential issues for water quality impacts. Pesticides, herbicides and fertilizers contaminate runoff to receiving waters and often also to groundwater. As discussed previously, existing groundwater quality problems in the region include elevated concentrations of nitrate and perchlorate. Nitrogen is the primary component of turf grass fertilizers. Excessive application of fertilizers in association with golf course construction and maintenance may result in increased nitrate concentrations in underlying groundwater. Additionally, reliance on local groundwater resources to supply water demands associated with golf course irrigation could also alter groundwater flow patterns by pumping groundwater at a rate that alters groundwater flow patterns in the source aquifer. Altering existing groundwater flow patterns may have several effects, including potentially influencing migration of perchlorate, and other constituents, in multiple groundwater aquifers. However, Santa Clara County Valley Water District and the City of Gilroy Municipal Water Treatment Facility have been identified during preliminary planning as potential suppliers of recycled water to meet golf course irrigation needs (Santa Clara County Parks and Recreation, SOURCE: pers. comm., Sue Tippetts (SCVWD) and Jim Gasser (SCRWA)).

As previously noted, program-level components may also significantly increase surface water run-off due to construction of an events pavilion, satellite ranger station, bicycle park, golf course, and paved parking lots.

Mitigation Measure Hydrology, Floodplains and Water Quality-4a: Implement Mitigation Measures Hydrology, Floodplains and Water Quality-3a and 3b. In addition, the County shall prepare and develop design specifications for a Storm Water Design Plan (SWDP) to significantly reduce and where feasible, eliminate, the off-site migration of sediments and storm water pollutants associated with storm water runoff generated from program level components, including as parking lots, the equestrian center and golf course. The SWDP shall incorporate appropriate source control and treatment measures recommended in the California Storm Water Best Management Practice Handbook for New Development and Redevelopment (CASQA, 2003b), Santa Clara County's Storm Water Drainage Manual, and Non-Point Source Ordinance, and standards developed South Santa Clara County's SWMP and Small MS4 NPDES permit for program level components located within CCRWQCB jurisdiction or SCVURPPP and Santa Clara Countywide NPDES permit, including new C.3 regulations, for components located within SFRWQCB jurisdiction. The SWDP shall adhere to the County's Integrated Pest Management and Pesticide Use Ordinance (County of Santa Clara, 2002) and develop a turf grass management plan for the golf course as a component of the SWDP to minimize the amount of fertilizer and other chemicals that are used resulting in lower levels of pollutants to surface and ground water, with the goal of reducing potential discharge of such chemicals to local waterways. Manure management plans shall also be developed for the equestrian staging and camping areas, and the equestrian/agricultural education center as part of the SWDP.

Mitigation Measure Hydrology, Floodplains and Water Quality-4b: Golf course design shall minimize turf grass coverage to the maximum extent possible. Water supply for golf

course construction, operation, and maintenance shall minimize potential reliance on local groundwater sources.

Santa Clara Valley Water District requires permit submittal and approval prior to installation of a groundwater well. Permit requirements include specification of well location, construction, well type and intended water usage, and anticipated groundwater pumping rates. Finalized golf course design that incorporated local groundwater resources would therefore be subject to review and approval of proposed well location(s) and groundwater pumping rates by the Santa Clara Valley Water District. Compliance with Santa Clara Valley District permit requirements would therefore minimize potential influences on perchlorate plume migration in the region.

Impact Significance After Mitigation: Less Than Significant.

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 Design Guidance Manual for Stormwater Quality Protection, 1999 edition.
- <u>California Stormwater Quality Association (CASQA), Stormwater Best Management Practice</u>

 <u>Handbook for New Development and Redevelopment, http://www.cabmphandbooks.org/, prepared by Camp Dresser & McKee and Larry Walker Associates, January 2003a.</u>
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CHAPTER 4

MASTER PLAN ALTERNATIVES

METHODOLOGY

This alternatives analysis discusses the No Action Alternative, Alternative 1 (No Golf Course), and Alternative 2 (Trail Access Only). Table <u>45-1</u>, at the end of this chapter, presents a summary comparison of the alternatives impacts. Alternatives considered but dismissed during the planning process are also discussed. The California Environmental Quality Act (CEQA) Guidelines Section 15126.6(a) require EIRs to describe a range of reasonable alternatives to a project or its location that would attain the basic objectives of the project, but would avoid or reduce significant effects of the project, and to evaluate the comparative merits of the alternatives. The Guidelines set forth the following criteria for selecting alternatives:

- 1. ...[T]he discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly. (§15126.6[b])
- 2. The range of potential alternatives shall include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects. (§15126.6[c])
- 3. The specific alternative of "no project" shall also be evaluated along with its impact. (§15126.6[e][1])
- 4. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project. The range of feasible alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision making. (§15126.6[f])

MASTER PLAN ALTERNATIVES SCREENING PROCESS

Prior to preparation of the Coyote Lake Harvey Bear Ranch County Park Master Plan, the County conducted an analysis of natural resources, cultural resources, and county-wide recreational trends. A Task Force of representatives from the public was convened and met publicly to consider elements to include within the Master Plan. A Technical Advisory Committee consisting of representatives from local, state and federal public agencies also was convened to provide input and guidance on the formulation of the Master Plan. A series of public workshops was held to present the Master Plan as it progressed and to solicit public comment. During this process, a

preliminary Environmental Analysis was completed which evaluated each of the proposed Master Plan components and alternatives. The Environmental Analysis was considered together with public and agency comments to form the proposed Master Plan and the three Master Plan alternatives described below.

NO ACTION ALTERNATIVE

DESCRIPTION

Under the No Action Alternative, neither the Master Plan nor the Natural Resources Management Plan would be implemented. The County would continue to implement existing protection, operations, and maintenance policies. The existing access to the Lakeside area would remain as is. Public access to this area would likely increase in proportion to population growth and recreational demand. No access would be granted to the Bear or Mendoza Ranch properties and no Master Plan improvements would occur. Park patrols and operation, grazing leases, erosion control, treatment of non-native species and pests, and road and facilities maintenance would continue at existing levels and intensities.

IMPACTS AND REASONS FOR REJECTION

Under the No Action Alternative, neither the Master Plan nor the Natural Resources Management Plan would be implemented and the County would continue to implement existing protection, operations, and maintenance policies. No access would be granted to the Bear or Mendoza Ranch properties and no unified Park improvements would occur. Implementation of actions and mitigation measures similar to those identified in the proposed Master Plan would likely reduce impacts, however, implementation of these actions and measures would occur on an individual basis, without the comprehensive management strategies presented in the Master Plan. The No Project Alternative would not address, or would only address in a partial and unsystematic manner, the goal of the Master Plan to enhance regional coordination and trail opportunities, provide a variety of sustainable interpretation and recreation opportunities, increase public access, and preserve and enhance natural and cultural resources. The No Project Alternative also would violate the County Parks Charter Fund directive to provide public parkland as these funds were used to purchase the Bear and Mendoza Ranches. Therefore, this alternative was rejected.

MASTER PLAN ALTERNATIVE 1: NO GOLF COURSE

DESCRIPTION

Alternative 1 was evaluated during the Master Plan planning process under the title Alternative B. This alternative is similar to the proposed Master Plan with the mix of amenities offered. The primary difference between this alternative and the proposed Master Plan is the substitution of a 500 person events pavilion and recreational vehicle campground in lieu of the golf course proposed by the Master Plan for the Western Flat area. Although the golf course would not be

constructed, Alternative 1 would still be a positive contributor to the long term cost recovery of the Park.

Alternative 1 includes the following elements:

- 500 person events pavilion
- Bicycle Park
- Campground improvements: addition of showers and amphitheatre, and reduction of campground density
- Completion of staging areas
- Dog off-leash area
- Environmental education center
- Equestrian/agricultural events center
- Family and group picnic areas
- Fishing pond
- Hang-gliding launch and emergency landing site in northern area
- Hang-gliding launch and landing sites in Mendoza Area
- Historic restoration and interpretation
- Implementation of the Natural Resource Management Plan
- Improvements to existing Lakeside entrance area, visitor center and maintenance yard
- Informal lawn play area
- Lakeside group picnic area
- Lakeside pathway and fishing improvements
- Lakeside roadway safety improvements
- Mendoza Area family picnic sites
- New Lakeside campground (based on demand)
- Overflow parking/equestrian camping in West Flat Area by Special Use Permit
- Phase 1 trails, gates and fencing, staging areas at Western Flat Area and Mendoza Area, and trails naming and signage
- Phase 2 trails as described in the Trails Plan
- Phase 3 trails as described in the Trails Plan
- Re-alignment of the West Flat entrance road
- Recreational vehicle campground
- Self-launch areas for kayaks/non-motorized boats
- Use of southern pond for annual Fishability Days event
- Youth campground

IMPACTS AND REASONS FOR REJECTION

Under Alternative 1, the Park would implement program elements in the proposed Master Plan that differ from the proposed project only in the Western Flat Area, which would not include the golf course, and would support a larger events pavilion and recreational vehicle camping. All other components of the proposed Master Plan would be the same for the project- and program-level components in the Lakeside Area, Mendoza Ranch Area, Slopes and Ridge Area, the trails

plan and the Natural Resources Management Plan. Implementation of actions and mitigation measures similar to those identified in the proposed Master Plan would likely reduce impacts. This alternative was rejected because it would not generate sufficient revenue to off-set long-term management costs of the Park and would not serve as wide a range of recreational uses as the Preferred Alternative (see Goals and Need for the Master Plan in Chapter 2, Project Description).

MASTER PLAN ALTERNATIVE 2: TRAIL ACCESS ONLY

DESCRIPTION

Alternative 2 is a trail access-only option that would respond only to the public's demand for pedestrian, equestrian and bicycle access to the Park. The trails and access plan would utilize only existing ranch roads and no new trails or re-routing of existing trails to avoid steep segments would be developed. Basic access and staging would be constructed for both the Western Flat and Mendoza Ranch areas. Unlike the No Action Alternative, Alternative 2 would provide access to both the Bear or Mendoza Ranch properties.

Alternative 2 includes the following elements:

- Completion of staging areas
- Trail access on existing ranch roads
- Limited access and staging for the Western Flat and Mendoza Ranch areas
- Limited trails naming and signage

IMPACTS AND REASONS FOR REJECTION

Alternative 2 provides only for the most basic access to the Park by utilizing existing system of ranch roads, and by developing two access and staging areas at areas that currently lack such facilities. Under this Alternative, the County would continue to implement existing protection, operations, and maintenance policies. The Natural Resource Management Plan would not be implemented and no unified Park improvements would occur. Implementation of actions and mitigation measures similar to those identified in the proposed Master Plan (but only those relevant to trails access) would likely reduce impacts. This Alternative would not address, or would only address in a partial and unsystematic manner, the goal of the Countywide Trails Master Plan Update to enhance regional coordination and trail opportunities, provide a variety of sustainable interpretation and recreation opportunities, and increase public access, nor would it meet the Master Plan goals and preserve and enhance natural and cultural resources. In addition, this alternative would not generate sufficient revenue to off-set long-term management costs of the Park (see Goals and Need for the Master Plan in Chapter 2, Project Description). Therefore, this alternative was rejected.

ALTERNATIVES CONSIDERED BUT DISMISSED

MASTER PLAN ALTERNATIVE A

Alternative A was developed during the Master Plan planning process simultaneous with the proposed Master Plan (Master Plan Alternative C) and Alternative 1 (Master Plan Alternative B, described above) Alternative A is similar to both those alternatives with a mix of amenities offered. The primary difference between this alternative and the proposed Master Plan is the lack of an events pavilion or recreational vehicle camping facility in the Western Flat Area. An 18-hole golf course is common to this Alternative and the proposed Master Plan.

Alternative A included the following elements:

- Bicycle Park
- Campground improvements: addition of showers and amphitheatre, and reduction of campground density
- Completion of staging areas
- Dog off-leash area
- Environmental education center
- Equestrian/agricultural events center
- Family and group picnic areas
- Fishing pond
- Golf course
- Hang-gliding launch and emergency landing site in northern area
- Hang-gliding launch and landing sites in Mendoza Area
- Historic restoration and interpretation
- Implementation of the Natural Resource Management Plan
- Improvements to existing Lakeside entrance area, visitor center and yard
- Informal lawn play area
- Lakeside group picnic area
- Lakeside pathway and fishing improvements
- Lakeside roadway safety improvements
- Mendoza Area family picnic sites
- New Lakeside campground (based on demand)
- Overflow parking/equestrian camping in West Flat Area by Special Use Permit
- Phase 1 trails, gates and fencing, staging areas at Western Flat Area and Mendoza Area, and trails naming and signage
- Phase 2 trails as described in the Trails Plan
- Phase 3 trails as described in the Trails Plan
- Re-alignment of the West Flat entrance road
- Self-launch areas for kayaks/non-motorized boats
- Use of southern pond for annual Fishability Days event
- Youth campground

IMPACTS AND REASONS FOR REJECTION

Under Alternative A, the Park would implement program elements in the proposed Master Plan that differ from the proposed project only in the Western Flat Area, which would not include the events pavilion and recreational vehicle camping. All other components of the proposed Master Plan would be the same for the project- and program-level components in the Lakeside Area, Mendoza Ranch Area, Slopes and Ridge Area, the trails plan and the Natural Resources Management Plan. Implementation of actions and mitigation measures similar to those identified in the proposed Master Plan would likely reduce impacts. This alternative would not generate sufficient revenue to off-set long-term management costs of the Park (see Goals and Need for the Master Plan in Chapter 2, Project Description). Therefore, this alternative was rejected.

ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The CEQA Guidelines Section 15126(d)(4) require an EIR to identify an environmentally superior alternative. The environmentally superior alternative was determined to be Alternative 1 because it would reduce development and development-related effects and would implement the Natural Resources Management Plan. Among the other alternatives, the No Action Alternative and Alternative 2 would also reduce development and development-related affects, however neither alternative would realize the benefits of the Natural Resources Management Plan. The No Action Alternative, Alternative 1, nor Alternative 2 would generate sufficient revenue to off-set long-term management costs of the Park. Therefore, these alternatives were rejected.

TABLE 4-1 COMPARISON OF MASTER PLAN ALTERNATIVES IMPACTS

Preferred Alternative: Proposed Master Plan

No Action Alternative

Master Plan Alternative 1: No Golf Course

Master Plan Alternative 2: Trails Access Only

Air Quality

- Construction of facilities and improvements and implementation of controlled burning conducted under the Natural Resources Management Plan would cause criteria pollutant and dust emissions. Actions that reduce potential impacts to a less than significant level would be implemented.
- Increased access would not result in significant emissions related to increased vehicle trips.
- No new facilities would be constructed under the No Action alternative. If improvements to existing facilities are constructed, criteria pollutant and dust emissions would occur. Actions that reduce potential impacts could be proposed, similar to those proposed under the preferred alternative. However, implementation of actions and mitigation measures would not occur under a comprehensive plan. No controlled burning would occur.
- Public access would be less than under the preferred alternative. Therefore, potential operational impacts would not be significant.
- · Construction of facilities and improvements and implementation of controlled burning conducted under the Natural Resources Management Plan would result in similar air quality impacts as described for the preferred alternative. Because no golf course would be constructed, air quality effects from vehicle emissions and grading would be reduced compared to the preferred alternative. Actions that reduce potential impacts to a less than significant level would be similar to those under the preferred alternative. The level of effort required would be similar to that required under the preferred alternative.
- Increased access would be similar to preferred alternative. Therefore, this alternative would not result in significant emissions impacts.

- Allows the least amount of new facilities (e.g., trails and trail staging areas only) and resultant air quality impacts. Actions that reduce potential impacts of these facilities to a less than significant level would be similar to those under the preferred alternative.
 However, the level of effort required would be less than under the preferred alternative.
- Public access would be less than under the preferred alternative. Therefore, potential operational impacts would not be significant.

Preferred Alternative: Proposed Master Plan

No Action Alternative

Master Plan Alternative 1: No Golf Course

Master Plan Alternative 2: Trails Access Only

Biological Resources

- · Construction of new facilities, improvements, and implementation of management actions could impact biological resources. Actions that would reduce potential impacts to a less than significant level include implementation of the Natural Resources Management Plan, best management practices during construction, and avoidance and compensation measures for sensitive species and sensitive habitats.
- Increased public access could impact biological resources. Includes actions and mitigation measures that would reduce potential impacts to a less than significant level.
- No new facilities would be constructed under the No Action alternative. If improvements to existing facilities are constructed, affects to biological resources could occur. Actions that reduce potential impacts could be proposed, similar to those proposed under the preferred alternative. However, implementation of actions and mitigation measures would not occur under a comprehensive plan.
- The Natural Resources Management Plan would not be implemented.
 Therefore, the beneficial effects of this program would not be realized.
- Public access would be less than under the preferred alternative. Therefore, potential operational impacts would not be significant.
- · Construction of facilities and improvements and implementation of the Natural Resources Management Plan would result in similar effects to biological resources as described for the preferred alternative. Because no golf course would be constructed, effects to biological resources would be reduced compared to the preferred alternative. Actions that reduce potential impacts to a less than significant level would be similar to those under the preferred alternative. The level of effort required would be similar to that required under the preferred alternative.
- Allowed public use would be similar to preferred alternative and would result in similar impacts to natural resources. Actions would be proposed that reduce potential impacts, similar to those proposed under the preferred alternative.

- Allows the least amount of new facilities and improvements that could impact natural resources (e.g., trails and trail staging only). Potential effects to Bay checkerspot butterfly habitat would be similar to those described for the preferred alternative. Actions that reduce potential impacts would be included, but would not be as extensive as under the preferred alternative.
- The Natural Resources
 Management Plan would
 not be implemented.
 Therefore, the beneficial
 effects of this program
 would not be realized.
- Public access would be less than under the preferred alternative. Therefore, potential operational impacts would not be significant.

Preferred Alternative: Proposed Master Plan

No Action Alternative

Master Plan Alternative 1: No Golf Course

Master Plan Alternative 2: Trails Access Only

Cultural Resources

- Construction of new facilities could result in cultural resource impacts.
 Measures to protect cultural resources would be implemented that would reduce impacts to a less than significant level.
- Increased public access could result in damage to cultural resources.
 Measures to protect cultural resources would be implemented that would reduce impacts to a less than significant level.
- No new facilities would be constructed under the No Action alternative. If improvements to existing facilities are constructed, affects to cultural resources could occur. Actions that reduce potential impacts could be proposed, similar to those proposed under the preferred alternative. However, implementation of actions and mitigation measures would not occur under a comprehensive plan.
- Public access would be less than under the preferred alternative. Therefore, potential operational impacts would not be significant.
- Construction of facilities would result in similar potential for cultural resource impacts as preferred alternative.
 Because no golf course would be constructed, effects to cultural resources would be reduced compared to the preferred alternative. Actions to protect cultural resources would be implemented.
- Allowed public access would result in similar potential for cultural resource damage as preferred alternative.
 Actions to protect cultural resources would be implemented.
- Construction of fewer new facilities would result in less potential for cultural resource impacts. Actions to protect cultural resources would be implemented.
- Public access would be less than under the preferred alternative. Therefore, potential operational impacts would not be significant.

Geology, Geohazards and Soils

- Construction of additional facilities would increase potential for erosion and landslides. Actions to reduce soil erosion, and to identify, map, and reduce threats associated with landslides, would be implemented and would reduce impacts to a less than significant level.
- Increased access would increase the number of people potentially exposed to seismic hazards.
 Mitigation measures would reduce potential impacts to a less than significant level.
- No new facilities would be constructed under the No Action alternative. If improvements to existing facilities are constructed, minor, actions to reduce soil erosion, and to identify. map, and reduce threats associated with landslides, would not be implemented as part of a comprehensive plan. Actions could be proposed that would reduce potential impacts, similar to those proposed under the preferred plan.
- Public access would be less than under the preferred alternative. Therefore, potential seismic hazards would not be significant.
- Construction of facilities would result in similar potential for erosion and landslides as the preferred alternative. Because no golf course would be constructed, potential erosion effects of large-scale grading would be reduced compared to the preferred alternative. Actions to reduce impacts would be implemented.
- Allowed public access would be similar to the preferred project, and would result in similar potential for exposure to geologic hazards. Actions to reduce seismic impacts would be implemented.

- Construction of fewer new facilities would result in less potential erosion and landslides.
- Public access would be less than under the preferred alternative. Therefore, potential seismic impacts would not be significant.

Preferred Alternative: Proposed Master Plan

No Action Alternative

Master Plan Alternative 1: No Golf Course

Master Plan Alternative 2: Trails Access Only

Hazardous Materials

- Construction of facilities and improvements could expose hazards. Implementation of mitigation measures would reduce impacts to less than significant.
- Increased access could result in greater use, storage, and dumping of hazardous materials, but would not result in potentially significant impacts.
- No new facilities would be constructed under the No Action alternative. If new facilities construction occurs, hazards could be exposed. Implementation of mitigation measures similar to those proposed under preferred alternative would be required to reduce impacts to less than significant.
- Public access would be less than under the preferred alternative. Therefore, potential exposure to hazardous materials would be less that preferred alternative, and impacts would be less than significant.
- Construction of facilities
 would result in reduced
 potential for exposure to
 hazardous materials as the
 preferred alternative.
 Because no golf course
 would be constructed,
 potential hazardous
 materials exposure during
 grading would be reduced.
 Actions to reduce impacts
 would be implemented.
- Allowed public access
 would be similar as for the
 as preferred alternative, and
 would result in similar
 potential for exposure to
 hazardous materials.
 Because no golf course
 would be constructed,
 potential hazardous
 materials use, storage and
 risk of exposure would be
 less than the preferred
 alternative. Actions to
 reduce seismic impacts
 would be implemented.
- Construction of fewer new facilities would result in less potential exposure to hazardous materials.
- Public access would be less than under the preferred alternative. Therefore, potential exposure to hazardous materials would not be significant.

Preferred Alternative: Proposed Master Plan

No Action Alternative

Master Plan Alternative 1: No Golf Course

Master Plan Alternative 2: Trails Access Only

Hydrology, Floodplains and Water Quality

- New facilities construction could result in water quality impacts. Actions to maintain and improve water quality during and after construction would be implemented. With these actions, impacts would be less than significant.
- Increased public use could result in water quality impacts. Actions to maintain and improve water quality would be implemented. With these actions, impacts would be less than significant.
- No new facilities would be constructed under the No Action alternative. If new facilities are constructed, water quality impacts could occur. Watershed management would continue under existing policies and could reduce potential impacts, but the NRMP would not be implemented, and the benefits of that plan would not be realized. Actions could be proposed that would reduce impacts, similar to those proposed under the preferred alternative.
- Public access would be less than under the preferred alternative, therefore potential water quality impacts would be reduced. Actions could be proposed that would reduce impacts, similar to those proposed under the preferred alternative.
- · Reduced construction of new facilities would result in less potential impacts to water quality than the preferred alternative. Because no golf course would be built, temporary or permanent realignment of several seasonal streams in the Western Flat would not occur. Elsewhere in the Park, actions to maintain and improve water quality would be implemented, similar to those proposed under the preferred alternative. However, level of effort required to reduce impacts would be less than under the preferred alternative.
- Allowed public access
 would be less than the
 preferred alternative,
 therefore lower potential
 water quality impacts
 would result. Actions to
 maintain and improve water
 quality would be
 implemented, similar to
 those proposed under the
 preferred alternative.
 However, level of effort
 required to reduce impacts
 would be less than under
 the preferred alternative.
- Construction of fewer new facilities would result in less potential impacts to water quality. New trails and staging areas would incorporate measures to reduce construction and operational impacts to less than significant. The NRMP would not be implemented, and the benefits of that plan for water quality would not be realized.
- Public access would be less than under the preferred alternative. In particular, there would be fewer Park visitors in the Western Flat, and the temporary or permanent realignment of seasonal streams would not be required. Therefore, potential impacts to not be significant.

Land Use, Plans and Policies

- Implementation of the preferred plan would not conflict with land use plans and policies.
- No changes in land use plans and policies would result from the No Action alternative.
- Reduced public access and facilities would conflict with the purpose and objective of acquiring the Park.
- Similar to the preferred plan, implementation of this alternative would not conflict with land use plans and policies.
- Similar to the preferred plan, implementation of this alternative would not conflict with land use plans and policies.
- Reduced public access and facilities would conflict with the purpose and objective of acquiring the Park.

	Preferred Alternative: Proposed Master Plan	No Action Alternative	Master Plan Alternative 1: No Golf Course	Master Plan Alternative 2: Trails Access Only
Noise	 Construction of new facilities would result in noise increases. However, impacts would be less than significant. Increased public use would result in increased noise related to traffic and recreation use. However, impacts would be less than significant. 	 No new facilities would be constructed under the No Action alternative. If new facilities and improvements are constructed, noise increases would result. However, impacts would be less than significant. Public access would be less than under the preferred alternative. Therefore potential noise impacts would be reduced and impacts would be less than significant. 	 Construction of new facilities would result in noise increases. Because no golf course would be built, construction noise (i.e., grading and truck traffic would be reduced compared with the preferred plan. Actions to reduce noise to less than significant levels would be incorporated. Restricted access would result in lower potential for increased noise than under preferred alternative, and impacts would be less than significant. 	 Construction of trails and staging areas would result in reduced, short-term noise compared to the preferred alternative and would be less than significant. Public access to trails would result in reduced traffic and recreation noise than the preferred alternative, and impacts would be less than significant.
Public Services and Utilities	 Construction of new facilities and improvement of existing facilities could result in potential utilities and public services impacts. Actions that reduce potential impacts to a less than significant level would be implemented. Increased public access could result in potential utilities and public services impacts, including increased need for medical emergency and wildland fire response. Actions that reduce potential impacts to a less than significant level would be implemented. 	 No new facilities would be constructed under the No Action alternative. Potential demand for public utilities and services would be less than under the preferred alternative. If new facilities are constructed, impacts could occur. Actions could be proposed that would reduce impacts, similar to those proposed under the preferred alternative. Public access would be less than under the preferred alternative. Therefore, would be the same as existing. 	 Construction of new facilities and improvement of existing facilities would not result in potential utilities and public services impacts. Because no golf course would be built, potential impacts from increased need for water and electricity would be reduced. Increased public access could result in potential utilities and public services impacts, including increased need for medical emergency and wildland fire response. Actions that reduce potential impacts to a less than significant level would be implemented. 	 New facilities, limited to trails and staging areas, would not require additional public services or utilities, therefore potential demand would be less than the preferred alternative. Public access would be reduced compared to the preferred alternative, therefore impacts to public services would be less.
Recreation	Construction of new facilities would benefit recreation access and opportunities.	No new facilities would be construction under the No Action alternative. Therefore, recreational access and opportunities would be substantially less than the preferred alternative.	Because no golf course would be built, recreational benefits would be less than the preferred alternative. Other access and recreational opportunities would be the same as the preferred project.	Trails and staging areas would provide minimal access and recreational opportunities for most of the Park compared to the preferred alternative.

	Preferred Alternative: Proposed Master Plan	No Action Alternative	Master Plan Alternative 1: No Golf Course	Master Plan Alternative 2: Trails Access Only
Transportation and Circulation	Increased access could result in traffic safety hazards. Implementation of mitigation measures would be required that would reduce impacts to a less than significant level.	 No new facilities would be constructed under the No Action alternative. Restricted access would increase traffic in proportion to local population and demand for recreation. Reduced public access would not increase traffic safety hazards. 	Construction of new facilities would increase traffic. Because no golf course would be built, traffic impacts would be less than the preferred alternative. Restricted access would increase traffic in proportion to local population and demand for recreation. Some increase in traffic safety hazards could occur. Implementation of similar mitigation measures as under the preferred alternative would reduce potential impacts.	 New trails and staging areas would marginally increase traffic impacts, but would not be significant. Increased access could result in traffic safety hazards similar to the preferred alternative. Implementation of mitigation measures similar to the preferred alternative would be required.
Visual Resources	New facilities and improvements would result in visual change. With the exception of the golf course, new facilities would blend with the existing facilities. Management actions to reduce visual impacts include design requirements for structures and landscaping. Increased access could result in increased litter and facilities damage. Implementation of management actions would reduce impacts to less than significant.	No new facilities would be constructed under the No Action alternative. If new facilities and improvements are constructed, visual change would result. Actions similar to those included in the preferred plan could be implemented. However, implementation would not occur as part of a comprehensive plan.	Because no golf course would be built, construction of new facilities would result in less potential impacts to visual resources than the preferred alternative. Elsewhere in the Park, design requirements for structures and landscaping would be implemented, similar to those proposed under the preferred alternative. However, level of effort required to reduce impacts would be less than under the preferred alternative. Allowed public access would be less than the preferred alternative, therefore fewer visual impacts would result.	 Visual change related to new staging areas would not be significant, and would be compensated to the extent necessary by implementation of design requirements similar to the preferred plan. Public use and potential for litter and damage would be reduced compared to the preferred alternative.
Growth Inducement	Would not result in growth inducement.	Would not result in growth inducement.	Would not result in growth inducement.	Would not result in growth inducement.

CHAPTER 5

CEQA STATUTORY SECTIONS

INTRODUCTION

This section summarizes the findings with respect to short-term versus long-term productivity of the Park, significant, unavoidable environmental impacts, growth-inducing impacts, and cumulative impacts of the proposed Master Plan.

SHORT-TERM VERSUS LONG-TERM PRODUCTIVITY

CEQA Section 21100 requires the relationship between local short-term uses of the environment and the maintenance and enhancement of long-term productivity to be discussed in an EIR. This discussion includes the cumulative and long-term effects of the proposed project which adversely affect the environment. Special attention is given to impacts which narrow the range of beneficial uses of the environment or pose long-term risks to health or safety, as described below.

Construction of facilities proposed under the Master Plan would foreclose the option of using the site for another purpose in the future, or of retaining that particular site in an undeveloped state, thereby maintaining its existing habitat value for wildlife. Implementation of the proposed Master Plan would result in a long-term commitment of energy resources to build, operate, and maintain proposed facilities.

SIGNIFICANT IRREVERSIBLE EFFECTS

CEQA states that impacts associated with a proposed project may be considered to be significant and irreversible for the following reasons:

- Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible, since a large commitment of such resources makes the removal or non-use thereafter unlikely;
- Primary impacts and, particularly, secondary impacts (such as highway improvement that
 provides access to a previously inaccessible area) generally commit future generations to
 similar uses; and,
- Irreversible damage can result from environmental accidents associated with the project.

Implementation of the Master Plan would allow construction of new facilities that in turn could result in short-term, construction-related impacts and impacts associated with increased public access and use. The implementation of mitigation measures identified herein would reduce the

identified effects and therefore would not result in significant irreversible environmental impacts or commitment of resources. However, the commitment of land, resources, and energy for project facilities would be a long-term commitment. Once specific projects have been developed, it is unlikely that circumstances would arise that could justify the return of the land occupied by the Master Plan facilities to its original condition.

GROWTH INDUCEMENT

Section 15126.2 (d) of the CEQA Guidelines requires agencies to address potential growth-inducing effects of their actions. Growth-inducing effects are defined as those effects that could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Growth-inducing effects could result from projects that would remove obstacles to population growth (a major expansion of a wastewater treatment plant might, for example, allow for more construction in service areas). Increases in population could tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. The Guidelines also require analysis of the characteristics of projects that may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively.

The primary purpose of the Master Plan is to direct future management of the park for the next 20 years. An important component of this purpose is to protect the natural and cultural resources of the park. This purpose, goals, and management direction included in the Master Plan have no potential to foster population growth either directly or indirectly, or the construction of additional housing. The Master Plan's potential to foster to economic growth through revenue generating facilities is minimal and would not result in growth-inducing effects.

CUMULATIVE IMPACTS

Cumulative environmental effects are multiple individual effects that, when considered together are considerable or that compound or increase other environmental impacts. The individual effects may result from a single project or a number of separate projects and may occur at the same place and point in time or at different locations and over extended periods of time. Cumulative impacts can result from individually minor but collectively significant projects. The purpose of this cumulative analysis is to determine whether potentially significant cumulative environmental impacts would occur from implementation of the Master Plan in combination with other projects or conditions, and to indicate the severity of the impacts and their likelihood of occurrence. The CEQA Guidelines require that EIRs discuss the cumulative impacts of a project when the project's incremental effect is "cumulatively considerable," meaning that the project's incremental effects are considerable when viewed in connection with the effects of past, current, and probable future projects. The discussion does not need to reach the level of be in as great detail as is necessary for project impacts, but it is to be "guided by the standards of practicality and reasonableness". The purpose of the cumulative analysis is to allow decision makers to better understand the potential impacts which might result from approval of past, present and reasonably

foreseeable future projects, in conjunction with the proposed project. The discussion of cumulative impacts should include:

- (1) Either: (A), a list of past, present, and probable future projects producing related or cumulative impacts; or (B), a summary of projections contained in an adopted General Plan or similar document, or in an adopted or certified environmental document, which described or evaluated conditions contributing to a cumulative impact;
- (2) A discussion of the geographic scope of the area affected by the cumulative effect;
- (3) A summary of expected environmental effects to be produced by these projects; and
- (4) Reasonable, feasible options for mitigating or avoiding the project's contribution to any significant cumulative effects.

It should be noted that a cumulative impact analysis can only look at what is "reasonably foreseeable" or probable. Projects that which are under discussion proposed now may actually be built in phases, or may not be built for many years or may never be built at all; other projects may be changed substantially before being brought forward for approval. The actual date by at which all projects that could contribute to cumulative impacts of this development would be completed is unknown. For this reason, this cumulative analysis relies on projections included in the County's General Plan (1994) and queries of local governments.

Project-level components of the Master Plan include 1) installation of trails, gates, fencing, staging areas, and signage (Western Flat and Mendoza Area); 2) campground improvements, including reduction of density, addition of shower facilities, and construction of amphitheatre (Lakeside Area); 3) establishment of hang-gliding launch and landing sites (Slopes and Ridge Area); 4) establishment of equestrian camping at existing overflow parking area (West Flat Area); 5) installation of boat self-launch area for kayaks/non-motorized boats (Lakeside Area); and 6) use of pond for annual Fishability Days event (near Mendoza Ranch). Work at most of these sites would be limited to clearing of the site, with limited grading activities at the launch area and along the trails. Grading, and-construction, and operational activities (i.e., vehicle trips) would be most intensive at the campground improvements area, particularly associated with the construction of an amphitheatre. Program-level facilities identified in the Master Plan include construction of an 18-hole golf course, a fishing pond, trails, building and stadium structures, bicycle sports Park, and other site-specific use areas. In particular, construction and operation of the golf course, equestrian center, events pavilion, and fishing pond could result in both temporary and permanent effects to resources.

Generally, cumulative projects include development and <u>operation of construction</u>-projects within adjacent unincorporated Santa Clara County, the City of Gilroy, and the City of Morgan Hill. Cumulative projects could include residential, commercial, and industrial projects, as well as continuing development of recreation and public areas in the vicinity of, and within Coyote Lake-Harvey Bear Ranch County Park. No approved and pending developments are located in the vicinity of the Park . Neither the Santa Clara County (Brashaw, pers. comm.) or the City of

Gilroy (Casper, pers. comm.), have any projects planned in the vicinity of Coyote Lake – Harvey Bear County Park.

The City of Morgan Hill has one conditional use permit pending on The Institute Golf Course, a private 18-hole golf course located approximately one-quarter mile northeast of adjacent to the West Flat area (Hall, pers. comm.). Although construction of the golf course was completed in 1998, no permits were issued by the City. The project proponent applied for the conditional use permit in 1999, and the Draft EIR is currently in circulation. A Draft EIR, prepared during construction of the golf course, but following completion of portions of it, was publicly circulated in January 2003, but has since been withdrawn following substantial comments as to its adequacy. A new DEIR is anticipated in late October 2003. Therefore, at present, no completed Final EIR for the Institute Golf Course is available that has been certified by the Lead Agency as adequate for its project approval consideration, nor may the originally published Draft EIR be considered to provide documentation and impact analyses that the Lead Agency deems accurate and complete.

The absence of a public document for review for the Institute Golf Course, the apparent illegality of construction of several of its components, and the substantial number of significant impacts that have already and/or would result from completion of the project introduce somewhat unusual considerations into the analysis of potential cumulative impacts of the Coyote Bear Park project. An EIR need not consider a project constructed and operated without required approvals and permits in its analysis of cumulative impacts; indeed, the presumption is warranted for CEQA purposes that existing facilities constructed and operated illegally are subject to government sanctions that will terminate their operation and may remove the facilities themselves. However, in the specific case of the Institute Golf Course, the process of CEQA documentation has been initiated with the intent that the Lead Agency (the City of Morgan Hill) will consider approving the project, albeit after the fact, and thus permitting it to be completed and to operate. Thus, one of two outcomes appears likely. (1) Based on the completed CEQA documentation for the project and other considerations, the Institute Golf Course project will not be approved by the City of Morgan Hill and will be forced to cease operation, thereby eliminating its incremental contribution to any potential cumulative impacts. (2) the revised CEOA analysis currently underway for the Institute Golf Course may identify significant impacts for the project as constructed and operated. At this point in time, it is not possible to determine what those impacts may be, particularly since it appears likely that the project description itself may be subject to change. Nor is it possible to know what feasible mitigation measures and/or reasonable alternatives to the project as constructed and now operated will be identified in the completed EIR for the Institute Golf Course, or even whether feasible mitigation can be found for all of the significant impacts that may be identified. Under this second scenario, the CEOA documentation for the Institute Golf Course is subject to change in ways that cannot now be known, precluding an evaluation by the Parks Department of the cumulative effects of the Covote Project in combination with the Institute Golf Course.

A second point of consideration is that Draft EIR for the Institute Golf Course, which as noted the Lead Agency has withdrawn and evidently intends to recirculate, identified significant

unavoidable impacts for a number of issues concerning endangered species, flooding, water supply, among others, through an after-the fact analysis. As a consequence, the analysis in the Draft was obliged to conclude that certain impacts for which feasible mitigation is generally available were in fact significant and unavoidable because the impacts are actually occurring and have not yet been ameliorated. This analytic approach renders use of the analysis in the Draft EIR for the Institute Golf Course problematic, even if it is assumed that the technical data and analyses in the document are accurate.

Nonetheless, because the CEQA process for the Institute Golf Course has begun and is expected to be completed and approval of the Institute Golf Course considered, it ensures a conservative and inclusive analysis of the potential cumulative impacts of the Coyote-Bear Park project to include the Institute Golf Course. Although the revised Institute Golf Course DEIR is not yet available, the January 2003 DEIR provides information that enables a qualitative assessment, although with the caveat that the assessment is subject to revision based on the recirculated Draft. For comparison, the subject headings used in the Coyote Bear DEIR are used here. Subject headings in The Institute Golf Course DEIR (January 2003) are cross-referenced in the discussion.

BIOLOGICAL RESOURCES

The Institute Golf Course DEIR (January 2003) found significant cumulative impacts would result to special status species. No mitigation measures for impacts to special status species are proposed as part of the Institute Golf Course. In contrast, the Coyote Bear DEIR proposes mitigation measures to avoid, minimize and compensate for potential impacts at both the project and program level of development, with the result being a reduction in project impacts to a level that is less than significant. With implementation of the mitigation measures identified in the Draft EIR, the incremental contribution of the Coyote Bear Park project to cumulative effects on special status species would be insubstantial.

HYDROLOGY, FLOODPLAINS AND WATER QUALITY

The Institute Golf Course DEIR (January 2003) found significant cumulative impacts would result to water supply, ground water quality, surface water quality, and surface water runoff. No mitigation measures for impacts to these resources are proposed as part of the Institute Golf Course. In contrast, the Coyote Bear DEIR proposes mitigation measures to avoid, minimize and compensate for potential impacts at both the project and program level of development, with the result being a reduction in project impacts to a level that is less than significant. With implementation of the mitigation measures identified in the Draft EIR, the incremental contribution of the Coyote Bear Park project to cumulative effects on hydrology and water quality would be insubstantial

With regard to water supply, the Coyote Bear DEIR includes mitigation that commits the Parks Department to explore and develop alternatives to reliance on groundwater for irrigation and other uses. The framework of the DEIR establishes that this would occur for program-level

elements of park development at such time that design of those phases is initiated and the specific water needs are analyzed.

Similarly, the effects of golf courses on groundwater quality were evaluated and discussed as potentially significant in the DEIR; accordingly, the DEIR also discussed feasible mitigation measures that would lessen project impacts. The measures include conforming to the County's guidelines for chemical use on golf courses, and not relying on groundwater for golf course irrigation, which can elevate already problematic nitrate levels. Several viable options for sources of irrigation, all of which are compatible with objectives to limit reliance on groundwater, have been identified, including:

- The San Felipe Pipeline, owned by the U.S. Bureau of Reclamation (USBR) and operated by the Santa Clara Valley Water District (SCVWD) traverses the West Flat Area of Coyote Lake Harvey Bear Ranch. Raw (untreated) Water in the pipeline travels to SCVWD treatment facilities and then to water retailers that provide domestic water service to residential and commercial customers. SCVWD has indicated to the Parks Department that it may be possible to provide raw water for irrigation, but that the preference of the SCVWD Board of Directors is to limit such "non-essential" uses to maximize the availability of the water to the retailers and their customers. Instead, SCVWD encourages the Parks Department to participate in a recycled water program, which would provide a substantial opportunity for much-needed disposal of treated wastewater.
- The City of Gilroy Municipal Water Treatment Plant is undergoing planning for expansion, with an estimated completion date in 2005. At that time, the volume of tertiary treated water, which meets California State Title 22 standards of suitability for irrigation of public parks and agricultural crops, will increase from 3 million gallons per day (MGD) to 6 MGD. The City of Gilroy and SCVWD is currently identifying potential customers and possible delivery routes for this treated water, including several other golf courses on the west side of the valley.
- Natural springs on the western slopes of Bear Ranch are currently producing in excess of 70,000 gallons per day. These sources have been used in the past, and could be further developed for use in irrigation, as well as for enhancement of riparian corridors.

The Institute Golf Course DEIR also identifies as significant and unavoidable impacts the degradation of surface water quality resulting from discharge of sediments and pollutants into Corralitos Creek, and an increased potential for flood related property loss or hazard to human life. Additionally, the Institute Golf Course DEIR determined that project would result in increased soil erosion and non-point source pollutants entering surface waters, higher nitrogen loading to downstream surface waters, and contamination of on-site drainages and downstream creeks with pesticides.

The Coyote Bear Park DEIR evaluated the same types of potential impact sources and incorporated mitigation measures to reduce the impacts to a level that would be less than significant. These measures include an appropriate implementation approach that begins with consultation and compliance with relevant Federal, State and local regulations, and incorporates the specific types of actions that typically, and at a minimum, would be required as conditions of

approval of the project. The DEIR also identifies strategies for minimizing reconfiguration of streams to be incorporated into eventual design plans, minimum qualifications for preparers of plans involving stream re-alignment, and quantitative criteria for monitoring turbidity of any discharge to streams.

TRAFFIC AND CIRCULATION

Neither the Institute Golf Course or Coyote Bear Park DEIRs found significant impacts associated with traffic and circulation. The traffic networks of the two projects overlap only on San Martin Avenue, which, in later phases of park development, will be the primary access route to the West Flat Area, and is one of two access routes to the Institute Golf Course from Highway 101. The Institute Golf Course, as a private facility, would generate far fewer peak hour trips than the County CMA threshold of significance, and would therefore not "exceed the capacity of the roadway system". Traffic analysis of the Coyote Bear Park also found no significant incremental increase in trips or decrease in level of service at either the project or program level. Changes in level of service are expected as a result of regional growth and concomitant increases in vehicle trips, primarily along the Leavesley Road corridor. The increases in regional cumulative traffic have been taken into account in the Coyote Bear DEIR analyses of future years.

OTHER ISSUE AREAS

The Coyote Bear DEIR found no potentially significant cumulative effects in other issue areas, including air quality, cultural resources, geology, geohazards and soils, hazardous materials, land use, noise, public services and utilities, recreation, and visual resources. No information exists at this time, including the now withdrawn EIR for the Institute Golf Course, which indicates the less-than-significant incremental project impacts of the Coyote Bear Park project disclosed under these topic headings would constitute a cumulatively considerable contribution to a significant cumulative impact.

Because specific timelines for implementation of facilities that could be developed under the Master Plan are not known and no projects are currently planed within the adjacent jurisdictions, assessing the expected environmental effects that these projects would produce entails speculation. However, there are two general categories of effects that could be expected. The first and most widespread would be general construction impacts, such as temporary air quality degradation and increased erosion resulting from earth movement. However, construction impacts would be temporary and local in nature and thus unlikely to constitute cumulatively considerable contributions to cumulative significant impacts. The second category of impacts is related to operational effects to regional traffic, air quality, and potential habitat alterations and effects on wildlife.

Implementation of the Master Plan, in conjunction with other regional projects and ongoing regular park maintenance activities, could adversely affect Park resources. However, implementation of mitigation measures identified in Chapter 3 and included as part of the Master Plan would reduce any impacts, including cumulative impacts, to a less than significant level. In

addition, the County would require examination of program-level facilities at the time they are proposed for implementation to determine if further environmental review at a more detailed project-specific and site-specific level is necessary, including analysis of potential cumulative effects.

CHAPTER 6

LIST OF PREPARERS AND REVIEWERS

ACKNOWLEDGMENTS

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Melissa Dargis – Environmental Resources Planner, Santa Clara Valley Water District Rachel Gibson – Supervisor Don Gage's Office

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APPENDIX A

NOTICE OF PREPARATION

County of Santa Clara

Environmental Resources Agency Parks and Recreation Department

298 Garden Hill Drive Los Gatos, California 95032-7669 (408) 355-2200 FAX 355-2290 Reservations (408) 355-2201 www.parkhere.org



March 14, 2003

To:

Subject: Notice of Preparation of a Draft Environmental Report

Project Title: Coyote Lake-Harvey Bear Ranch County Park Master Plan

Start Date: Monday, March 17, 2003 End Date: Monday, April 14, 2003

Project Applicant: Santa Clara County

The Santa Clara County Parks and Recreation Department will be the Lead Agency in the preparation of a Draft Environmental Impact Report (Draft EIR) for the Coyote Lake-Harvey Bear Ranch County Park Master Plan, a 4,448-acre park located in southern Santa Clara County, California. We ask that you please respond in writing with your concerns or the concerns of your agency, regarding the scope and content of the environmental information for the project that are germane to your interests or the statutory interests of your agency.

A project description including project location, environmental setting, and need for a master plan are contained in the attached materials. Due to the time limits mandated by State Law, your response must be received by the Lead Agency in 30 days or by the end date indicated above. Please include your name, or the name and address of the appropriate contact person with your agency in your response.

Please address all responses to:

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

For more information, please contact Elish Ryan, Park Planner at (408)355-2236 or by email at elish.ryan@mail.prk.co.santa-clara.ca.us. Additional information regarding this project may also be viewed on the Parks Department website at www.parkhere.org.

Sincerely,

Elish Ryan, Park Planner



Enclosures

Board of Supervisors: Donald F. Gage, Blanca Alvarado, Pere McHugh, James T. Beall Jr., Liz Kniss
County Executive: Richard Wittenberg

APPENDIX B

LIST OF NOP RESPONDENTS

The following is a list of Notice of Preparation (NOP) respondents who submitted letters by the end of the comment period, April 14, 2003. Copies of the NOP letters are contained within the Coyote Lake-Harvey Bear Ranch County Park project files located at the offices of Santa Clara County Department Parks and Recreation, 298 Garden Hill Drive, Los Gatos, California, 95032.

Federal, State, Regional, and Local Agencies:

Philip Crimmins, Project Analyst State of California, Governor's Office of Planning and Research, State Clearinghouse

Timothy Sable, District Branch Chief State of California, Department of Transportation

Gwen Sax, Senior Environmental Health Specialist Santa Clara County Department of Environmental Health

Raluca Nitescu, Project Engineer Santa Clara County Roads and Airports Department

Mike Sotelo, Associate Governmental Program Analyst California Department of Boating and Waterways

Neddal Ali-Adeeb, Associate Engineer Santa Clara Valley Water District

Jean S. Hardwicke, Senior Deputy Fire Marshall Santa Clara County Fire Department

Barbara J. Cook, Chief, Northern California Operations Branch California Department of Toxic Substances Control

Michael Fris, Division Chief, Endangered Species Program US Fish and Wildlife Service

APPENDIX C

LAWS, REGULATIONS, ORDINANCES, AND POLICIES

LAWS, REGULATIONS, ORDINANCES, AND POLICIES

The table below lists a wide range of requirements that must be met for compliance with laws, ordinances, regulations, and policies imposed by federal, state, and local entities with authority over park developments or resources that may be affected by park actions.

Regulatory Issue	Jurisdiction	Citation	Administering Agency	Requirements/Compliance
Biological Resources	Federal	Endangered Species Act of 1973, as amended; 16 USC § 1531 et seq.; 50 CFR parts 17 and 222	U.S. Fish and Wildlife Service (USFWS); National Marine Fisheries Service	Protect and manage federally-listed species
	Federal	Migratory Bird Treaty Act	USFWS	Protect migratory birds and their nests
	Federal	Clean Water Act of 1977; 33 USC § 1344; 30 CFR § 330.5(a)(26)	U.S. Army Corps of Engineers	Regulates discharge of fill material into wetlands and other waters of the U.S., including streams, ponds, vernal pools and springs.
	State	California Species Preservation Act of 1970; California Wildlife Preservation Act of 1990; California Fish and Game Code §§ 900 – 903	California Department of Fish and Game (CDFG)	Protect and enhance the birds, mammals, fish, amphibians, and reptiles of California
	State	Native Plant Protection Act of 1977	CDFG	Protect rare and endangered plants
	State	California Endangered Species Act of 1984, California Fish and Game Code §§ 2050 - 2098	CDFG	Protect state-listed plants and animals
	State	California Fish and Game Code §§ 3511, 4700, 5050, and 5515	CDFG	Prohibits taking fully-protected birds, mammals, reptiles, amphibians, or fishes
	Local	Santa Clara County General Plan, Resource Conservation Element	Santa Clara County Planning Commission	Comply with requirements to protect habitat and biodiversity
Water Quality	Federal	Clean Water Act § 402; 33 USC § 1342; 40 CFR parts 122 – 136	RWQCB, EPA Region IX	As necessary, obtain NPDES permits for stormwater discharge and prepare SWPPPs for construction projects

Regulatory Issue	Jurisdiction	Citation	Administering Agency	Requirements/Compliance
	Federal	Clean Water Act § 311; 33 USC § 1321; 40 CFR parts 110, 112, 116, and 117	RWQCB, EPA Region IX, and California Office of Emergency Services	Report any prohibited discharge of oil or hazardous substances
	State	California Water Code § 13271 – 13272; 23 CCR 2250 – 2260	RWQCB and California Office of Emergency Services	Report releases of reportable quantities of hazardous substances or sewage and releases of specified quantities of oil or petroleum products
	State	Porter-Cologne Water Quality Control Act of 1972; California Water Code §13260 – 13269; 23 CCR Chapter 9	CEQA lead agency, RWQCB and Water Resources Control Board	Provide adequate protection of water quality by appropriate design, sizing, and construction of erosion and sediment controls; meet waste discharge requirements concerning potential surface water pollution from runoff
	State/Local	California Public Resources Code § 25523(a); 20 CCR §§ 1752, 1752.5, 2300 – 2309, and Chapter 2 Subchapter 5, Article 1, Appendix B, Part (1)	CEQA Lead Agency	Provide information concerning proposed water resources and water quality protection
	Local	Santa Clara County General Plan, Resource Conservation Element	Santa Clara County Planning Commission	Comply with requirements to protect water quality
	Local		Santa Clara Valley Water District	Protection of domestic water supply
	Local		San Martin Water District	Protection of domestic water supply
Geology	State/Local	Alquist-Priolo Fault Zone Act	Santa Clara County	Meet requirements for protection from seismic and other geologic hazards
	State	Seismic Hazards Mapping Act	State Geologist	Requires geotechnical investigation and appropriate mitigation prior to issuance of local permits
	Local	California Code of Regulations (CCR), Title 24, Part 2 (a portion of the California Building Standards Code)	Santa Clara County Planning Department	Comply with requirements to mitigate for geologic hazards
Soil Conservation	Federal	Clean Water Act	RWQCB: Central Coast Region under the direction of the Water Resources Control Board	Meet discharge requirements relative to sediment

Regulatory Issue	Jurisdiction	Citation	Administering Agency	Requirements/Compliance
	Local	California Public Resources Code § 5097.5	Santa Clara County Planning Department	Prevent unauthorized removal of archaeological resources or paleontological remains on public lands
	Local	Santa Clara County General Plan, Heritage Resources Element	Santa Clara County Planning Commission	Comply with requirements to protect historical sites and structures, archaeological and paleontological sites and artifacts.
Land Use	State	CEQA Appendix G	State Lead Agency	Evaluate significance of conflicts adopted community plans or with established commercial, recreational, educational religious or scientific uses of the area; evaluate the significance of the project on prime agricultural land
	Local	Santa Clara County General Plan, Land Use element	Santa Clara County Planning Commission	Adhere to land use policies
Aesthetic/Visual Resources	State	CEQA Appendices G and I	State Lead Agency	Evaluate impacts using significance criteria
	Local	Santa Clara County General Plan Resource Conservation Element	Santa Clara County Planning Commission	Comply with policies regarding significant scenic resources.
Noise	State	CEQA Appendix G	State Lead Agency	Ensure that project activities do not substantially increase ambient noise in adjacent areas
	Local	Santa Clara County General Plan Resource Conservation Element	Santa Clara County Planning Commission	Comply with policies regarding noise.
Air quality	State/Local	CEQA Appendix G	State Lead Agency	Evaluate project compliance with ambient air quality standards, substantial contributions to an existing or projected air quality violation, or exposure of sensitive receptors to substantial pollutant concentrations
Health and Safety	State Local	Santa Clara County Building Code	California Department of Forestry Santa Clara County Planning Department	Provides wildland fire protection Comply with requirements to mitigate for geologic hazards

Regulatory Issue Jurisdiction Citation	Jurisdiction	Citation	Administering Agency	Requirements/Compliance
Water Supply	Local		Santa Clara County Valley District	Maintain Coyote Lake for emergency
	Local		San Martin Water District	water supply. Maintain and develop local domestic
				water supply.
Transportation	Local		Santa Clara County	Obtain encroachment permits for work on
				public roads.

APPENDIX D

TRAFFIC DATA

Traffic data for this DEIR is available upon request.

APPENDIX E

USFWS SPECIES LIST

ENSPINATOR 10. 1-1-03-SP-1554

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Sacramento Fish and Wildlife Office 2800 Cottage Way, Room W-2605 Sacramento, California 95825

March 31, 2003

Ms. Elish Ryan Senior Planner County of Santa Clara 298 Garden Hill Drive Los Gatos, California 95032-7669

Subject:

Species List for Coyote Lake Harvey Bear Ranch County Park Master

Plan, Santa Clara County, California

Dear Ms. Ryan:

We are sending the enclosed list (Enclosure A) in response to your March 14, 2003, notice. The list covers the following U.S. Geological Survey 7½ minute quad or quads: Uliroy Quad.

Please read *Important Information About Your Species List* (enclosed). It explains how we made the fist and describes your responsibilities under the Endangered Species Act. Please contact Dan Buford at (916) 414-6625, if you have any questions about the attached list or your responsibilities under the Endangered Species Act. For the fastest response to species list requests, address them to the attention of Species Lists at this address. You may fax requests to 414-6712 or 414-6713. You may also email them to harry_mossman@fws.giv.

Sincerely,

Michael Fris

Division Chief, Endangered Species Program

Miller to

Enclosures

Important Information About Your Species List

How We Make Species Lists

We store information about endangered and threatened species lists by U.S. Geological Survey 7½ minute quads. The United States is divided into these quads, which are about the size of San Francisco. If you requested your list by quad name or number, that is what we used. Otherwise, we used the information you sent us to determine which quad or quads to use.

Animals

The animals on your species list are ones that occur within, or may be affected by projects within, the quads covered by the list. Fish and other aquatic species appear on your list if they are in the same watershed as your quad or if water use in your quad might affect them. Amphibians will be on the list for a quad or county if pesticides applied in that area may be carried to their habitat by air currents. Birds are shown regardless of whether they are resident or migratory. Relevant birds on the county list should be considered regardless of whether they appear on a quad list.

Plants

Any plants on your list are ones that have actually been observed in the quad or quads covered by the list. We have also included either a county species list or a list of species in nearby quads. We recommend that you check your project area for these plants. Plants may exist in an area without ever having been detected there.

Surveying

Some of the species on your list may not be affected by your project. A trained biologist or botanist, familiar with the habitat requirements of the species on your list, should determine whether they or habitats suitable for them may be affected by your project. We recommend that your surveys include any proposed and candidate species on your list. For plant surveys, we recommend using the enclosed Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Species. The results of your surveys should be published in any environmental documents prepared for your project.

State-Listed Species

If a species has been listed as threatened or endangered by the State of California, but not by us nor by the National Marine Fisheries Service, it will appear on your list as a Species of Concern. However you should contact the California Department of Fish and Game for official information about these species. Call (916) 322-2493 or write Marketing Manager, California Department of Fish and Game, Natural Diversity Data Base, 1416 Ninth Street, Sacramento, California 95814.

Your Responsibilities Under the Endangered Species Act

All plants and animals identified as *listed* on Enclosure A are fully protected under the Endangered Species Act of 1973, as amended. Section 9 of the Act and its implementing regulations prohibit the *take* of a federally listed wildlife species. Take is defined by the Act as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" any such animal. Take may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or shelter (50 CFR §17.3).

Take incidental to an otherwise lawful activity may be authorized by one of two procedures:

If a Federal agency is involved with the permitting, funding, or carrying out of a project that may result in take, then that agency must engage in a *formal consultation* with the Service. Such consultation would result in a *biological opinion* addressing the anticipated effect of the project on listed and proposed species. The opinion may authorize a limited level of incidental take.

If no Federal agency is involved with the project, and federally listed species may be taken as part of the project, then you, the applicant, should apply for an incidental take permit. The Service may issue such a permit if you submit a satisfactory conservation plan for the species that would be affected by your project. Should your survey determine that federally listed or proposed species occur in the area and are likely to be affected by the project, we recommend that you work with this office and the California Department of hish and Game to develop a plan that mitigates for the project's direct and indirect impacts to fisted species and compensates for project-related loss of habitat. You should include the mitigation plan in any environmental documents you file.

Critical Habitat

When a species is listed as endangered or threatened, areas of habitat considered essential to its conservation may be designated as *critical habitat*. These areas may require special management considerations or protection. They provide needed space for growth and normal behavior; food, water, air, light, other nutritional or physiological requirements; cover or shelter; and sites for breeding, reproduction, rearing of offspring, germination or seed dispersal.

Although critical habitat may be designated on private or State lands, activities on these lands are not restricted unless there is Federal involvement in the activities or direct harm to listed wildlife.

If any species has proposed or designated critical habitat within a quad, there will be a separate line for this on the species list. Maps and boundary descriptions of the critical habitat may be found in the *Federal Register*. The information is also reprinted in the *Code of Federal Regulations* (50 **CFR** 17.95).

Candidate Species

We recommend that you address impacts to candidate species. We put plants and animals on our candidate list when we have enough scientific information to eventually propose them for listing as

threatened or endangered. By considering these species early in your planning process you may be able to avoid the problems that could develop if one of these candidates was listed before the end of your project.

Your list may contain a section called *Species of Concern*. This term includes former category 2 candidate species and other plants and animals of concern to the Service and other Federal, State and private conservation agencies and organizations. Some of these species may become candidate species in the future.

Wetlands

If your project will impact wetlands, riparian habitat, or other jurisdictional waters as defined by section 404 of the Clean Water Act and/or section 10 of the Rivers and Harbors Act, you will need to obtain a permit from the U.S. Army Corps of Engineers. Impacts to wetland habitats require site specific mitigation and monitoring. For questions regarding wetlands, please contact Mark Littlefield of this office at (916) 414-6580.

Updates

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed, candidate and special concern species in your planning, this should not be a problem. We also continually strive to make our information as accurate as possible. Sometimes we learn that a particular species has a different range than we thought. This should not be a problem if you consider the species on the county or surrounding-quad lists that we have enclosed. If you have a long-term project or if your project is delayed, please feel free to contact us about getting a current list. You can also find out the current status of a species by going to the Service's laternet page: www.fws.gov

GUIDELINES FOR CONDUCTING AND REPORTING BOTANICAL INVENTORIES FOR FEDERALLY LISTED, PROPOSED AND CANDIDATE PLANTS (September 23, 1996)

These guidelines describe protocols for conducting botanical inventories for federally listed, proposed and candidate plants, and describe minimum standards for reporting results. The Service will use, in part, the information outlined below in determining whether the project under consideration may affect any listed, proposed or candidate plants, and in determining the direct, indirect, and cumulative effects.

Field inventorics should be conducted in a manner that will locate listed, proposed, or candidate species (target species) that may be present. The entire project area requires a botanical inventory, except developed agricultural lands. The field investigator(s) should:

- Conduct inventories at the appropriate times of year when target species are present and identifiable. Inventories will include all potential habitats. Multiple site visits during a field season may be necessary to make observations during the appropriate phenological stage of all target species.
- 2. If available, use a regional or local reference population to obtain a visual image of the target species and associated habitat(s). If access to reference populations is not available, investigators should study specimens from local herbaria.
- 3. List every species observed and compile a comprehensive list of vascular plants for the entire project site. Vascular plants need to be identified to a taxonomic level which allows rarity to be determined.
- 4. Report results of botanical field inventories that include:
 - a description of the biological setting, including plant community, topography, soils, potential
 habitat of target species, and an evaluation of environmental conditions, such as timing or
 quantity of rainfall, which may influence the performance and expression of target species
 - a map of project location showing scale, orientation, project boundaries, parcel size, and map quadrangle name
 - c. survey dates and survey methodology(ies)
 - d. if a reference population is available, provide a written narrative describing the target species reference population(s) used, and date(s) when observations were made
 - e. a comprehensive list of all vascular plants occurring on the project site for each habitat type
 - f. current and historic land uses of the habitat(s) and degree of site alteration
 - g. presence of target species off-site on adjacent parcels, if known
 - h. an assessment of the biological significance or ecological quality of the project site in a local

and regional context

- 5. If target species is(are) found, report results that additionally include:
 - a. a map showing federally listed, proposed and candidate species distribution as they relate to the proposed project
 - b. if target species is (are) associated with wetlands, a description of the direction and integrity of flow of surface hydrology. If target species is (are) affected by adjacent off-site hydrological influences, describe these factors.
 - c. the target species phenology and microhabitat, an estimate of the number of individuals of each target species per unit area; identify areas of high, medium and low density of target species over the project site, and provide acres of occupied habitat of target species. Investigators could provide color slides, photos or color copies of photos of target species or representative habitats to support information or descriptions contained in reports.
 - d. the degree of impact(s), if any, of the proposed project as it relates to the potential unoccupied habitat of target habitat.
- 6. Document findings of target species by completing California Native Species Field Survey Form(s) and submit form(s) to the Natural Diversity Data Base. Documentation of determinations and/or voucher specimens may be useful in cases of taxonomic ambiguities. Inbitat or range extensions.
- 7. Report as an addendum to the original survey, any change in abundance and distribution of target plants in subsequent years. Project sites with inventories older than three years from the current date of project proposal submission will likely need additional survey. Investigators need to assess whether an additional survey(s) is (are) needed.
- 8. Adverse conditions may prevent investigator(s) from determining presence or identifying some target species in potential habitat(s) of target species. Disease, drought, predation, or herbivory may preclude the presence or identification of target species in any year. An additional botanical inventory(ies) in a subsequent year(s) may be required if adverse conditions occur in a potential habitat(s). Investigator(s) may need to discuss such conditions.
- 9. Guidance from California Department of Fish and Game (CDFG) regarding plant and plant community surveys can be found in Guidelines for Assessing the Effects of Proposed Developments on Rare and Endangered Plants and Plant Communities, 1984. Please contact the CDFG Regional Office for questions regarding the CDFG guidelines and for assistance in determining any applicable State regulatory requirements.

ENCLOSURE A

Endangered and Threatened Species that May Occur in or be Affected by Projects in the Selected Quads Listed Below Reference File No. 1-1-03-SP-1554 March 31, 2003

GILROY QUAD: 406D Listed Species **Mammals** San Joaquin kit fox, Vulpes macrotis mutica (E) Birds bald eagle, Haliaeelus leucocephalus (T) California least tern, Sterna antillarum (=albifrons) browni (E) Least Bell's vireo, Vireo bellii pusillus (E) **Amphiblens** California tiger salamander, Ambystoma californiense (C/E) California red-legged frog, Rana aurora draytonii (T) Fish delta smelt, Hypomesus franspacificus (T) Central Valley steelhead, Oncorhynchus mykiss (T) NMFS South Central California steelhead, Oncorhynchus mykiss (T) NMFS winter-run chingok salmon, Oncorhynchus Ishawyitscha (E) NMFS Central Valley spring-run chinook salmon, Oncorhynchus Ishawytscha (T) NMFS Sagramento splittail, Pogonichthys macrolepidotus (T) Invertebrates bay checkerspot butterfly, Euphydryas editha bayensis (T) **Plants** Santa Clara Valley dudleya, Dudleya setchollii (E) Metcalf Canyon jewelflower, Streptanthus albidus ssp. albidus (E) showy Indian clover, Trifolium amoenum (E) **Proposed Species** Birds

mountain plover, Charadrius montanus (PT)

Candidate Species

Fish

Central Valley fall/run chinook salmon, Oncorhynchus tshawytscha (C) NMFS

Species of Concern

Mammals

Pacific western big-eared bat, Corynorhinus (=Plecotus) townsendii townsendii (SC)

greater western mastiff-bal, Eumops perotis californicus (SC)

small-footed myotis bat, Myotis ciliolabrum (SC)

long-eared myotis bat, Myotis evotis (SC)

fringed myotis bat, Myotis thysanodes (SC)

long-legged myotis bat, Myotis volans (SC)

Yuma myotis bat, Myotis yumanensis (SC)

San Francisco dusky-footed woodrat, Neotoma fuscipes anneclens (SC)

Birds

tricolored blackbird, Agelaius tricolor (SC)

Bell's sage sparrow, Amphispiza belli belli (SC)

western burrowing owt, Athene cunicularia hypugaea (SC)

ferruginous hawk, Buleo regalis (SC)

Costa's hummingbird, Cálypte costae (SC)

Lawrence's goldfinch, Carduelis lawrencei (SC)

Vaux's swift, Chaetura vauxi (SC)

black swift, Cypseloides niger (SC)

while-tailed (=black shouldered) kile, Elanus leucurus (SC)

little willow flycatcher, Empidonax fraillii brewsteri (CA)

prairie falcon, Falco mexicanus (SC)

American peregrine falcon, Falco peregrinus anatum (D)

loggerhead shrike, Lanius Iudovicianus (SC)

Lewis' woodpecker, Melanerpes lewis (SC)

long-billed curiew, Numerius americanus (SC)

rulous hummingbird, Selasphorus rulus (SC)

Reptiles

silvery legless lizard, Anniella pulchra pulchra (SC)

northwestern pond turtle, Clemmys marmorata marmorata (SC)

southwestern pond turtle, Clemmys marmorata pallida (SC)

San Joaquin coachwhip (=whipsnake), Masticophis flagellum ruddocki (SC)

California homed lizard, Phrynosoma coronatum frontale (SC)

Amphibians

foothill yellow-legged frog, Rana boylii (SC)

western spadefoot toad, Spea hammondii (SC)

Fish

longfin smelt, Spirinchus thaleichthys (SC)

Invertebrates

Opler's longhorn moth, Adela oplerella (SC) unsilvered fritillary butterfly, Speyeria adiaste adiaste (SC)

Plants

San Joaquin spearscale (=saltbush), Atriplex joaquiniana (SC) *
big-scale (=California) balsamiroot, Balsamorhiza macrolepis ver macrolepis (SLC)
Loma Prieta hoita, Hoita strobilina (SC)
smooth lessingia, Lessingia micradenia var. glabrata (SC)
most beautiful (uncommon) jewelflower, Streptanthus albidus ssp. peramoenus (SC)

KEY:

(⊑)	Endangered	Listed (in the Federal Register) as being in danger of extinction.
(T)	Threatened	Listed as likely to become endangered within the foreseeable future.
(P)	Proposed	Officially proposed (in the Federal Register) for listing as endangered or threatened.
(PX)	Proposed Critical Habitat	Proposed as an area essential to the conservation of the species.
(C)	Candidate	Candidate to become a proposed species.
(SC)	Species of Concern	May be endangered or threatened. Not enough biological information has been gathered to support listing at this time.
(SLC)	Species of Local Concern	Species of local or regional concern or conservation significance.
(MB)	Migratory Bird	Migratery bird
NMFS	NMFS species	Under the jurisdiction of the National Marine Fisheries Service. Contact them directly.
(D)	Delisted	Delisted, Status to be monitored for 5 years.
(CA)	State-Listed	Listed as threatened or endangered by the State of California.
(*)	Extirpated	Possibly extirpated from this quad.
(**)	Extinct	Possibly extinct.
	Critical Habitat	Area essential to the conservation of a species.

ENCLOSURE A

Endangered and Threatened Species that May Occur in or be Affected by Projects in the Area of the Following California Counties

Reference File No. 1-1-03-SP-1554

March 31, 2003

CONTRA COSTA COUNTY

Listed Species

Mammals

San Joaquin kit fox, Vulpes macrotis mutica (E) riparian (San Joaquin Valley) woodrat, Neotoma fuscipes riparia (E) riparian brush rabbit, Sylvilagus bachmani riparius (E) salt marsh harvest mouse, Reithrodontomys raviventris (E)

Birds

Catifornia brown pelican, Pelecanus occidentalis californicus (E)

California clapper rail, Rallus longirostris obsoletus (E)

California least tern, Sterna antillarum (=albl/rons) browni (E)

bald eagle, Haliaeetus leucocephalus (T)

western snowy plover, Charadrius alexandrinus nivosus (T)

Reptiles

Alameda whipsnake, Masticophis lateralis euryxanthus (T)
Critical habitet, Alameda whipsnake, Masticophis lateralis euryxanthus (T)
giant garter snake, Thamnophis gigas (T)

Amphibians

California red-legged frog, Rana aurora draytonii (T)
California tiger salamander, Ambystoma californiense (C/E)

Fish

Central California Coastal steelhead, Oncorhynchus mykiss (T) NMFS

Central Valley spring-run chinook salmon, Oncorhynchus Ishawytscha (T) NMFS

Critical habitat, delta smell, Hypomesus transpacificus (T)

Critical habitat, winter-run chinook salmon, Oricorhynchus Ishawytscha (E) NMFS

Secremento splittail, Pogonichthys macrolepidolus (T)

coho salmon - central CA coast, Oncorhynchus kisutch (T) NMFS

delta smelt, Hypomasus transpacificus (T)

fidewater goby, Eucyclogobius newberryi (E)

winter-run chingok salmon, Oncorhynchus Ishawylscha (E) NMFS

invertebrates

Conservancy fairy shrimp, Branchinecta conservatio (E)

Lange's metalmark butterfly, Apodemia mormo langei (E)
callippe silverspot butterfly, Speyeria cellippe cellippe (E)
longhorn falry shrimp, Branchinecta longiantenna (E)
valley elderberry longhorn beetle, Desmocerus californicus dimorphus (T)
vernal pool fairy shrimp, Branchinecta lynchi (T)
vernal pool tadpole shrimp, Lepidurus packardi (E)

Plants

Antioch Dunes evening-primrose, Oenothera deltoides ssp. howellii (E)

Contra Costa goldfields, Lasthenia conjugens (E)

Cuntra Costa wallflower, Erysimum capitatum ssp. angustalum (E)

Critical Habitat, Contra Costa wallflower, Erysimum capitatum ssp. angustatum (E)

Critical habitat, Antioch Dunes evening-primrose, Oenothera delloides ssp. howellii (E)

Critical habitet, Santa Cruz larplant, Holocarpha mecradenia (T)

Santa Cruz terplant, Holocarpha macradenia (T)

large-flowered fiddleneck, Amsinckia grandiflora (E)

pallid manzanita (=Alameda or Oakland Hills manzanita), Arctostaphylos pallida (T)

soft bird's beak. Cordylanthus molits ssp. mollis (E)

Proposed Species

Birds.

mountain plover. Charadrius montanus (PT)

Invertebrates

Critical habitat, vernal pool invertebrates. See Federal Register 67:59883 (PX)

Plants

Critical habitat, vernal pool plants, See Federal Register 67:59883 (PX)

Candidate Species

Fish

Central Valley fail/late fail-run chinook salmon, *Oncorhynchus tshawytscha* (C) NMFS Critical habitat, Central Valley fail/late fall-run chinook, *Oncorhynchus tshawytscha* (C) NMFS green sturgeon, *Acipenser medirostris* (C)

Species of Concern

Mammals

Berkeley kangaroo rat, Dipodomys heermanni barkeleyensis (SC) *

Pacific western big-eared bat, Corynorhinus (=Plecolus) townsendii townsendii (SC)

San Francisco dusky-footed woodral, Neotoma fuscipes annectens (SC)

San Joaquin pocket mouse, Perognathus inornalus (SC)

Suisun ornate shrew, Sorex ornatus sinuosus (SC)

Yuma myotis bat, Myotis yumanensis (SC)
fringed myotis bat, Myotis thysanodes (SC)
greater western mastiff-bat, Eumops perotis californicus (SC)
long-eared myotis bat, Myotis evotis (SC)
long-legged myotis bat, Myotis volans (SC)
salt marsh vagrant shrew, Sorex vagrans halicoetes (SC)
small-footed myotis bat, Myotis ciliolabrum (SC)

Birdş

Alameda (South Bay) song sparrow, Melospiza melodia pusillula (SC)

Aleutian Canada goose, Branta canadensis leucopareia (D)

Allen's hummingbird, Selasphorus sasin (SC)

American biltern, Bolaurus lentiginosus (SC)

American peregrine falcon, Falco peregrinus anatum (D)

Bell's sage sparrow, Amphispiza belli belli (SC)

California thrasher, Toxostoma redivivum (SC)

Costa's hummingbird, Calypte costee (SC)

Lawrence's goldfinch, Carduells lawrencei (SC)

Lewis' woodpecker, Melanerpes lewis (SC)

San Pablo song sparrow, Melospiza melodia samuelis (SC)

Suisun song sparrow, Melospiza melodia maxillaris (SC)

Swainson's hawk, Buteo Swainsoni (CA)

Vaux's swift, Chaeture vauxi (SC)

bank swallow, Riparia riparia (CA)

black rall, Laterallus jamaicensis coturniculus (CA)

ferruginous hawk, Buleo regalis (SC)

ilttle willow flycatcher, Empidonax traillii brewsteri (CA)

loggerhead shrike, Lanius Iudovicianus (SC)

long-bilted curlew, Numenius americanus (SC)

marbled godwit, Limosa fedoa (SC)

oak ülmouse, Baeolophus inomalus (SLC)

olive-sided flycatcher, Contopus cooperi (SC)

red knot, Calidris canutus (SC)

red-breasted sapsucker, Sphyrapicus ruber (SC)

rufous hummingbird, Selasphorus rufus (SC)

saltmarsh common yellowthroat, Geothlypis trichas sinuosa (SC)

tricolored blackbird, Agelaius tricolor (SC)

western burrowing owl, Athene cunicularia hypugaea (SC)

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whimbrel, Numenius phaeopus (SC)
white-faced ibis, Plegadis chihi (SC)
white-falled (=black shouldered) kite, Elanus leucurus (SC)
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Replifes

California horned lizard, *Phrynosoma coronatum frontele* (SC)
San Joaquin coachwhip (=whipsnake), *Masticophis flagelium ruddocki* (SC)
northwestern pond turtle, *Clemmys mermorata marmorata* (SC)
silvery legiess lizard, *Anniella pulchra pulchra* (SC)
southwestern pond turtle, *Clemmys marmorata pallida* (SC)

Amphibians

foothill yellow-legged frog, Rana boylii (SC) western spadefoot toed, Spea hammondii (SC)

Fish

Pacific lamprey, Lampetra tridentata (SC) longfin smelt, Spirinchus thaleichthys (SC) river lamprey, Lampetra ayresi (SC)

Invertebrates

Antioch Dunes anthicid beetle, Anthicus antiochensis (SC)

Antioch andrenid bee. Perdita scilula antiochensis (SC)

Antioch cophuran robberfly, Cophura hurdi (SC)

Antioch efferian robbenty, Efferia antiochi (SC)

Antioch mutillid wasp, Myrmosule pacifica (SC)

Antioch sphecid wasp, Philanthus nasilis (SC)

Bridges' Coast Range shoulderband snail, Helminthoplypta nickliniana bridgesi (SC)

California linderiella fairy shrimp, Linderiella occidentalis (SC)

Clervo aegistian scarab beetle, Aegialia concinne (SC)

Hurd's metapogon robbarily, Metapogon hurdi (SC)

Marin elfin butterfly, Incisalia mossii marinensis (SC)

Middlekauf's shieldback katydid, Idlostatus middlekaufi (SC)

Midvalley fairy shrimp, Branchinecta mesovallensis (SC)

Ricksecker's water scavenger beetle, Hydrochara rickseckeri (SC)

Sacramento anthicid beetle, Anthicus sacramento (SC)

San Francisco lacewing, Nothochrysa californica (SC)

San Joaquin dune beetle, Costus gracilis (SC)

curved-foot hygrotus diving beatle, Hygrotus curvipes (SC)

molestan blister beetle, Lytta molesta (SC)

yellow-banded andrenid bee, Perdita hirticops luteocincta (SC)

Plants

Ben Lomond buckwheat (= naked buckwheat), Eriogonum nudum var. decurrens (SC)

Brewer's dwarf-flax (=western flax), Hesperolinon brewerl (SC)

California crolon, Crolon californicus (SLC)

California triquetrella moss, Triquetrella californica (SLC)

Carquinez goldenbush, Isocoma arguta (SC)

Congdon's tarplant, Hemizonia parryi ssp. congdonii (SC)

Diablo helianthella (=rock-rose), Helianthella castenea (SC)

Franciscan thistle, Circlum andrewsii (SC)

Gairdner's yampah, Perideridia geirdneri ssp. gairdneri (SC)

Hall's bush mallow, Melacothamnus hallii (=M. fasciculatus) (SLC)

Hoover's cryptantha, Cryptantha hooveri (SLC)

Livermore tarplant, Deinandra bacigalupil (SC)

Loma Prieta hoila. Holta strobilina (SC) *

Mason's lilaeopsis, Lilaeopsis masonii (SC)

Mt. Diablo bird's-beak, Cordylanthus nidularius (SC)

Mt. Diablo fairy-lantern, Calochortus pulchellus (SLC)

Mt. Diablo jewelflower, Streptenthus hispidus (SC)

MI. Disblo phacella, Phacella phacelloides (SC)

Northern Catifornia black walnut, Juglans californica var. hindsii (SC)

Oregon meconella (=while fairypoppy), Meconella oregana (SC)

Pacific cordgrass (=California cordgrass), Sparina foliosa (SLC)

San Joaquin spearscale (≖sallbush), Alriplex joaquiniana (SC)

Suisun Mersh aster, Aster lentus (SC)

Tiburon buckwheat, Eriogonum caninum (SLC)

alkali milk-vetch, Astragalus tener var. tener (SC) *

bent-flowered fiddleneck, Amsinckia lunaris (SLC)

big tarplant, Blepharizonia plumosa ssp. plumosa (SC)

brittlescale, Atriplex depressa (SC)

caper-fruited tropidocarpum, Tropidocarpum capparideum (SC) *

chaparral harebell (=belillower), Campanula exigua (SLC)

coast rock-cress, Arabis blepharophylla (SLC)

della coyole-thistle (=button-celery), Eryngium racemosum (CA)

delta tule-pea, Lathyrus jepsonii var. jepsonii (SC)

diamond-petaled California poppy, Eschscholzia rhombipetala (SC) *

fragrant fritillary (= prairie bells), Fritillaria lillacea (SC)

heartscale, Atriplex cordulata (SC)

Interior California (Hospital Canyon) larkspur, Delphinium californicum ssp. Interios (SC) little mousetail, Myosurus minimus ssp. apus (SC) most beautiful (uncommon) jewelilower, Streptanthus albidus ssp. peramoenus (SC) recurved larkspur, Delphinium recurvatum (SC) robust monardella (=robust coyote mint), Monardella villosa ssp globosa (SLC) rock sanicle, Sanicula saxatilis (SC) selt marsh owl's clover (=johnny-nip), Castilleja ambigua ssp. ambigua (SLC) serpentine bedstraw, Gallum andrewsli ssp. gatense (SLC) showy (=golden) madia, Madia radiata (SC) * stinkbells, Fritillaria agrestis (SLC) western leatherwood, Dirca occidentalis (SLC)

KEY:

(E)	Endangered	Listed (in the Federal Register) as being in danger of extinction.
(T)	Threatened	Listed as likely to become endangered within the foreseeable future.
(P)	Proposed	Officially proposed (in the Federal Register) for listing as endangered or threatened.
(PX)	Proposed Critical Habilat	Proposed as an area essential to the conservation of the species.
(C)	Candidate	Candidate to become a proposed species.
(SC)	Species of Concern	Other species of concern to the Service.
(SLC)	Species of Local Concern	Species of local or regional concern or conservation significance.
(D)	Delisted	Delisted. Status to be monitored for 5 years.
(CA)	State-Listed	Listed as threatened or endangered by the State of California.
NMFS	NMFS species	Under jurisdiction of the National Marine Fisheries Service. Contact them directly.
ė	Extirpated	Possibly extirpated from the area.
**	Extinct	Possibly extinct
	Critical Habital	Area essential to the conservation of a species.

APPENDIX F

MITIGATION MONITORING AND REPORTING PROGRAM

FOR THE COYOTE LAKE-HARVEY BEAR RANCH COUNTY PARK MASTER PLAN EIR MITIGATION MONITORING AND REPORTING PROGRAM

INTRODUCTION

This is the Mitigation Monitoring and Reporting Program (MMRP) for the Coyote Lake-Harvey Bear Ranch County Park Master Plan EIR.

Environmental Impact Report (EIR) for the Coyote Lake Harvey Bear Ranch County Park Master Plan EIR (certified December 16, 2003). This project has been analyzed in accordance with the California Environmental Quality Act (CEQA) requirements in the Program This MMRP is required by Section 21081.6 of the CEQA statute.

MITIGATION MONITORING AND REPORTING PROGRAM

program; the full text of the impact analysis and mitigation measures is presented in the Draft EIR (June 2003), and in the Final EIR (December 2003), which includes staff-initiated text changes in response to comments on the DEIR. The mitigation measures included in this program are components being approved. The significant impacts associated with this project and the required mitigation measures are summarized in this The MMRP includes the mitigation measures identified in the EIR required to address only the significant impacts associated with the project those adopted by the Santa Clara County Board of Supervisors in its Findings of Fact, as required by CEQA.

MMRP provides a framework for identification and implementation of specific mitigation measures for project-level and program-level Santa Clara County Parks and Recreation Department (SCCPRD) projects within the Master Plan. As individual projects are developed, specific Compliance with these mitigation measures will be monitored and verified at different stages in the project implementation process. The monitoring and reporting requirements will be identified on a project by project basis. The MMRP is presented in Table 1, and is keyed to each significant impact and each adopted EIR mitigation measure. The significant impacts and mitigation measures are summarized in the tables and are coded by number to the appropriate EIR section. The column headings in the tables are defined as follows:

- Implementation Procedure: If needed, this column provides additional information on how the mitigation measures will be implemented. The column was left blank if no elaboration on the mitigation was necessary.
- Monitoring and Reporting Actions: This column contains an outline of the appropriate steps to verify compliance with the mitigation measure.
- Monitoring Responsibility: This column contains an assignment of responsibility for the monitoring and reporting tasks.
- Monitoring Schedule: This column identifies the general schedule for conducting each monitoring and reporting task, identifying where appropriate both the timing and the frequency of the action. The schedule milestones utilized for this column include:
- During project design / final plan approval
- Prior to approval of construction specifications
 - Prior to start of construction
 - During construction
- During operation of facilities
- Prior to NPDES permit application

AIR QUALITY

Impact Air Quality-1: Construction activities would generate short-term emissions of criteria pollutants. Identified as potentially significant impact.

Mitigation Measure Air Quality-1: During construction of Park facilities requiring grading or excavation, construction contractors shall implement the following dust control program, which is recommended by BAAQMD.

- Water all active construction sites at least twice daily. Watering should be sufficient to prevent airborne dust from leaving the site. Increased water frequency may be necessary whenever wind speeds exceed 15 miles per hour. Reclaimed water should be used whenever possible.
- Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard (i.e., the minimum required space between top of the load and the top of the trailer).
- Pave, apply water three times daily, or apply non-toxic soil stabilizers on all unpaved access roads, parking areas and staging areas at construction
- Sweep daily (with water sweepers using reclaimed water if possible) all paved access roads, parking areas and staging areas at construction sites.
- Sweep streets daily (with water sweepers using reclaimed water if possible) if visible soil material is carried onto nearby paved roads.

The following measures should also be implemented at all construction sites greater than four acres in area.

- Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more).
- Enclose, cover, water twice daily or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.).
- Limit the speed of all construction vehicles to 15 miles per hour on unpaved roads.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
- Replant vegetation in disturbed areas as quickly as possible.

The following control measures should also be implemented at construction sites that are large in area, located near sensitive receptors, or which for any other reason may warrant additional emissions reductions:

- Install wheel washers for all exiting trucks, or wash off tires or tracks of all trucks and equipment leaving the construction site
- Install wind breaks, or plant trees/vegetative wind breaks at windward side9

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. Include a dust control program in contract specifications.	1. Review construction specifications to verify inclusion of dust control program. Retain review and dust control program for administrative record.	1. County Parks	Prior to approval of construction specifications.
	2. Inspect construction site to verify compliance. Retain inspection report for administrative record.	2. County Parks	2. As necessary during construction.

Impact Air Quality-2: The Park Master Plan would result in an increase in criteria pollutant emissions due to project-related traffic. This would be a less than significant impact.

complete build-out under the Master Plan have been prepared using the procedures established by the BAAQMD CEQA Guidelines (BAAQMD, 1999). The Over the long-term, the Master Plan would result in an increase in emissions primarily due to an increase in motor vehicle trips. On-site stationary sources results of the analysis are shown in Table 3-3. The estimates shown in Table 3-3 are based on an estimate of 413 average daily trips after completion of and area sources would result in lesser quantities of pollutant emissions. Emissions estimates for the first year of park operation under Phase 1 and for Phase 1 projects and 1,687 daily vehicle trips upon complete buildout for an average weekend

Impact Air Quality-3: The proposed project would contribute to cumulative regional air emissions by the operation of the Park under the Master Plan. This would contribute to a net air quality benefit

have a significant cumulative air quality impact. For any project that does not individually have significant operational air quality impacts, the determination of significant cumulative impact is based on an evaluation of the consistency of the project with the local general plan and of the general plan with the regional air According to the BAAQMD CEQA Guidelines, any proposed project that would individually have a significant air quality impact would also be considered to consistency with the 2000 Bay Area Clean Air Plan. The Master Plan, as mitigated, would have a less than significant impact on regional air quality. The quality plan. To determine cumulative impacts of the proposed project, the project's consistency with the Clean Air Plan was determined based on its

nature of the Master Plan is that it will offer high-quality recreation opportunities to residents of the county and nearby counties who would otherwise have to travel longer distances to experience the same recreational opportunities. This would result in a net benefit to air quality in the region.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. Design facilities to operate in compliance with BAAQMD permit requirements.	1. Incorporate permit requirements in design standards.	1. County Parks	 During Project Design/ Final Plan Approval
	2. Perform inspections to ensure that facilities are operating to permit requirements. Retain inspection report for administrative record.	2. County Parks	During operation of facilities.

BIOLOGICAL RESOURCES

Impact Biological Resources-1: Construction of a new trail segment to replace a portion of the ridgeline ranch road, and subsequent use and maintenance of the segment, could result in impacts to the Bay checkerspot butterfly critical habitat and loss of individuals during reproductive periods. Less Than Significant with Mitigation Measures

mowing or other ground-disturbing activities are necessary to prepare or maintain the existing alignments for public use. Surveys should include searches through November July through October) and completed prior to the rainy season. At this time of year, partially grown larvae are in diapause and hiding Mitigation Measure Biological Resources-1a: Preconstruction surveys should be performed at locations where trail construction and maintenance, for Bay checkerspot adult and larval life stages. Any ground-disturbing activities in occupied habitat should be limited to the fall months (September under rocks or in cracks and crevices in the soil, and are considered less vulnerable than when they are active feeding in the spring. Maintenance and construction may take place at other times along portions of the trails where survey results do not detect the species.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. Preconstruction survey for Bay checkerspot butterfly adult and larval life stages.	1. Retain results for administrative record	1. County Parks	1. Prior to construction activities.
2. Limit ground-disturbing activities to fall months (September through November) and complete these activities prior to the rainy season	2. Conduct inspections to ensure compliance.	2. County Parks	2. During construction as necessary to ensure compliance.

can improve the habitat quality by reducing weeds and annual grasses. Implementation of the Natural Resource Management Plan (NRMP) included as part of the proposed Master Plan would likely improve habitat quality and the potential for supporting a population of Bay checkerspot butterfly within the Park. Mitigation Measure Biological Resources-1b: Vegetation management of annual and serpentine grasslands that support food plants of the these insects Grazing cattle has been used at other locations in Santa Clara County to effectively manage the butterfly's habitat. The timing and intensity of the grazing program is critical for favoring the growth of food plants, and would be stipulated in response to monitoring as described in the NRMP.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
 Implement Natural Resources Management Plan (NRMP) 	1. Retain results of survey for administrative record	1. County Parks	1. During construction to ensure compliance.

Impact Biological Resources-2: Implementation of the Master Plan could result in direct and indirect disturbance of western pond turtle nesting habitat located near the pond next to the Bear Ranch house. Less Than Significant with Mitigation Measures.

corner of the West Flat Area. This is the only pond in the park where pond turtles were detected during reptile and amphibian surveys that included seining. Western pond turtle, a Federal species of concern and a California species of special concern, occupies the pond near the Bear Ranch house in the northeast population has persisted in proximity to the Bear Ranch House and past sources of disturbance, including people, domestic pets, and vehicle traffic on the driveway. Under the Master Plan, the footprint of development near the pond would remain essentially unchanged, and there would be the same access by pond turtles to suitable nesting sites with the same level of protective vegetative cover. The type of use near the pond would change from a residence to a Habitat for the pond turtle at this location includes the pond itself, as well as an indeterminate area of adjacent upland used for nesting. The pond turtle amily picnic site and scenic overlook, which would introduce larger numbers of people and traffic near the pond.

adult, juvenile, and hatchling turtles, as well as the presence, absence, or sign of predators (bass, bullfrogs, herons, raccoons or snakes. Although difficult to turtles in late spring (May-June) and early fall (August-September), during warm days when turtles are likely to be active. Surveys should include counts of Mitigation Measure Biological Resources-2a: Consistent with the Natural Resources Management Plan, visual surveys should be conducted for pond ocate, any potential nest sites also should be documented.

shoreline basking sites become limited by vegetation growth, or are otherwise unavailable, then new basking sites should be created. Suitable sites can be Mitigation Measure Biological Resources-2b: Surveys should assess the adequacy of basking sites, an important habitat element for pond turtles. If provided by placement of a tree trunk or floating platform, secured to remain in the middle of the pond. Mitigation Measure Biological Resources-2c: Consistent with the Natural Resources Management Plan, park visitors and their pets should be limited to approximately 150 feet from the pond edge to prevent trampling of nests. Nesting season extends from approximately April through August, therefore, the limits to access may be relaxed outside of this period. The family picnic/overlook may be located within the 150 buffer, but would be offset by a larger buffer elsewhere around the pond.

Mitigation Measure Biological Resources-2d: A speed limit of 10 miles per hour during April-August should be established and enforced on the driveway to the family picnic/overlook.

of the pond and the nearest fairway. Fairway margins should retain a high rough that is subject to maintenance only outside of the pond turtle nesting period. The buffer would encompass the slope below the pond with the exposures preferred for nesting. The extensive grassland habitat to the east of the pond will Mitigation Measure Biological Resources-2e: The golf course should be designed to include a buffer, or setback, of 150 feet between the south and west remain in its current natural condition, also available for nesting.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
Conduct preconstruction surveys for western pond turtles	1. Retain survey results for administrative record	1. County Parks	1. Prior to the start of construction
2. Implementation of the Natural Resources Management Plan and incorporate measures to protect western pond turtle	2. Conduct inspections to ensure compliance	2. County Parks	2. Prior to the start of construction

Impact Biological Resources-3: Implementation of the trails plan in the proposed Master Plan could result in temporary displacement of habitat for bigscale balsam root. Less Than Significant with Mitigation Measures.

Big scale balsam root is known from the northern part of the Park, within the area designated critical habitat for Bay checkerspot butterfly habitat. Trail construction in this area, as described in Impact Biological Resources-1 could adversely affect this plant if undocumented populations of the plant are located in the trail alignment Mitigation Measure Biological Resources-3a: A qualified botanist should survey the proposed alignment of proposed trail segments 2 and 5, as identified in the trails Plan. The survey should occur during the same season that trail construction would occur, and during the flowering season for the species (March through June) to ensure recognition if big-scale balsam root plants are present. If plants are present within 25 feet of the proposed alignment centerline, then realignment is recommended.

orange temporary fencing should be installed to create a buffer and isolate the plants from the work area. Workers should be educated about the presence of Mitigation Measure Biological Resources-3b: Big-scale balsam root plants located near the trail should be protected during trail construction. Bright plants, and instructed to avoid disturbing it.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
Conduct preconstruction surveys for big-scale balsam root.	1. Review survey results and retain survey for administrative record.	1. County Parks	Prior to final Project Design approval
2. Adjust placement of trails and other features to avoid impacts	 Review construction specifications to ensure inclusion. Retain review for administrative record 	2. County Parks	Prior to approval of construction specifications.
3. Installation of protection measures if plants are located within construction boundaries.	3. Review survey results and retain survey for administrative record.	3. County Parks	3. As necessary during construction to ensure
		-	compliance.

Impact Biological Resources-4: Construction of Park facilities could result in displacement of oak woodland and native grassland. Less Than Significant with Mitigation Measures. This impact is conditional on trail route alignments in a native grassland or removal of an oak tree to facilitate proper grade control or sight lines. According to the proposed Master Plan, no impacts would occur to these sensitive plant communities. Every effort has been made to avoid these areas using resource

sensitivity maps to guide the routing of trails and the siting of other Park improvements. However, implementation of the plan could result in identification of new field conditions or engineering constraints that necessitate exceptions in limited instances from this original intent. In particular, the issue of public safety in the vicinity of large oaks that may be in poor health could necessitate removal of limited numbers of trees. Removal of oak trees also could result in impacts to nesting raptors, other birds, or bats. These are addressed in subsequent impacts and mitigation measures.

Mitigation Measure Biological Resources-4a: The County would retain a certified arborist to assess the health and vigor of all trees in proximity to proposed facilities planned for intensive public use. The arborist would provide recommendations for the preservation or removal of trees that pose substantial risk of injury to life or property of Park visitors and staff. Mitigation Measure Biological Resources-4b: In the event that tree removal is necessary, the impacts would be offset through planting of native oak trees depending on availability) and should be planted and maintained according to standard native plant establishment guidelines to protect them against damage several small seasonal drainages, and elsewhere throughout the golf course. In the Lakeside Area, new trees could be planted in the campground and picnic microclimate. In the Western Flat Area, oak trees may be planted near the historic preservation area, events pavilion, equestrian center, picnic areas, along areas. Trees should be cultivated by a qualified native plant nursery from acorns collected locally (i.e., from within the park, the watershed, or the County, elsewhere in the Park. In all cases, ample opportunities exist to plant trees close to the locations of those removed, with identical site conditions and from wildlife or park visitors.

without compromising the purpose of the new trail, i.e, to improve connectivity and gradients. The area of displaced native grassland should be quantified to Mitigation Measure Biological Resources-4c: Prior to establishing the final alignments of new trails, a qualified botanist should survey the alignments to determine whether native perennial grasslands would be traversed. Modest re-alignment of at trail should be considered if it would avoid native grasslands facilitate revegetation or enhancement efforts elsewhere in the Park (see Measure 4-d).

guidelines in the NRMP in the areas abandoned by reduction of campground density, and in the golf course to establish roughs and buffers along the small Mitigation Measure Biological Resources-4d: Revegetation of native perennial grassland would be implemented according to recommendations and seasonal drainages.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. Obtain services of certified arborist to survey and assess the health of all trees within the boundaries of the project area.	Review survey findings and retain for administrative record.	1. County Parks	1. During Project Design

Coyote Lake Harvey Bear Ranch County Park Mitigation Monitoring and Reporting Program

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
2. Removal of trees will be offset by the planting of native trees elsewhere in the Park. of native trees elsewhere in the Park. record.	2. Review construction specifications to ensure inclusion. Retain review for administrative record.	2. County Parks	2. Prior to approval of construction specifications.
3. Revegetation of native perennial grassland will be implemented as per the NRMP.	3. Perform site inspections to verify compliance with mitigation measures. Retain inspection report for administrative record.	3. County Parks	3. As necessary after construction

Impact Biological Resources-5: Construction of Park facilities could result in loss of raptor nests and other bird nesting habitat in oak woodland. Less than Significant with Mitigation.

(MBTA), Federal Bald Eagle Protection Act (BEPA), and CDFG Code Section 3503.5. Facility construction activities also could disturb nesting or roosting Construction of park facilities may involve the removal of nesting habitat for raptors and other birds protected by the Federal Migratory Bird Treaty Act behavior of non-listed special status nesting raptors, other nesting birds (passerines) during the breeding season Mitigation Measure Biological Resources-5: Construction that results in removal of nests during the non-breeding season (generally September 1 through January 31) does not require mitigation. To the extent feasible, construction of park facilities in proximity to areas identified during the breeding bird survey as active nesting areas will take place outside the period February 15 through August 31.

In the event that the breeding season cannot be avoided, pre-construction surveys for nesting activity would be conducted under the direction of a Certified suspended and consultation with the California Department of Fish and Game should be initiated. Subject to agreement with the CDFG, a breeding season Wildlife Biologist. If nesting activity of raptors or migratory songbirds protected under the MBTA and BEPA are identified, then construction should be monitoring protocol should be implemented during construction, or until the young have fledged During construction activities, there is a possibility of impact to individual burrowing owls, a special-status species currently at very low population levels in the Santa Clara Valley. Therefore, in additional to the general measures described in 1, 2 and 3, below, protection measures specific to the burrowing owl also shall be implemented.

TABLE 1 (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM — Coyote Lake Harvey Bear Ranch County Park

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. To the extent feasible, construction activities will be conducted outside the breeding/nesting season (February 15 through August 31).	1. Review construction plans and specification to ensure inclusion. Retain in administrative record.	1. County Parks	Prior to final approval of construction plans
2. Conduct preconstruction surveys for nesting birds and raptors.	2. Review survey results and retain for administrative record	2. County Parks	2. Prior to construction
3. If nesting birds or raptors are located during preconstruction surveys, appropriate protection measures will be implemented.	3. Perform site inspections to verify compliance with mitigation measures. Retain inspection report for administrative records.	3. County Parks	3. Prior to construction
For burrowing owl:			
 A pre-construction survey shall be conducted in all areas providing suitable habitat at least 30 days prior to construction according to the most recent CDFG Burrowing Owl Survey Protocol and Mitigation Guidelines (CDFG, 1995) or the approved methodology at the time surveys are conducted. 	 CDFG approval for passive relocation of owls during non-breeding season. 	4. County Parks	4. Prior to construction
5. Establish areas around any occupied burrows where no disturbance may occur. The sensitive areas shall extend 160 feet around the occupied burrows during the non-breeding season of September 1 through January 31, and shall extend 250 feet around occupied burrows during the breeding season from February 1 through August 31.	5. Daily monitoring of owl activity within buffer area and of compliance with exclusion requirement.	5. County Parks	5. During construction as needed

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	MONITORING AND REPORTING	MONITORING	MONITORING
IMPLEMENTATION PROCEDURE	ACTIONS	RESPONSIBILITY	SCHEDULE
6. For each burrow that will be excavated by project construction, one alternate unoccupied natural or artificial burrow shall be provided outside of the 160-foot buffer zone.	r one week nd nstruction upervision tools and n. If any ing ase and the avation may	6. County Parks	6. During construction as needed
	confirms that the burrow is empty.		

Impact Biological Resources-6: Implementation of the proposed Master Plan could result in loss of up to 210 acres of raptor foraging habitat. Less Than Significant

Impact Biological Resources-7: Construction within or adjacent to habitat that supports bat roosts may disrupt breeding behavior and cause roost abandonment and loss of young. Less than Significant with Mitigation Measures.

mortality to these species and their young may occur. In addition, human disturbances from construction activities and noise could cause roost abandonment Mitigation Measure Biological Resources-5 will identify potential roosting habitat for special status bats in the project area prior to construction, and would Construction of park facilities may involve the removal of large trees with cavities that harbor bat roosts. Pre-construction surveys conducted according to inform construction plans about the potential for this impact to occur. If roosts are detected and roost removal occurs during the breeding season, direct and death of young or loss of reproductive potential at active roosts located near the project construction areas.

roosting bat species, mitigation is not required. Measures such as avoidance and passive relocation of species, which are included in these protocols, will be January, but this is subject to case-by-case consideration of the breeding activity) within or adjacent to habitats that may support protected nesting bird or Mitigation Measure Biological Resources-7: If construction activities are scheduled during the non-breeding season (generally September through required for construction activities within or adjacent to suitable habitat.

MITIGATION MONITORING AND REPORTING PROGRAM - Coyote Lake Harvey Bear Ranch County Park TABLE 1 (Continued)

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
 To the extent feasible, construction activities will be conducted outside the bat breeding season. 	1. Review construction specifications to ensure inclusion. Retain review for administrative record.	1. County Parks	1. During Project Design.
Conduct preconstruction surveys for nesting bats.	2. Perform site inspections to verify compliance with tree removal permit. Include inspection report for administrative record.	2. County Parks	2. Prior to construction specifications approval.
3. If nesting bats are located within the construction area, appropriate protection measures will be implemented.	3. Retain report for administrative record.	3. County Parks	 Prior to the start of construction

waters of the U.S. under jurisdiction of the U.S. Army Corps of Engineers, and streams under regulatory authority of the California Department of Fish and Impact Biological Resources-8: Development of Park facilities could result in temporary and permanent impacts to jurisdictional wetlands and other Game and the Regional Water Quality Control Board and Santa Clara Valley Water District. Less than Significant with Mitigation Measures.

seasonal streams that drain the western slopes of the Park and flow across the West Flat Area eventually join Llagas Creek, which is a tributary to the Pajaro of 6 feet. The streams cross lands that have historically been used for agriculture and livestock grazing, and do not currently provide riparian habitat values in the portion of the Western Flat Area that is proposed for the most intensive development of new park facilities. However, it is unlikely that the proposed River. An estimated 11,000 total linear feet of streams are located in the West Flat Area, or approximately 1.5 acres assuming an average streambed width Jurisdictional wetlands and other waters of the U.S. (i.e., seasonal intermittent streams) are mapped and documented in the NRMP. Several low-order park facilities could be developed without varying levels of temporary fill or realignment of the streams.

In addition, park facilities proposed at Coyote Lake would result in small-scale impacts to jurisdictional areas, including the lake bed and shore. No vernal pools or freshwater seeps would be adversely impacted by implementation of Master Plan program elements.

wetlands and other waters of the U.S. and of the State, and regulatory permits from the U.S. Army Corps of Engineers, the California Department of Fish Mitigation Measure Biological Resources-8a: Disturbance of the seasonal streams or the lake bed or shore will require a jurisdictional delineation of and Game, and the Regional Water Quality Control Board and Santa Clara Valley Water District. Each agency discharges its authority through permits it issues; the permits ensure compliance with the regulations concerning habitat, endangered species, conveyance and water quality. The eventual disposition of the streams in the Western Flat will need to comply with the standard conditions, as well as special conditions attached to each regulatory permit. Typical conditions include:

- No net loss of wetland or riparian area, or of its ecological functions and values;
- Replacement of area, functions and values of temporarily disturbed jurisdictional wetlands or streams at a minimum ratio of 1:1;
- Compensation of permanently disturbed wetlands or streams through creation or enhancement of additional area at ratios of up to 3:1;
- Preparation of detailed mitigation plans describing the habitat to be created or enhanced, the process by which it will be accomplished (see Measure 7b), and setting performance standards and schedules for attaining a certain level of habitat function and value;
- Long-term monitoring (i.e., 5 years) to ensure the successful implementation of the mitigation plan, with quantitative data collection and analysis and annual reports to the permitting agencies.
- Contingency plans to redress any portion of the mitigation effort that does not meet the performance standards.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. Obtain all necessary permits	 Issuance of permit/agreement shall act as reporting action. Retain permits for administrative record. 	1. County Parks	1. Prior to start of construction

West Flat Area, a plan may be required, as a condition of regulatory permits, for restoration of the riparian corridors associated with the seasonal streams in Mitigation Measure Biological Resources-8b: Depending on final layout and implementation plan for the golf course and other Park amenities in the the West Flat Area. Restoration and revegetation plans are routinely incorporated as conditions of approval in permits issued by the agencies that regulate wetlands and streams. The intent of these plans is to ensure no net loss of habitat functions and values, which is achieved through avoidance, minimization and compensation of impacts to jurisdictional areas, as well as the surrounding, non-jurisdiction upland habitat to the extent that it is essential to the integrity of the wetland or

natural drainages. The plan should conform to the County's Design Guidelines for Golf Courses (County of Santa Clara, 1996), in particular the "Habitat specifically address impacts that would occur as a result of the construction of these facilities, including: temporary or permanent re-alignment of streams, bank stabilization, erosion control, bridge crossings (i.e. along golf course paths), and incorporation of any water features, such as the fishing pond, into If required, the restoration and revegetation plan should be prepared as a component of the golf course (and other facilities) design process, and should Streams" element, that recommends the following:

- The golf course design should attempt to minimize the number of stream crossings. Stream crossings should be designed in such a way as to minimize erosion and harmful effects to significant habitat and migration corridors.
- Bridges should minimize alteration of the stream environment.
- Design should create and restore riparian habitat, especially in previously degraded habitat areas, and should reduce the impact of alterations necessitated by design and construction of the course.
- which may result from surface drainage of the golf course, cart paths, and other developed areas. In certain circumstances where riparian vegetation The course design should employ vegetated buffer strips of sufficient width to mitigate impacts to riparian corridors and other significant habitat has been degraded or does not exist, turf grass and rough areas may be located in closer proximity to the stream bank.
- In areas proposed for structures, paved roadways, or parking lots, setbacks of less than the 75-150 feet recommended by the General Plan should be allowed only when mitigations are possible which adequately address habitat and stream quality impacts.
- Cart paths should be graded such that runoff from them generally does not flow directly into any stream.
- Construction fencing/siltation barriers should be utilized during the construction phase where needed to protect habitat and stream areas.

Restoration and monitoring plans prepared as a condition of a permit from the Corps typically include the following (Department of the Army, 1991):

- Schedule and timing of implementation of the mitigation plan, with important milestones identified;
- Responsibilities and authorities of parties involved in implementation of the plan;
- Location, type and quantity (area) of habitat to be created or enhanced, including maps and other detail drawings as necessary.
- Plant species to be used, including quantities, size, type and origin of genetically appropriate material;
- Methods of installation and cultivation after planting;
- Methods of protecting the habitat from future disturbance;
- Maintenance requirements and schedule, including how problems with habitat development will be corrected;
- Monitoring methods and frequency, including a description of analytical methods to be used and what the methods are intended to demonstrate;
- Reporting requirements and frequency.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
 Develop riparian restoration plan if required. 	1. Submit plan to regulatory agencies. Retain for administrative record.	1. County Parks	1. Prior to start of construction

Impact Biological Resources-9: Implementation of the Master Plan would ensure preservation of regional wildlife corridors. Beneficial Impact.

on the long-term preservation of these migratory corridors for wildlife movement. The majority of the Western Flat Area would consist of a golf course. The ranging mammals. Developments proposed in the Slopes and Ridge, Mendoza and Lakeside Areas would be low-density, and would have a positive effect introduction of a manicured open space between undeveloped parklands and rural/agricultural lands to the west would not substantially deter wildlife that The Park preserves a significant tract of undeveloped land between the valley and other protected open space to the north and east, and is used by wideare habituated to these environments, such as deer and raccoon, from continuing to move between them.

Impact Biological Resources-10: Construction of Park facilities could contribute to erosion or result in discharge of sediment to surface waters, which would adversely affect aquatic habitat quality. Less Than Significant with Mitigation Measures. This impact and measures to mitigate it is addressed in the Hydrology, Floodplains and Water Quality Section. No additional mitigation measures required.

CULTURAL RESOURCES

Cultural Resources Impact-1a: Implementation of proposed facilities may affect known or undiscovered archeological resources. Less Than Significant with Mitigation Measures.

Mitigation Measure Cultural Resources-1a: The County shall implement a Cultural Resource Protection Program.

Where work will take place in locations where prehistoric or historic sites have been previously documented or has been determined to have high probability standards and State and County requirements. If it is determined that materials are of a prehistoric nature, procedures outlined in the State Resources Code prior to the start of construction. If significant resources are identified. specialized studies would be performed, consistent with professional archaeological subsurface testing (such as shovel test pits) will be implemented to determine the presence and significance of archaeological materials in these locations, for archeological resources, pedestrian surveys shall be conducted within an area of potential effect. If deemed necessary and feasible, archaeological pertaining to the protection of Native American remains and associated goods shall be implemented and a most-likely descendant shall be contacted.

descendants assigned to the project will consult with the Project Manager(s) to determine alternative project design, construction, or operation necessary to avoid significant adverse impacts to the resource. The site of the find, including an adequate buffer zone, will be secured (fenced or flagged) and no work If archaeological data recovery is insufficient to adequately protect the cultural significance of any find, the qualified archaeologists or most-likely will occur within that area without the approval of the lead project archaeologist.

A report of the findings from the excavations would be completed and copies distributed to the Santa Clara Parks & Recreation Department.

Project construction sites will be photo-documented before, during, and after construction and photos added to historical records (archives) for the Park.

previously undocumented cultural resources are encountered during project construction (including but not limited to dark soil containing shellfish, bone, flaked stone, groundstone, or deposits of historic trash), work within the immediate vicinity of the find will stop until procedures outlined in the County All ground-disturbing work will be monitored by a qualified cultural resource specialist or construction monitor assigned by the County. In the event

Ordinance Relating to Indian Burial Grounds (County of Santa Clara, 1987) and State Public Resources Code can be implemented and most likely descendants notified for site investigation. The appropriate tribal representative will be contacted prior to ground disturbance to occur in areas within the ancestral territory that are sensitive for prehistoric resources.

Mitigation Measure Cultural Resources-1b. The County shall implement a Historic Resource Protection Program.

Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings (1995), Weeks and Grimmer (36 CFR 67) and the California historic resources will be conducted in a manner consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Historic significance evaluations shall be performed on historic resources in the park prior to design development. All work on identified or potential Historical Building Code.

Any rehabilitation work on historic resources will be monitored by a qualified cultural resource specialist.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
 Contract with a qualified archaeologist to review final facility locations and note project areas that may affect known archaeological resources. 	Retain contract and archaeological review for administrative record.	1. County Parks	1. During Project Design/ Final Plan Approval.
 As appropriate, develop a program for monitoring construction activities. 	2. Review and approval of monitoring plan shall serve as reporting action. Retain monitoring plan for administrative record.	2. County Parks	2. Prior to approval of construction specifications.
 Perform a pre-construction orientation and instruction on the identification of archaeological resources. 	3. Retain record of orientation and instructions for administrative record. Perform inspections to verify compliance. Retain inspection record for administrative record.	3. County Parks	3. Prior to construction activities.
4. If necessary, conduct archaeological evaluation of discovered resources	4. Retain archaeological evaluation of discovered resources for administrative record.	4. County Parks	4. As required by construction monitoring plan developed for individual projects.

Mitigation Measure Cultural Resources-1c: The County shall conduct site-specific review of program-level Master Plan components.

Potential archaeological and historic resources impacts should be reviewed at the project-level for specific facilities or development plans proposed under the Coyote Lake-Harvey Bear Ranch County Park Master Plan and mitigation measures shall be considered, including but not limited to:

- Subject projects to site-specific planning and compliance in accordance with cultural resource protection laws.
- Site and design facilities/actions to avoid adverse effects to sensitive cultural resources. Subject projects to site-specific planning and compliance in accordance with cultural resource regulations. Conduct archeological site monitoring and routine protection. Conduct data recovery excavations at archeological sites threatened with destruction, where protection or site avoidance during design and construction is infeasible.
- Avoid or mitigate impacts to ethnographic resources. Mitigation could include identification of and assistance in accessing alternative resource gathering areas, continuing to provide access to traditional use and spiritual areas, and screening new development from traditional use areas.
- Continue and formalize ongoing consultations with culturally associated Native American descendants. Formalize a parkwide gathering plan and discovery plan for Native American human remains. Protect known burial sites, and protect sensitive traditional use areas to the extent feasible.
- Conduct surveys for archeological sites, traditional resources, historic sites, structures, and cultural landscape resources as warranted. Surveys and reports shall be prepared in compliance with the recommendations of the Native American Heritage Commission.
- archaeologist and submitted to the California State University Archaeological Information Center. Any artifacts recovered during mitigation shall be property. The archaeologist shall be on site during any activity when new soils are to be moved or exported. The archaeologist shall be authorized to Where significant sites have been identified, the County shall provide a qualified archaeologist, Native American monitor, or most-likely descendant halt the project in the area of the finding and mark, collect, and evaluate any archaeological materials discovered during construction. Copies of any archaeological surveys, studies, or reports of field observation during grading and land modification shall be prepared and certified by the attendant to monitor any subsurface operations, including but not limited to grading, excavation, trenching, or removal of existing features of the subject deposited in an accredited and permanent scientific or educational institution for the benefit of current and future generations.
- resources that have been encountered. As provided in the CEQA Guidelines, Section 15064.5(f), work could continue on other parts of the park while archaeologist. If the finding is determined to be an historical or unique archaeological resource, avoidance measures or appropriate mitigation shall implemented. Recommendations can then be made for any appropriate procedures to either further investigate or mitigate impacts to those cultural In the event cultural resources are encountered on the park during the course of construction; the findings shall be examined by a qualified historical or unique archaeological resource mitigation (if necessary) takes place.

Implementation of the requirements described above would reduce the potential program-level archaeological and historic resources impacts associated with the implementation of the Coyote Lake-Harvey Bear Ranch County Park Master Plan. However, the County would require examination of many specific

facilities and development plans included in the Master Plan at the time they are proposed for implementation to determine if further environmental review at a more detailed project-specific and site-specific level were necessary.

Impact Cultural Resources-2: Implementation of the Master Plan has Potential to Adversely Affect Paleontological Resources. Less Than Significant with Mitigation Measures.

Mitigation Measure Cultural Resources-2a: The County shall implement a paleontological resource protection program.

In the event of an unanticipated discovery of a breas, true, and/or trace fossil during construction, excavations in the immediate area of the find will be temporarily halted or diverted until identification and proper treatment are determined and implemented by a qualified cultural resource specialist.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. Conduct paleontological evaluation of discovered resources.	1. Retain paleontological evaluation of discovered resources for administrative record.	1. County Parks	1. During construction, as required.

Impact Cultural Resources-3: Implementation of the Master Plan has Potential to Adversely Affect Human Remains. Less Than Significant with Mitigation Measures.

Mitigation Measure Cultural Resources-3: The County shall implement a human remains protection program.

appropriate County personnel. The authorized representative will notify the County Coroner, in accordance with §7050.5 of the California Health and Safety Code. If the coroner determines the remains represent Native American interment, the Native American Heritage Commission will be consulted to identify In the event that human remains are discovered, work will cease immediately in the area of the find and the project manager/site supervisor will notify the the most likely descendants and appropriate disposition of the remains. Work will not resume in the immediate area of the find until proper disposition is complete (PRC §5097.98).

Potential human remains disturbance impacts should be reviewed at the project-level for specific facilities or development plans proposed under the Coyote Lake-Harvey Bear Ranch County Park Master Plan and mitigation measures shall be considered, including but not limited to:

development plans included in the Master Plan at the time they are proposed for implementation to determine if further environmental review at a more Implementation of the requirement described above would reduce the potential program-level human remains disturbance impacts associated with the implementation of the Coyote Lake-Harvey Bear Ranch Master Plan. However, the County would require examination of many specific facilities and detailed project-specific and site-specific level were necessary.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. Notify county coroner or Native American Heritage Commission if prehistoric archaeological deposits are discovered that include human remains, and follow required procedures.	Retain reporting actions for administrative record.	1. County Parks	During construction, as required.

GEOLOGY, SOILS, AND SEISMICITY

fault rupture due to excessive seismic ground motion. Such an event could expose people and property to the hazards associated with lateral and/or vertical Impact Geology, Geohazards, and Soils-1: In the event of a major earthquake on the Calaveras fault portions of the Park could be susceptible to surface ground offset. Less Than Significant with Mitigation Measures.

Mitigation Measure Geology, Geohazards, and Soils-1: Comply with applicable engineering and design rules and regulations.

The proposed amphitheatre, boat-self launch facility, and shower facility shall comply with all applicable Santa Clara County engineering and design rules and regulations. At a minimum, geotechnical and seismic design criteria shall conform to engineering recommendations in accordance with seismic requirements of Zone 4 of the 1997 Uniform Building Code (UBC) and the California Building Code (Title 24) additions.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. Incorporate geotechnical report recommendations, UBC, AWWA, and/or other appropriate design guidelines into design plans and specifications.	1. Review design plans and specifications to verify inclusion. Plan approval will serve as reporting action. Retain review for administrative record.	1. County Parks	1. During Project Design/ Final Plan Approval.
2. Perform site inspections to verify compliance with design plans, specifications, UBC, AWWA and other local building code provisions. Retain inspection report for administrative record.	 Retain inspection report for administrative record. 	2. County Parks	2. As necessary during construction.

Impact Geology, Geohazards, and Soils-2: In the event of a major earthquake in the region, seismic ground shaking could potentially injure people and cause collapse or structural damage to existing and proposed structures. Less Than Significant with Mitigation Measures.

project site. The intensity of such an event would depend on the causative fault and the distance to the epicenter, the moment magnitude, and the duration of shaking. A seismic event in the Bay Area could produce ground shaking intensities at the proposed project site ranging from violent (MM IX) to moderate The San Francisco Bay Area would likely experience at least one major earthquake (M 6.7 or higher) within the next 30 years which that would affect the (MM VI).

moment magnitude of M 6.9, produced moderate (VI) shaking intensities (ABAG, 2003b). A characteristic earthquake on any of the active faults listed in cause considerable structural damage, even in well-designed structures, and collapse in poorly designed structures. Substantial cracks could appear in the A characteristic earthquake on the Calaveras fault with an estimated M 6.8 could violent (IX) shaking intensities throughout the majority of the Park with very violent (X) shaking in areas adjacent to Coyote Lake (ABAG, 2003a). Based on the Modified Mercalli scale, an earthquake of this intensity would Francisco earthquake, with an M 7.9, produced moderate (VI) to strong (VII) shaking intensities at the Park, while the 1989 Loma Prieta event, with an ground, and the shaking could cause other secondary damaging effects such as the failure of underground pipes. As a comparison, the great 1906 San Table 3-4, with the exception of the Calaveras fault, could produce light (V) to strong (VII) shaking intensities (ABAG, 2003a).

and surrounding areas have not yet been evaluated by the California Geologic Survey (formerly the California Division of Mines and Geology) for potential number of visitors to Coyote Lake. The potential for new structures to be exposed to liquefaction from underlying saturated lakeside sediments. The Park Project-level development will include construction of several new structures along the shoreline of Coyote Lake and will likely result in an increased

designation as a Seismic Hazard Zone for liquefaction, as previously discussed. To address potential liquefaction hazards, Mitigation Measure Geology, Geohazards, and Soils-2 should be incorporated into project plans.

Mitigation Measure Geology, Geohazards, and Soils-2: Implement Mitigation Measure Geology, Geohazards, and Soils-1.

Impact Geology, Geohazards, and Soils-3: In the event of a major earthquake in the region, seismic ground shaking could potentially expose people and property to seismic-related hazards, including liquefaction and seiche. Less Than Significant with Mitigation Measures.

and surrounding areas have not yet been evaluated by the California Geologic Survey (formerly the California Division of Mines and Geology) for potential number of visitors to Coyote Lake. The potential for new structures to be exposed to liquefaction from underlying saturated lakeside sediments. The Park designation as a Seismic Hazard Zone for liquefaction, as previously discussed. To address potential liquefaction hazards, Mitigation Measure Geology, Project-level development will include construction of several new structures along the shoreline of Coyote Lake and will likely result in an increased Geohazards, and Soils-2 should be incorporated into project plans.

Mitigation Measure Geology, Geohazards, and Soils-3: Conduct appropriate geologic and hazard assessments and implement necessary measures to reduce impacts.

assessment shall, at a minimum, include an analysis of subsurface soils, groundwater depth, and anticipated ground shaking intensities in accordance with Geologic and seismic assessments associated with proposed lakeside structures shall include an evaluation of potential liquefaction hazards. This CDMG Special Publication 117, Guidelines for Evaluating and Mitigating Seismic Hazards in California.

damage to proposed project-level lakeside structures and injury. This is a potentially significant, inherent impact associated with public use of Coyote Lake. The Lakeside Area may be inundated during a seiche on Coyote Lake. Waves and subsequent flooding that may result from a seiche could result in some In order to quantify seiche hazards and reduce potential impacts, the following Mitigation Measure should be incorporated:

ground shaking hazards associated with the Calaveras fault, and shall include a determination of shoreline areas that may be inundated/flooded by seiche A study shall be conducted to evaluate seiche potential on Coyote Lake. This study shall incorporate recent data regarding potential fault rupture and wave action. Reduction of campground density should incorporate relocation of sites to outside seiche inundation/flooding areas.

liquefaction hazards for the proposed entrance kiosk/expanded maintenance facility is recommended. In addition, seiche study results should be considered Lakeside Area program-level components could potentially expose Park visitors and staff to liquefaction and seiche hazards. Analyses of potential prior to finalizing potential structure locations.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
Conduct geologic and seismic assessments and include analysis of subsurface soils, groundwater depth and anticipated groundshaking intensities in accordance the Guidelines for Evaluating and Mitigation Seismic Hazards in California.	1. Design plans and specifications shall be reviewed by a Registered Geologist to verify inclusion of stabilization measures. Plan approval will serve as reporting action. Retain review for administrative record.	1. County Parks	1. During Project Design/ Final Plan Approval
 Evaluate seiche potential on Coyote Lake. Reduce campground density if necessary. Final structure placement will include seiche analysis. 	2. Retain for administrative record and incorporate changes into final design plans	2. County Parks	 During Project Design/ Final Plan Approval

Impact Geology, Geohazards, and Soils-4: Construction activities may result in soil erosion, and expose visitors and staff to geologic hazards associated with expansive soils. Less Than Significant with Mitigation Measures. Project-level components includes construction of staging areas, trails, and several Lakeside structures. Work at these locations would be limited to clearing of the site, with limited grading activities at the launch area and along the trails. Construction would be most intensive at the campground improvements area, particularly associated with the construction of an amphitheatre. Project-level components have the potential to result in short-term, constructionrelated soil erosion. In addition, newly constructed trails have the potential to create long-term soil erosion problems by altering drainage patterns, traversing existing erosion or landside areas, or improperly traversing slopes.

General NPDES Permit to minimize erosion, as discussed in the Hydrology, Floodplains and Water Quality Section. In addition, trail design would conform Short-term construction-related erosion of surficial soils would be mitigated by Mitigation Geology, Geohazards, and Soils 1, compliance with SWRCB with guidelines outlined in the Countywide Trails Master Plan. As noted in the proposed Master Plan, some trails may be closed seasonally due to soil conditions. To further reduce potential long-term erosion hazards, the following mitigation measures shall be incorporated:

Mitigation Measure Geology, Geohazards, and Soils-4: Proposed trails shall be constructed to avoid existing erosion and landside areas within the Park, and shall incorporate trail location recommendations identified in the Trails Plan component of the proposed Master Plan and the Draft Natural Resource Management Plan: Coyote-Lake-Harvey Bear Ranch County Park (Rana Creek Habitat Restoration, 2003).

Program-level components would involve extensive grading associated with golf course, Bicycle Park, and other West Flat Area construction. Completion of a grading plan in accordance with Santa Clara County regulations, compliance with NPDES permit requirements, and incorporation of topographic information, erosion, drainage, and landslide areas identified in the Natural Resource Management Plan into trail and road design plans would reduce potential short- and long-term erosion impacts. Expansive soils are located likely located throughout the Park, as the majority of soils are fine-grained clays and loams. Appropriate preparation of site soils expansive soil hazards for proposed project-level components. Similar measures for program-level components would likely address potential expansive and foundation design, as required by compliance with UBC codes in Mitigation Measure Geology, Geohazards, and Soils-1, would reduce potential

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
 Project design will incorporate measures that will reduce short and long-term erosion hazards. 	1. Review design plans and specifications to verify inclusion. Plan approval will serve as reporting action. Retain review for administrative record.	1. County Parks	 During Project Design/ Final Plan Approval.
2. Appropriate soil preparation and foundation design with compliance with UBC codes in Mitigation Measure-1 will be incorporated into final project design	2. Plan approval will serve as reporting action. Retain for review for administrative record.	2. County Parks	2. During Project Design/Final Plan Approval.

HAZARDOUS MATERIALS

Impact Hazardous Materials-1: Construction workers and future visitors in the West Flat Area may encounter hazardous materials in impacted soil associated with historic ranching operations at the Bear Ranch. Less Than Significant with Mitigation Measures. Improper handling, storage, or disposal of contaminated soil could pose health hazards to construction workers, the public, and the environment. Potential hazardous materials impacts to soil and groundwater associated with historic operations at the Mendoza Ranch have been investigated, and remedial

petroleum hydrocarbons (TRPH) at a level slightly above the reporting limit. Given that TRPH has low mobility and is non-toxic, no further investigation or depth in soil. The Bear Ranch household dump, or refuse area, was similarly investigated (ATC Environmental, 1996b) and found to have total recoverable quantified. As discussed above, historic operations included a UST, AST, and household dump. Shallow soil samples collected from an area with visible surface staining contained concentrations of TPH-d, petroleum hydrocarbon impacts to soil at the former UST location have not been defined laterally at activities, including the excavation of impacted soil, have been completed. However, hazardous materials impacts at the Bear Ranch have not been fully remediation was warranted. Mitigation Measure Hazardous Materials-1a: The County shall continue investigation and remediation of the former UST, AST, and household dump in accordance with Santa Clara County Environmental Health Department regulations. This may include the excavation and removal of petroleum hydrocarbon impacted soils.

Mitigation Measure Hazardous Materials-1b: The County shall develop and implement an environmental site health and safety plan to address worker safety hazards that may arise during project- and program-level construction activities.

encountered. In addition, the contractor shall be required to comply with all applicable OSHA regulations regarding worker safety. The OSHA-specified The Health and Safety Plan shall contain specific language identifying potentially hazardous materials associated with ranching activities that may be method of compliance would be dependent on the severity of impact to soil. Appropriate measures could include a vapor monitoring program, eye protection, and specific handling requirements.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. Complete investigation of potentially contaminated sites.	1. Monitoring and reporting in accordance with County Health Department regulations.	1. County Parks	1. Prior to start of construction in potentially affected area.
 Prepare a project specific Health and Safety Plan and submit to applicable agencies in Santa Clara County 	2. Retain Health and Safety Plan and agency approvals for administrative record. Review site safety plan to verify inclusion of local, state, and federal requirements. Retain review for administrative record.	2. County Parks	2. Prior to start of construction.
3. Include conditions of the Health and Safety Plan in construction specifications.	3. Review construction specifications to verify inclusion. Retain review for administrative record.	3. County Parks	3. Prior to approval of construction specifications

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
4. Monitor for compliance with Health and Safety Retain inspections to verify compliance. Retain inspection report for administrative record.	4. Perform site inspections to verify compliance. Retain inspection report for administrative record.	4. County Parks	4. As necessary during construction.

Impact Hazardous Materials-2: Demolition or renovation of existing structures on the Bear and Mendoza Ranches could expose construction workers and the public to lead-based paint and asbestos. Less Than Significant with Mitigation Measures.

Based on the age and nature of the structures, these facilities are believed to contain these substances. Asbestos is regulated both as a hazardous air pollutant under the Clear Air Act and as a potential worker safety hazard under the authority of Cal-OSHA. Lead-based paint is classified as a hazardous waste if the Phase I investigations on the Bear and Mendoza Ranches did not include an assessment of the existing ranch structures for lead-based paint or asbestos. lead content exceeds 1,000 parts per million. Additionally, lead-based paint chips can pose a hazard to workers and adjacent sensitive land uses.

presence of lead-based paint and asbestos prior to implementation of program-level components that involve the destruction, renovation, or maintenance of Mitigation Measure Hazardous Materials-2a: The County shall assess historic ranch structures on the Mendoza and Bear Ranches for the potential existing structures. An assessment shall be conducted to determine the potential extent of lead-based paint and asbestos in existing structures. Should this assessment determine that lead-based paint and/or asbestos are present, the following mitigation measures shall be implemented for identified structures.

Mitigation Measure Hazardous Materials-2b: The health and safety plan described above in Mitigation Measure Hazardous Materials-1b shall apply to potential lead-based paint risks present during construction. Both the federal OSHA and Cal-OSHA regulate worker exposure during construction activities that affect lead-based paint. The Interim Final Rule found in removal, surface preparation for repainting, renovation, cleanup, and routine maintenance. The OSHA-specified method of compliance includes respiratory protection, protective clothing, housekeeping, hygiene facilities, medical surveillance, and training. No minimum level of lead is specified to activate the 29 Code of Federal Regulations, Part 1926.62 covers construction work where employees may be exposed to lead during such activities as demolition, provisions of this regulation.

Mitigation Measure Hazardous Materials-2c: A lead-based paint abatement plan containing, but not limited to, the following elements shall be implemented:

- Develop an abatement specification approved by an Interim-Certified Project Designer;
- Acquire necessary approvals from the Santa Clara County Environmental Health Department for specifications or commencement of abatement activities;
- Prepare a site health and safety plan, as needed;
- Contain all work areas to prohibit off-site migration of paint chip debris;
- Remove all peeling and stratified lead-based paint on building surfaces and on non-building surfaces to the degree necessary to safely and properly complete demolition activities according to recommendations of the survey. The demolition contractor shall be responsible for the proper containment and disposal of intact lead-based paint on all equipment to be cut and/or removed during the demolition;
- Provide on-site air monitoring during all abatement activities and background monitoring to ensure no contamination of work areas or adjacent properties;
- Cleanup and/or HEPA of vacuum paint chips;
- Collect, segregate, and profile waste for disposal determination; and
- Provide appropriate disposal of all waste.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
 Develop a lead-based abatement plan and submit to the appropriate Health and Safety Agencies in Santa Clara County 	1. Retain Health and Safety Plan and agency approvals for administrative record. Review site safety plan to verify inclusion of local, state, and federal requirements. Retain review for administrative record	1. County Parks	Prior to the start of construction

Mitigation Measure Hazardous Materials-2d: Asbestos abatement shall be conducted prior to demolition or renovation of the existing buildings.

Prior to renovation or demolition of buildings containing asbestos, contractors licensed to conduct asbestos abatement work must be retained, and the Bay Area Air Quality Management District must be notified ten days prior to initiating construction and demolition activities. Asbestos encountered during demolition of the existing building would be disposed of at an appropriate facility.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. Retain licensed asbestos abatement contractors for asbestos removal	1. Notify BAAQMD	1. County Parks	Prior to start of construction

Impact Hazardous Materials-3: Hazardous materials used onsite during construction activities (i.e., petroleum products) could be spilled through improper handling or storage. Less Than Significant.

and/or use of large quantities of materials capable of impacting soil and groundwater are not typically required for a project of the proposed sizes and types. Construction activities associated with project-level and program-level components may involve the use of certain hazardous substances and/or petroleum products. Inadvertent release of these materials could result in adverse impacts to soil, surface water, and/or groundwater. However, the onsite storage

Mitigation Measure Hazardous Materials-3: Apply best management practices during construction of project- and program-level facilities.

construction activities associated with both project-level and program-level components, as discussed in Hydrology, Floodplains and Water Quality Section. The use of hazardous materials best management practices (BMPs) is required pursuant to National Pollutant Discharge Elimination System permits for BMPs typically include the following:

- Follow manufacturer's recommendations on use, storage, and disposal of chemical products used in construction.
- Avoid overtopping construction equipment fuel gas tanks.
- During routine maintenance of construction equipment, properly contain and remove grease and oils.
- Properly dispose of discarded containers of fuels and other chemicals.

Implementation of BMPs would minimize potential adverse impacts to groundwater and soils resulting from hazardous materials used during construction, and additional mitigation measures are therefore not necessary. Impact Hazardous Materials-4: Long-term storage and use of hazardous materials associated with golf course operation and maintenance could result in adverse impacts to soil, groundwater, and nearby surface water bodies. Less Than Significant with Mitigation Measures.

course design (County of Santa Clara, 1996) and the County's Integrated Pest Management Ordinance (County of Santa Clara, 2002). These guidelines set strict limits on types and quantities of allowable use of pesticides and herbicides and also establish standards for groundwater and surface water quality in Mitigation Measure Hazardous Materials-4: The golf course would be operated in conformance with the County of Santa Clara's guidelines for golf vicinity of their use.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. Golf course operations manual shall included guidelines for use and long-term storage of pesticides and herbicides.	Retail operations manual for administrative record.	1. County Parks	1. During operation of golf course.

HYDROLOGY, FLOODPLAINS, AND WATER QUALITY

Impact Hydrology, Floodplains and Water Quality-1: Construction activities could result in soil erosion and increase levels of suspended sediments and contaminants in stormwater run-off, resulting in adverse impacts to surface water quality. Less Than Significant with Mitigation Measures.

Construction activities adjacent to waterways could result in soil erosion and decreased water quality unless erosion control and sedimentation precautions and suspended sediment, reducing the flood-carrying capacity, affecting associated aquatic and riparian habitats, reducing reservoir storage capacity, and especially during the rainy season. Sedimentation to the waterways would degrade water quality for beneficial uses by increasing channel sedimentation are employed. Excavation, grading, stockpiling, and other earth-moving operations could potentially result in erosion and sedimentation to waterways, increasing the cost of drinking water treatment.

Mitigation Measure Hydrology, Floodplains and Water Quality-1a: The County shall comply with the SWRCB General NPDES Permit and SCVWD regulations to minimize erosion and subsequent transport of sediments and contaminants to nearby surface water bodies.

Standards for Erosion and Sediment Control Measures (ABAG, 1995) and with the California Stormwater Quality Association (CASQA), Stormwater Best Management Practice Handbook for Construction (CASQA, 2003a). The County is also required to apply for coverage under the SWRCB's General Construction-related grading and other activities would be required to comply with the Association of Bay Area Governments' (ABAG) Manual of Construction NPDES permit and prepare a SWPPP prior to construction activities.

implementation of the SWPPP starts with the commencement of construction and continues though the completion of the project. Upon completion of the project, the sponsor must submit a Notice of Termination to the SWRCB to indicate that construction is completed. At a minimum, this plan will include the following requirements:

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. Prepare SWPPP as per NPDES general conditions	1. Maintain SWPPP on construction site at all 1. County Parks times.	1. County Parks	1. Prior to the start of construction activities
			and during construction as required.
2. Implement SWPPP as per NPDES general conditions	2. Monitor construction activities to ensure compliance. Retain report for	2. County Parks	2. During construction activities.
	administrative record.		

Mitigation Measure Hydrology, Floodplains and Water Quality-1b: The County shall minimize temporary or permanent realign of streams or drainage swales associated with the project to the maximum extent possible. Designs for proposed permanent stream realignments shall be prepared by a Californiapermanent, shall comply with federal, state, and local agency requirements in order to minimize potential adverse short-term and long-term water quality registered geologist or civil engineer experienced in streambed restoration and fluvial processes. All stream realignment activities, both temporary and impacts.

permanent alteration of drainages may require a Clean Water Act Section 404 Nationwide permit from the U.S. Army Corps of Engineers and a Clean Water Act Section 401 Water Quality Certification from the CCRWQCB, as discussed in detail in Section 3, Biological Resources. Compliance with CCRWQCB and U.S. Army Corps of Engineers permit requirements would minimize potential degradation of water quality in drainages associated permanent stream The County is required by SCVWD to obtain a permit prior to commencing any work in and within 50 feet of streams or drainage swales. In addition,

construction immediately adjacent to or within streams or drainage swales. This plan shall include a map of the project site delineating where erosion control The County shall also prepare an erosion control plan specifying measures to prevent erosion/sedimentation problems during project measures will be applied, and shall include the following minimum criteria: realignments.

- Construction equipment shall not be operated in flowing water, except as may be necessary to construct crossings or barriers.
- Stream diversion structures shall be designed to preclude accumulation of sediment. If this is not feasible, an operation plan shall be developed to prevent adverse downstream effects from sediment discharges.
- receiving water is a flowing stream with turbidity greater than 50 nephelometric turbidity unit (NTU), or 5 NTU above ambient turbidity for ambient turbidities that are less than or equal to 40 NTU. If the water is discharged to a dry streambed, the discharged water shall not exceed 50 NTU. water in excess of specified limits. The discharged water shall not exceed 110 percent of the ambient stream turbidity of the receiving water, if the Where working areas are adjacent to or encroach on live streams, barriers shall be constructed that are adequate to prevent the discharge of turbid
- Material from construction work shall not be deposited where it could be eroded and carried to the stream by surface runoff or high stream flows.
- Riparian vegetation shall be removed only when absolutely necessary.

Compliance with the Clean Water Act, SCVWD requirements, SWRCB's NPDES requirements, which include the creation of a project-specific SWPPP as discussed above, compliance with CCRWQCB and U.S. Army Corps of Engineers permits, and development of an erosion control plan would ensure that potential adverse impacts to surface water associated with project construction would be less than significant.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. Obtain all regulatory permits	1. Retain permits for administrative record	1. County Parks	1. Prior to the start of construction
 Implement requirements as per agency requirements 	2. Perform inspections to verify compliance	2. County Parks	2. As necessary during construction.

Impact Hydrology, Floodplains and Water Quality-2: Creation of new trails may increase erosion by altering existing drainage patterns. Less Than Significant with Mitigation Measures. Increased turbidity and contamination from runoff and soil erosion is a primary concern in regards to water quality impacts from Park development. Trails frequently result in a change to drainage patterns that create erosion issues. As noted in the proposed Master Plan, some trails may need to be closed seasonally due to soil conditions. Potential erosion associated with proposed trails is addressed in Geology, Geohazards and Soils Section.

designed to minimize alterations to existing drainage patterns, prohibit trail short-cutting, and protect water quality in Coyote Lake. In addition, the County shall post information in equestrian staging areas to educate park users about potential adverse water quality impacts associated with undesignated trail use. Mitigation Measure Hydrology, Floodplains and Water Quality-2: Implement Mitigation Measure Geology, Geohazards and Soils-4. Trails shall be

	MONITORING AND REPORTING	MONITORING	MONITORING
IMPLEMENTATION PROCEDURE	ACTIONS	RESPONSIBILITY	SCHEDULE
Implementation of Mitigation Measure Geology, Geohazards and Soils-4	1. See Mitigation Measure Geology, Geohazards and Soils-4	1. County Parks	1. During Project Design

Impact Hydrology, Floodplains and Water Quality-3: An increase in impervious surfaces associated with construction of project- and program-level components may increase surface water run-off, potentially exceeding drainage system capacities, resulting in downstream flooding. Less Than Significant with Mitigation Measures.

significantly increase surface water run-off due to construction of an events pavilion, Satellite Ranger Station, Bicycle Park, golf course, and paved parking The majority of project-level components will not create newly impervious surfaces. The proposed shower facility in the Lakeside Area would cover a relatively small area and would result in a less than significant increase in surface water run-off to Coyote Lake. Program-level components may

Project- and program-level components would not be built within the 100-year floodplain around Coyote Lake, therefore construction of these facilities would not impede or redirect floodwater flows.

system in the West Flat Area, and evaluation of San Martin's adjoining existing storm drain system to incorporate increased flow volumes originating from Mitigation Measure Hydrology, Floodplains and Water Quality-3a: Potential mitigation may include installation of a new subsurface storm drainage the Park. Less Than Significant with Mitigation Measures.

comply with Santa Clara County's Storm Water Drainage Manual, and South Santa Clara County's Small MS4 NPDES permit and SWMP requirements in Mitigation Measure Hydrology, Floodplains and Water Quality-3b: Existing pervious surfaces shall be preserved to minimize the amount of newly generated storm runoff to the greatest extent possible, in accordance the recommendations provided in the Bay Area Stormwater Management Agencies order to minimize increases in stormwater discharge associated with project and program level components located within the CCRWQCB jurisdiction. Association's (BASMAA) Start at the Source Design Guidance Manual for Stormwater Quality Protection (BASMAA, 1999). The County shall also

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING	MONITORING	MONITORING
	ACTIONS	RESPONSIBILITY	SCHEDULE
Project will be designed to preserve pervious surfaces and to minimize increases in Stormwater runoff associated with the project in accordance to state and local Stormwater regulations	Review design plans and specifications to verify inclusion. Plan approval will serve as reporting action. Retain review for administrative record.	1. County Parks	1. During Project Design/ Final Plan Approval

Impact Hydrology, Floodplains and Water Quality-4: Proposed program-level components, including those resulting in increased impervious surface area, may result in long-term adverse water quality impacts. Less Than Significant with Mitigation Measures

the SWDP to minimize the amount of fertilizer and other chemicals that are used resulting in lower levels of pollutants to surface and ground water, with the goal of reducing potential discharge of such chemicals to local waterways. Manure management plans shall also be developed for the equestrian staging and Mitigation Measure Hydrology, Floodplains and Water Quality-4a: Implement Mitigation Measures Hydrology, Floodplains and Water Quality-3a and measures recommended in the California Storm Water Best Management Practice Handbook for New Development and Redevelopment (CASQA, 2003b), Santa Clara County's Storm Water Drainage Manual, and Non-Point Source Ordinance, and standards developed South Santa Clara County's SWMP and Management and Pesticide Use Ordinance (County of Santa Clara, 2002) and develop a turf grass management plan for the golf course as a component of Small MS4 NPDES permit for program level components located within CCRWQCB jurisdiction or SCVURPPP and Santa Clara Countywide NPDES permit, including new C.3 regulations, for components located within SFRWQCB jurisdiction. The SWDP shall adhere to the County's Integrated Pest 3b. In addition, the County shall prepare and develop design specifications for a Storm Water Design Plan (SWDP) to significantly reduce and where components, including as parking lots, the equestrian center and golf course. The SWDP shall incorporate appropriate source control and treatment feasible, eliminate, the off-site migration of sediments and storm water pollutants associated with storm water runoff generated from program level camping areas, and the equestrian/agricultural education center as part of the SWDP.

Mitigation Measure Hydrology, Floodplains and Water Quality-4b: Golf course design shall minimize turf grass coverage to the maximum extent possible. Water supply for golf course construction, operation, and maintenance shall minimize potential reliance on local groundwater sources.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
 Conduct field investigation and water quality evaluation for receiving waters. 	1. As determined through consultation with RWQCB. Evaluation to be included in NPDES Permit application.	1. County Parks	Prior to NPDES permit application.
2. Obtain a NPDES permit.	2. Permit approval shall serve as reporting action. Retain for administrative record.	2. County Parks	 During Project Design/ Final Plan Approval
 Perform concentrate disposal monitoring as defined in NPDES permit. 	3. As determined through consultation with RWQCB and required in NPDES Permit. Retain monitoring reports for administrative record.	3. County Parks	3. During operations, as established by permit requirements.

LAND USE, AND PLANNING

Based on the CEQA Significant Criteria identified in the EIR, the implementation of the Master Plan would not have any significant impacts land use or Planning impacts.

NOISE

Impact Noise-1: Development of park facilities in the West Flat Area would result in temporary noise impacts during project construction. This would be a potentially significant noise impact.

construction equipment. Construction-related material haul trips would raise ambient noise levels along haul routes, depending on the number of haul trips Construction activity noise levels in the West Flat Area would fluctuate depending on the particular type, number, and duration of uses of various pieces of made and types of vehicles used. In addition, certain types of construction equipment generate impulsive noises (such as pile driving), which can be particularly annoying.

Mitigation Measure Noise-1a: The County will incorporate the following measures into contract specifications:

Construction activities shall be limited to between 7:00 a.m. and 7:00 p.m. Monday through Saturday to be consistent with the Santa Clara County Noise and Vibration Ordinance and to avoid noise-sensitive hours of the day. Construction activities shall be prohibited on Sundays and holidays.

- Construction equipment noise shall be minimized during project construction by muffling and shielding intakes and exhaust on construction equipment (per the manufacturer's specifications) and by shrouding or shielding impact tools.
- Construction contractors shall locate fixed construction equipment (such as compressors and generators) and construction staging areas as far as possible from adjacent residences.

Mitigation Measure Noise-1b: To further address the nuisance impact of project construction, construction contractors shall implement the following:

- Signs will be posted at the construction site that include permitted construction days and hours, a day and evening contact number for the job site, and a contact number with the Santa Clara County in the event of problems.
- An onsite complaint and enforcement manager will be posted to respond to and track complaints and questions related to noise.

•		record.	County Noise and Vibration Ordinance.
construction specifications.		inclusion. Retain review for administrative	construction specifications as per Santa Clara
1. Prior to approval of	1. County Parks	1. Review construction specifications to ensure	1. Incorporate limitations for construction into
SCHEDULE	RESPONSIBILITY	ACTIONS	IMPLEMENTATION PROCEDURE
MONITORING	MONITORING	MONITORING AND REPORTING	

Impact Noise-2: Traffic associated with operation of the park under the Master Plan would result in an increase in ambient noise levels on nearby roadways used to access the park. This would be less-than-significant noise impact. Based on the traffic analysis prepared for this report, the proposed project would generate approximately 1,687 additional daily vehicle trips on an average weekend at full build out. These trips would be distributed over the local street network and would affect roadside noise levels.

visitors on weekends. The traffic volumes used in the model peak-hour traffic volumes on an average weekend. Estimated noise levels shown in Table 3-14 Noise Prediction Model for those road segments that would experience the greatest increase in traffic volume (as determined in the traffic section of this To assess the impact of project traffic on roadside noise levels, noise level projections were made using the Federal Highway Administration's (FHWA) modeling effort, average weekend peak-hour traffic volumes were used because the park is expected to experience the greatest increase in the number report) and/or that would pass through areas where residential uses are located. The results of the modeling effort are shown in Table 3-14. For the correspond to a distance of approximately 50 feet from the centerline of applicable roadway segments.

PUBLIC SERVICES AND UTILITIES

Impact Public Services and Utilities-1: Construction activities under the Park Master Plan have the potential to ignite fires. Less Than Significant.

Impact Public Services and Utilties-2: The expansion of the trail system throughout the park may increase the potential for incidents to which emergency fire and medical services may need to respond. Less Than Significant with Mitigation Measures.

shall review current policies and procedures as to how wildfires will be addressed on and near the Park as program-level components of the Master Plan are Mitigation Measure Public Services and Utilities-2: The County Department of Parks and Recreation, the County Fire Marshall, CDF, and SSCCFPD developed, and shall incorporate revisions or changes into subsequent environmental reviews that may be required for those developments.

OW CONTRACTOR OF THE PROPERTY	MONITORING AND REPORTING		MONITORING
IMPLEMENTATION PROCEDURE	ACTIONS	RESPONSIBILITY	SCHEDULE
1. Review current wildfire response policies with	1. Modify policies as appropriate	1. County Parks	1. Prior to approval of final
County Fire Marshall, CDF, and SSCCFPD.			design plans and
			specifications

Impact Public Services and Utilties-3: Facilities planned under the Park Master Plan may not include adequate fire prevention measures in their design, have adequate water supply and water flow for firefighting purposes, and accessibility for emergency response vehicles. Less Than Significant with Mitigation Measures.

potential impact to less than significant. For example, development of the Agricultural/Equestrian Education Center in the West Flat Area would require the establishment of additional water supply and water flow for fire fighting purposes. Because individual project information, such as locations of specific properly and proper access and water flow are not provided. Implementation of Mitigation Measures Public Services and Utilities-3, would reduce the facilities and development of project-specific management plans, is not yet known, specific facilities and plans would be reviewed at the time they are With regard to the development of new facilities in the park, potential fire protection services impacts could occur if these facilities are not designed proposed for implementation to determine the potential for project-specific impacts and to identify appropriate mitigation measures.

Mitigation Measure Public Services and Utilties-3: Potential fire protection services impacts should be reviewed at the project-level for specific facilities proposed under the Master Plan.

Mitigation measures considered will include, but not be limited to:

- Individual actions shall comply with all applicable State and local codes and ordinances. Requirements may relate to automatic fire extinguishing systems and smoke detectors.
- All building and facility design plans shall be reviewed by the County Fire Marshall.
- Roofs of new structures shall have a Class A rating to mitigate problems that may arise as a result of grassland-urban interface. For instance, fertilizer at the golf course should be stored in a concrete building with a roof made of metal or other flame-resistant material.
- Requirements for emergency vehicle access shall be incorporated into project design, including access to physical structures and fire hydrants or water supply tanks. Such requirements include road grade and lane width, paving of access roads, curb painting, emergency breakaway gates, vertical clearance, turning radii, turn-around areas, and signage.
- Adequate water supply for firefighting and water flow must be incorporated into the design of buildings and facilities in the park, and approved by the large pressurized water storage tanks. In the West Flat Area, the new fishing pond and ponds that are part of the golf course can be planned such that County Fire Marshall. Ensuring adequate water supply for firefighting purposes may entail the implementation of fire hydrants and/or installation of they can serve as the water supply for fire emergencies. The water supply system shall be in place prior to construction of any facilities.
- Emergency vehicle access shall be maintained at all times during construction phases.
- Access for fire fighting apparatus and personnel to and into all structures shall be required.

implementation of the Park Master Plan. However, the Department would require examination of many specific facilities included in the Park Master Plan at the time they are proposed for implementation to determine if further environmental review at a more detailed project-specific and site-specific level were Implementation of the requirements described above would reduce the potential program-level fire protection services impacts associated with the

	MONITORING AND REPORTING	MONITORING MONITORING	MONITORING
IMPLEMENTATION PROCEDURE	ACTIONS	RESPONSIBILITY	SCHEDULE
1. Review and modification of fire protection measures as necessary for Phase 1 project	1. Incorporate into project design. Document for administrative record.	1. County Parks	1. Prior to final plan approval
components.			

Impact Public Services and Utilties-4: Implementation of the Master Plan may increase water demand. Less Than Significant with Mitigation Measures.

Mitigation Measure Public Services and Utilties-4a: The County shall ensure an adequate water supply for Phase 1 projects.

Mitigation measures should include, but not be limited to:

- Install low-flow shower heads.
- Enforce time limits on shower use.
- supply to the shower facility need not necessarily be potable; however, if a non-potable water source is used, signs shall be installed to notify visitors. adequately meet that demand. If additional water supply is needed, the park shall consider upgrades to the existing water supply system. The water The park could also consider redirecting the water supply from the bathroom toilets to the showers and then using grey water from the showers for Conduct a study to quantify water demand during the peak camping season and evaluate whether the existing well and water supply system can

Mitigation Measure Public Services and Utilties-4b: The County shall ensure an adequate water supply for Phase 2 and Phase 3 projects.

increase the demand for water and their associated impact on water supply. The County shall also develop project-level mitigation measures to ensure The County shall review all projects proposed under Phases 2 and 3 of the Master Plan at the project level to determine the degree to which they will adequate and efficient use of available water supply for these projects. Such measures may include, but are not limited to:

- Utilize native, drought-resistant plants in landscaping.
- Install low-flow faucets and toilets in all new park facilities and consider composting toilets in place of flush toilets.
- New wells and water treatment shall be installed only with the correct permits.
- Reestablish a water supply system that draws water from Coyote Lake, in concert with SCVWD.
- For developments in the West Flat Area, the park shall consider building a connection to the nearest water main that runs along San Martin Avenue.

- Facilities proposed at higher elevations could require higher elevation structures and fire hydrants with their required pressures and may include a booster station, a new storage tank within the park, a new hydropneumatic zone within the park to service the higher elevations, or new main extensions from the local water company.
- treatment facility in Gilroy with the South County Regional Water Authority (SCRWA). As a provider of recycled water in the County, SCRWA is In order to establish an adequate supply of non-potable water for irrigation, the park shall explore the use of recycled water from the recycled water currently involved in similar arrangements, and is pursuing expanded programs.
- Best Management Practices shall be applied to the operation and maintenance of the golf course. Measures specific to golf course maintenance include nighttime watering to reduce evaporation loss and the practice of "multiple cycling" to reduce irrigation runoff.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
 Incorporate water conservation methods and techniques into Park operations plan. 	 Periodic staff review of operations plan to verify inclusion. Retain for administrative record. 	1. County Parks	1. Prior to final plan approval.

Impact Public Services and Utilties-5: Installation of showers as one of the campground improvements proposed at Lakeside Campground under Phase 1 of the Master Plan would increase wastewater flows to the park's existing septic system in the Lakeside Area. This is a potentially significant impact. Less Than Significant with Mitigation Measures. Mitigation Measure Public Services and Utilties-5a: The County shall implement controls on the amount of wastewater generated by the shower facility proposed at the Lakeside Campground showers and ensure adequate septic capacity.

This shall include, but not be limited to, the following:

- Installation of low-flow shower heads.
- Enforcing time limits on shower use.

projects proposed under Phases 2 and 3 of the Master Plan. The County shall also develop project-level mitigation measures to ensure adequate and efficient Mitigation Measure Public Services and Utilties-5b: The County shall provide adequate capacity to handle peak wastewater flows for the following use of wastewater flow capacity for these projects.

Such measures shall include, but are not limited to:

- All faucets should be low-flow and have automatic shut off valves.
- Installation of additional septic systems for each facility.
- Consider composting toilets in place of flush toilets.
- For developments in the West Flat Area, the park shall consider building a connection to the nearest wastewater main.

IMPLEMENTATION PROCEDURE ACTIONS	MONITORING AND REPORTING	MONITORING	MONITORING
	ACTIONS	RESPONSIBILITY	SCHEDULE
Incorporate water conservation methods and techniques into Park operations plan record. record.	Periodic staff review of operations plan to verify inclusion. Retain for administrative record.	1. County Parks	1. During Project Design/ Final Plan Approval

Impact Public Services and Utilities-6: Operation of projects included in the Master Plan could generate additional solid waste. Less Than Significant with Mitigation Measures.

Mitigation Measure Public Services and Utilties-6: Facilities and plans implemented under Phase 2 and Phase 3 of the Park Master Plan shall undergo further review with respect to their impact on solid waste services in the County at the project level.

Appropriate mitigation measures, as deemed necessary, shall be applied to the design or operation of each facility, including but not limited to:

- Organic wastes such as lawn cuttings, landscaping debris, straw, and horse manure shall be composted. Wood debris from landscaping shall be made available for campfires to visitors at the park's campgrounds.
- All park facilities, landscaped areas, picnic areas, parking lots, buildings and other visitor-serving uses should be equipped with recycling and trash
- Best Management Practices (BMP) to reduce and manage solid waste shall be implemented into the design and operation of the golf course proposed for the West Flat Area. For instance, "grass cycling" can be utilized to reduce waste from landscaping. The process of grass cycling involves more frequent mowing to produce shorter clippings that do not need to be bagged and hauled away. Another BMP would be to avoid using weed control products that later interfere with composting of landscaping debris.

- Onsite buildings will encourage recycling by providing facilities to accommodate park waste and recycling drop-off and pick-up programs. These facilities will include a space for a suitable number of containers for the separation of recyclable materials. Such containers will be designed to protect soils, water resources, biological resources, and other aspects of the environment.
- During construction, material waste will be minimized by utilization of standard dimensions and milling to length of repetitive dimensional lumber. In addition, a waste management plan will be incorporated into future construction documents. To the extent feasible, waste materials will be salvaged, reused, or recycled.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
 Incorporate solid waste management and recycling methods into Park operations plan. 	1. Periodic evaluation by operations staff to ensure compliance. Retain record of coordination for administrative record.	1. County Parks	Prior to approval of construction specifications

Impact Public Services and Utilities-7: Operation of the facilities to be implemented under the Master Plan could consume additional energy. Less Than Significant with Mitigation Measures.

Mitigation Measure Public Services and Utilties-7: The County shall ensure energy efficiency in the operation of its campground facilities.

The development of facilities to be implemented under Phases 2 and 3 of the Master Plan should undergo project-level review to ensure they do not result in the wasteful, inefficient, and unnecessary consumption of energy. Design measures may include:

- If the hot water is provided in the showers, ensure that energy efficient water heaters are used and enforce time limits on shower use. Limit operation of the hot water heaters to when the campground is open and in use.
- If RV electric hookups are installed, encourage their use during non-peak hours.
- orientation to the north for natural cooling, the use of energy efficient appliances and lights, increased insulation and window treatments, light-colored roof materials to reflect heat, shade trees to reduce building's heat, and centralized water heating systems. Employment of site plan design and building design mitigation measures that increase heating and cooling efficiency. This may include building
- Incorporation of alternative energy sources in facilities design, such as photovoltaic cells or wind turbines.
- Monitoring energy consumption of facilities throughout the park (both electricity and propane) to identify high energy consumers and facilities that could benefit from efficiency improvements.

Designing the events pavilion as a cluster of individual indoor spaces could help limit unnecessary heating. For instance, a large space would not have to be heated for an event occurring in a small space.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
 Incorporate energy saving techniques and methods into construction plans and specifications. 	Review construction plans and specifications to and document for administrative record.	1. County Parks	1. Prior to start of construction.
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RECREATION

Impact Recreation-1: Implementation of the project would result in short-term adverse recreation impacts associated with project construction. Less Than Significant with Mitigation Measures. Mitigation Measure Recreation-1: The County shall implement Noise, Air Quality, Transportation, and Visual Resources mitigation measures included in this MMRP.

	MONITORING AND REPORTING	MONITORING	MONITORING
IMPLEMENTATION PROCEDURE	ACTIONS	RESPONSIBILITY	SCHEDULE
1. Implement Mitigation Measures as described as described in EIR (Noise, Air Quality, Transportation, and Visual Resources).	As described for Noise, Air Quality, Transportation, and Visual Resources mitigation measures.	1. County Parks	Prior to start of construction.

Impact Recreation-2: Implementation of the Coyote Lake-Harvey Bear Ranch County Park Master Plan would expand the publicly accessible open space of the park resulting in a beneficial recreation impact. Significant Beneficial Impact

Impact Recreation-3. Implementation of the project would improve and expand the types of publicly accessible recreation facilities and trails in the park resulting in beneficial effects on the visitor experience. Significant Beneficial Impact

Impact Recreation-4. Implementation of the project would expand the trail system within the park and improve regional trail connectivity. Significant Beneficial Impact.

TRAFFIC AND CIRCULATION

Impact Traffic and Circulation-1: Implementation of the Master Plan has potential to adversely affect levels of service (LOS) at local intersections. Less than Significant.

Impact Traffic and Circulation-2: Implementation of the Master Plan could result in adverse effects on access and internal circulation within the park. Less than Significant with Mitigation

Mitigation Measure Traffic and Circulation-2a: Provide eastbound left turn channelization on San Martin Avenue on the Western Flat entrance.

Mitigation Measure Transportation and Circulation-2b: Design the Western Flat area entrance kiosk location to ensure adequate on-site storage is provided for vehicles entering the park.

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. Design and construct left-turn lane for entrance to park form San Martin Avenue.	1. Review construction specifications to ensure adequacy of design. Monitor construction to ensure proper implementation. Report as necessary to County Roads department.	1. County Parks	Prior to approval of construction specifications; During construction.
 Design and construct entrance kiosk and entrance road to accommodate vehicles. 	1. Review construction specifications to ensure adequacy of design. Monitor construction to ensure proper implementation.	2. County Parks	2. Prior to approval of construction specifications; As necessary during construction.

Impact Traffic and Circulation-3: Construction traffic could adversely impact local traffic conditions.

Mitigation Measure Traffic and Circulation-3: Construction traffic control plans shall be mitigated in accordance with the Caltrans Traffic Manual and subject to the approval of the Santa Clara County Department of Roads and Airports Department

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
1. Include preparation of a Traffic Control Plan, including the above requirements, in contractor specifications.	Review construction specifications to ensure inclusion. Retain review for administrative record.	1. County Parks	Prior to approval of construction specifications.
2. Review and approve Traffic Control Plan. Obtain approval from County Roads department.	2. Retain review and appropriate approvals for administrative record.	2. County Parks	Prior to construction activities.
3. Perform compliance inspections	3. Perform inspections to ensure compliance. Include inspection record for administrative record.	3. County Parks	3. As necessary during construction.

VISUAL RESOURCES

Impact Visual Resources-1: Implementation of the Master Plan would result in short-term adverse visual impacts associated with project construction. Less Than Significant with Mitigation Measures. Mitigation Measure Visual Resources-1: The following measures are included to minimize or reduce project impacts on existing scenic resources and visual quality during project construction:

- During construction of Park facilities construction staging shall be located in areas that are not visible from public vantages, to the extent possible.
- Avoid damage to natural surroundings in and around the work limits.
- Provide temporary barriers to protect existing trees, plants, and root zones, if necessary.
- Construction activities shall be phased to minimize the appearance of disturbed areas within the Park.

	MONITORING AND REPORTING	MONITORING	MONITORING
IMPLEMENTATION PROCEDURE	ACTIONS	RESPONSIBILITY	SCHEDULE
1. Incorporate measures into final Master Plan.	1. Review Plan to verify inclusion.	1. County Parks	1. Prior to construction
			activities.

Impact Visual Resources-2: The proposed Master Plan would alter and visually intrude upon the open, natural character of the Park in which new development is proposed. Less Than Significant with Mitigation Measures. Mitigation Measure Visual Resources-2: The following measures are included to minimize or reduce project impacts on existing scenic resources and visual quality:

- Minimize development footprints.
- Choose building materials that are visually compatible or do not compete with the landscape.
- In the West Flat and Mendoza areas, architecture of new facilities shall enhance the existing rustic ranchland character.
- In the West Flat area, existing barns shall remain the dominant structures, with no other structure exceeding the barns in height.
- New structures shall include arbors, porches, and patios to blend indoor and outdoor spaces.
- New architectural features in the Lakeside area shall blend with the existing architectural styles.
- Staging areas shall be paved with asphalt or be unpaved with road base material.
- Overflow parking areas shall be grass that can be mowed seasonally.
- Provide native vegetative screening to block views of new developed areas at the Park from public view corridors. Select tree and vegetation species that enhance the ranchland character theme.

MITIGATION MONITORING AND REPORTING PROGRAM – Coyote Lake Harvey Bear Ranch County Park TABLE 1 (Continued)

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
 Incorporate Ordinance standards regarding visual elements into design plans and specifications. 	Review design plans and specifications to ensure inclusion. Retain review for administrative record.	1. County Parks	1. During Project Design/ Final Plan Approval.
 Include requirement to return disturbed areas to pre-project conditions in construction specifications. 	 Perform site inspections to verify compliance. Retain inspection report for administrative record. 	2. County Parks	2. As necessary, during construction.

Impact Visual Resources-3: The proposed Master Plan would introduce new publicly accessible trails on the site providing new opportunities for scenic views. Significant Beneficial Impact

Impact Visual Resources-4: The proposed Master Plan would introduce sources of light and glare to the Park. Less Than Significant with Mitigation Measures.

Mitigation Measure Visual Resources-3: The following mitigation measures are recommended to minimize project impacts of light and glare:

- Exterior lighting shall use fixtures with low-level lighting, focused beams, and directional hoods to minimize light visible from other properties and reduce night sky impacts.
- Vegetative screening and islands shall be utilized in parking, staging, and camping areas to reduce reflective glare.
- Non-reflective asphalt surfaces shall be utilized to reduce glare

IMPLEMENTATION PROCEDURE	MONITORING AND REPORTING ACTIONS	MONITORING RESPONSIBILITY	MONITORING SCHEDULE
 Incorporate design requirements into design plans and specifications. 	1. Review construction specifications to ensure inclusion. Retain review for administrative record.	1. County Parks	1. During Project Design/ Final Plan Approval
	2. Perform site inspections to verify compliance. Retain inspection report for administrative record.	2. County Parks	2. As necessary, during construction.