

5 ENVIRONMENTAL ANALYSIS



Photo on reverse: Butano Fire Road

CHAPTER 5: ENVIRONMENTAL ANALYSIS

5.1 INTRODUCTION

PURPOSE OF THE EIR

This General Plan for Butano State Park, with all its sections, constitutes an environmental impact report (EIR), as required by Public Resources Code Sections 5002.2 and 21000 et seq. It will be submitted to the California Park and Recreation Commission (Commission) for approval. The Commission has sole authority for the plan's approval and adoption. Following approval by the Commission, the Department will prepare specific management plans and development plans as staff and funding become available. Future projects within the park, based on the proposals in this General Plan are subject to further environmental review, permitting requirements, and approval by other agencies, such as the Department of Fish and Game and the California Coastal Commission.

FOCUS OF THE EIR

The Notice of Preparation for this General Plan was circulated to the appropriate federal, state, and local planning agencies on October 20, 2003. Written comments focusing on potential impacts to listed steelhead and coho salmon were received from the National Marine Fisheries Service. Based on known issues affecting the long-term management of the park and on comments received during the planning process, this General Plan and Draft EIR were prepared to address potential environmental impacts that may result from the implementation of the management goals and guidelines, as well as from area-specific management. Emphasis is given to potentially significant environmental impacts that may result from all future park management, development, and uses within the park that are consistent with these goals and guidelines.

SUBSEQUENT ENVIRONMENTAL REVIEW PROCESS

The tiering process of environmental review is incorporated into this EIR. Tiering in an EIR prepared as part of a general plan allows agencies to consider broad environmental issues at the general planning stage, followed by more detailed examination of actual development projects in subsequent



environmental documents. These later documents incorporate, by reference, the general discussions from the broader EIR in the General Plan and concentrate solely on the issues specific to the later projects [Public Resources Code Section 21093; California Environmental Quality Act (CEQA) Guidelines Section 15152]. This document represents the first tier of environmental review.

As a first tier of planning, this plan provides parkwide goals and guidelines for cultural and natural resource management, visitor access and circulation, recreation activities and facilities, visitor experiences, visitor safety, trails, concessions, wildfire, aesthetics, interpretation, sustainable design, operations, community and interagency relations, and acquisition. Future second tier review will provide more detailed information and environmental analysis. At each planning level projects will be subject to further environmental review to determine if they are consistent with the General Plan and to identify any potentially significant environmental impacts, mitigation measures, and monitoring that would be required by the project.

Mitigation generally requires resource specialists to evaluate the scope of work, identify the cause of the impacts, and specify measures to mitigate the impacts to a less than significant level. More comprehensive environmental review will be possible at the more specific levels of planning, where facility size, location, and capacity can be explicitly defined, rather than at the general plan programmatic level. Additional potentially significant environmental impacts and mitigation measures specific to the project will be identified at that time.

CONTENTS OF THE EIR

This programmatic EIR includes the following sections:

Introduction: This section includes a brief overview of the environmental review process, legal requirements, and approach to the environmental analysis.

EIR Summary: The EIR summary represents a summary of potential environmental impacts associated with implementation of the General Plan, an overview of the environmental effects of alternatives considered relative to the preferred alternative, and a description of any areas of controversy and/or issues that need to be resolved.

Project Description: This section provides an overview of the proposed General Plan, which is the focus of the program EIR.



Environmental Setting: This section provides a description of the physical environmental conditions in the vicinity of the project from a local and regional perspective. The environmental setting constitutes the baseline physical conditions to determine whether an impact is significant.

Environmental Effects Eliminated from Further Analysis: This section describes those environmental topics that did not warrant detailed environmental analysis and the supporting rationale for their elimination.

Environmental Impacts: This section analyzes potential environmental impacts associated with implementation of the proposed General Plan.

Other CEQA Considerations: This section contains information on other CEQA-mandated topics, including significant and unavoidable impacts, significant irreversible environmental changes, growth-inducing impacts, and cumulative impacts.

Alternatives to the Proposed Project: The alternatives analysis describes the alternatives to the proposed General Plan that are considered in this EIR and the associated environmental effects of these alternatives relative to the proposed project.

5.2 EIR SUMMARY

SUMMARY OF IMPACTS AND MITIGATION

Implementation of the General Plan is not expected to result in significant impacts on the environment. Implementation of the goals and guidelines discussed in Chapter 4, as well as the Department's compliance with federal and state laws and regulations, avoids potential significant effects or maintains them at a less-than-significant level. Additional mitigation measures are, therefore, not necessary.

SUMMARY OF ALTERNATIVES CONSIDERED

Four alternatives were considered during the planning process, including the preferred alternative (discussed in Chapter 4, Park Plan), the no-project alternative, and two additional alternatives. These additional alternatives provide resource protection and recreation facilities and attempt to reduce any potential impacts of the preferred alternative.

5.3 PROJECT DESCRIPTION

Chapter 4, Park Plan, represents the project description and establishes the overall long-range purpose and vision for Butano State Park. Management goals and supporting guidelines in Chapter 4 address the currently identified critical planning issues (see Chapter 3, Issues) and are designed to avoid or reduce any potentially adverse environmental effects resulting from park use or management.

Planning areas are identified that will guide parkwide land use decisions, visitor use areas, and future development proposals. This Environmental Analysis focuses on the environmental effects of the preferred plan for three separate park planning areas: the **Entrance and Facilities Zone**, the **Gazos Mountain Camp Zone**, and the **Backcountry Zone**.

In the **Entrance and Facilities Zone** the plan proposes developing additional day use picnic sites for large and small groups along with an evaluation and possible redesign of existing day use parking to minimize traffic conflicts and accommodate a potential increase in these types of uses. The plan recommends coordination with the Peninsula Open Space Trust (POST) on the establishment of a trail through its Cloverdale Coastal Ranches property, with associated interpretive and other compatible facilities. The plan calls for development of a trailhead and trail connection from Butano State Park to the coast through adjacent Año Nuevo State Park. In the Goat Hill area of the park the plan proposes interpretation of the area's wetlands and an evaluation of the existing staff residence/storage areas related to year-round access, road maintenance, and wildfire, along with the potential for additional staff housing. Proposals to provide additional support facilities for park volunteers and programs in the entrance and visitor center complex and recommendations to broaden existing interpretive themes that will include the park's cultural history are also included in this planning zone.

In the **Gazos Mountain Camp Zone** the plan recommends adapting the existing structures to support park programs and activities including environmental education and research, to continue to protect sensitive habitat, and to establish high aesthetic standards for the structures by unifying their appearance and maintaining them in good repair. The plan also recommends research, survey, and recordation of the historic sawmill site.



Backcountry Zone proposals include the establishment of trailhead parking along Gazos Creek Road and to coordinate with the county to improve the water quality in Gazos Creek. In addition, the plan calls for research and interpretation of the Jackson Flats homestead, additional trail camps, and consideration of shuttle tours of backcountry areas on the park's fire roads.

Comprehensive parkwide management plans for natural and cultural resources, trails, fire management, and watershed management, as well as coordination with other agencies and organizations, are also proposed and described in Chapter 4.

5.4 ENVIRONMENTAL SETTING

Chapter 2, Existing Conditions, contains the description of the existing park environment, the local and regional environment, and important resource values within the park.

This General Plan is consistent with other applicable state and regional plans, such as the San Mateo County Local Coastal Program, the Wildlife Action Plan (Central Coast Region), the Master Plan for the Coast Redwood, the Regional Transportation Plan, and local community and open space plans including the Midpeninsula Regional Open Space District Master Plan, and the Cloverdale Coastal Ranch Plan.

5.5 ENVIRONMENTAL EFFECTS ELIMINATED FROM FURTHER ANALYSIS

The following topics were eliminated from further analysis in the EIR because there is no potential for significant environmental effects resulting from implementation of the General Plan. A brief reason for their elimination is provided for each respective topic.

AGRICULTURE RESOURCES

Implementation of the General Plan would not convert any "Important Farmland" as identified by the California Department of Conservation Farmland Mapping and Monitoring Program, nor does the park contain any lands



under Williamson Act contracts. Implementation of the General Plan would not result in the conversion of any agricultural land to non-agricultural uses. Therefore, no significant effects would occur on agricultural resources and no further environmental analysis on the effects on agricultural resources is necessary.

LAND USE AND PLANNING

The General Plan proposals would not result in the division of an established community or conflict with applicable land use plans, habitat conservation plans, or the policies or regulations of any agency with jurisdiction over the project. Therefore no significant land use and planning effects would occur and no further environmental analysis on the effects on land use and planning is necessary.

MINERAL RESOURCES

Implementation of the General Plan would not result in the loss of availability of known mineral resources that are or would be of value to the region and residents of the state, or are a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. Therefore, no further environmental analysis on the effects on mineral resources is necessary.

POPULATION AND HOUSING

Most visitors to Butano State Park come from the metropolitan areas of northern and central California. Visitation is expected to increase as the State's population grows by 1.4% annually through 2020. Staff at Butano State Park and those involved in the regional tourist-serving industries primarily live in San Mateo and Santa Cruz counties. Between 1997 and 2020 the population of San Mateo County is projected to increase by approximately 20% and a 48% increase is projected for Santa Cruz County. Guideline **Regional Planning 7** encourages cooperation with other agencies to identify and provide potential shared affordable employee housing opportunities. While implementation of the General Plan would not directly induce regional population growth, additional recreational facilities could attract additional visitation and potentially add to the employment base of the immediate area. The increase in demand for labor and housing would be met by the existing local population and no additional housing would be needed to serve growth associated with additional visitation. The General Plan does not include proposals for infrastructure that would induce additional growth in the immediate vicinity. For these reasons, significant population,



employment, and housing effects would not occur as a result of implementation of the General Plan, and no further analysis is necessary.

PUBLIC SERVICES

The General Plan proposals for new facilities at the park are limited. Existing public services such as fire and police protection, schools, parks, and other public facilities are adequate to maintain acceptable service ratios, response times, and other performance objectives for these services. Therefore, no further environmental analysis is necessary on the effects on public services.

5.6 ENVIRONMENTAL IMPACTS

The purpose of this section is to identify potential impacts of the project that may be considered significant. This analysis uses criteria from the model Initial Study Checklist (Appendix G of the CEQA Guidelines) and CEQA's mandatory findings of significance (PRC sec. 21083, Guidelines sec. 15065 and sec. 15064.5) as tools for determining the potential for significant environmental effects. A significant effect on the environment is generally defined as a substantial or potentially substantial adverse change in the physical environment.

General Plan proposals include development and maintenance of day use and overnight camping facilities, parking areas, road modifications, trails, education and research facilities, and natural resource management activities that could create adverse impacts. The impacts are considered potential because the actual size, location, and design of the proposed facilities or structures have not been determined. All park plans and projects shall be in compliance with state and federal permitting and regulatory requirements and subject to subsequent tier CEQA review and project specific mitigation. Appropriate mitigation specific to detailed project design will be implemented as necessary in later planning and development stages.

Any potential impacts at this programmatic level would be avoided or reduced to a less than significant effect by implementing the General Plan goals and guidelines, as described in the impact analysis for each topic. The analysis is organized alphabetically by topic following the model Initial Study Checklist (Appendix G of the CEQA Guidelines).

AESTHETICS

This section analyzes impacts to aesthetics that could result from the implementation of the General Plan.

Impact Analysis

Any changes that substantially degrade visual experiences for visitors to the park and others from adjacent properties have the potential to cause significant impacts. The significance of visual impacts is dependent upon expectations and perceptions. For example, the presence of recreation facilities or numerous visitors would generally be more visually offensive to visitors on a backcountry hike than in areas where higher levels of social interaction are expected, such as a picnic area or campground.

The General Plan proposals may create adverse impacts to visual resources which can be avoided or reduced by implementing the General Plan's guidelines for appropriate and sustainable setting, design, and selection of materials for park projects (see guidelines **Aesthetics 2** and **Sustainability 1**), revegetation of disturbed areas (see guideline **Vegetation 2**), and screening of facilities (see guideline **Aesthetics 4**).

Parking facilities may be visible from the existing kiosk, visitor center, campground, and picnic areas. Guideline **Aesthetics 4** describes the use of screening methods with appropriate native plants, rocks, or elevation changes. These elements could also soften the visual effect of parking areas, campground facilities, roads, and trails, buffer intrusive or distracting views and activities outside park boundaries, and enhance scenic views.

Through guideline **Aesthetics 5**, artificial lighting would be limited to developed areas of the park, be shielded or focused downwards, and emit the lowest light levels possible while meeting the park's goals for public safety.

High-profile directional, informational, and interpretive signs along trails, park and local roads could contribute to visual clutter. Implementation of guideline **Aesthetics 3** calls for organizing and presenting elements that exist together in specific areas of the park in a clear and uncluttered way.

The park is located adjacent to Cloverdale Road, which is designated by the San Mateo County Local Coastal Program as a Scenic Road. Gazos Creek Road from Highway 1 to Cloverdale Road is also designated as a Scenic Road. Guideline **Aesthetics 8** calls for plan proposals to comply with Local Coastal Program standards for aesthetic resources,



which would include minimizing visual impacts from park development on these county-designated scenic roads.

Developments outside Butano State Park may also be visible to visitors at viewpoints and the developments may introduce new light sources that would degrade nighttime views. With guideline **Regional Planning 8** the Department would submit input to local, state, and federal agencies during the environmental review period of development projects in an effort to encourage appropriate mitigation for any potential negative visual impacts. While the decision to implement visual mitigation measures outside Butano State Park is not within the jurisdiction of the Department, it is expected that feasible mitigation would be implemented in compliance with state laws.

AIR QUALITY

This section analyzes air quality impacts that could result from implementation of the General Plan.

Impact Analysis

In general, the region has very good air quality. Dust and vehicle emissions from site preparation and construction may create temporary air quality impacts. Air quality may also be temporarily impacted by prescribed burning programs or wildfires in the park.

The air quality impacts from construction can be substantially reduced by the use of dust control measures and other construction best management practices (see guideline **Geology/Hydrology 5**). Dust control measures would be developed during site-specific planning.

Under guideline **Vegetation 4** the Department would use prescribed fire as part of a vegetation management strategy. This strategy would identify conditions under which prescribed burning would be allowed in order to minimize impacts to air quality.

There may be increased park visitation as a result of additional directional signage on regional roads as well as from expanded facilities and interpretive opportunities. Most visitors currently arrive by private vehicles. An increase in visitor use may cause a minor increase in total vehicle emissions in the region. The General Plan recommends coordinating with San Mateo County and local transit agencies to encourage and develop public transit and multi-modal transportation opportunities for visitor access to the park and to other parks and recreation areas in the region

(see guideline **Access 5**). The General Plan also recommends the use of low-emission park vehicles such as maintenance vehicles and potential shuttles to reduce emissions and contribute to better air quality (see guideline **Sustainability 5**). The plan proposals will not conflict with, obstruct implementation of, or violate air quality standards set by the California Air Resources Board.

BIOLOGICAL RESOURCES

This section analyzes impacts to biological resources that could result from the implementation of the General Plan.

Impact Analysis

The General Plan proposals have the potential to adversely affect the park's biological resources, especially where new facilities are introduced into previously undisturbed areas, such as trails and trail camps in the backcountry. Adverse impacts to biological resources can be avoided or reduced by implementing the General Plan's guidelines for protecting and preserving these resources in the park and region.

Special status wildlife, wildlife habitats, and sensitive plant communities occur at Butano State Park. There are 24 special status plant species and 42 special status wildlife species for which potential habitat exists in the park. Two vegetation types occur within the park that are considered to be rare natural plant communities. Site-specific surveys for special status species and sensitive habitats will be completed as part of the planning process for resource management projects, construction, maintenance, or rehabilitation of facilities and trails. Where necessary, state and federal resource agencies will be consulted to assist with appropriate resource protection, habitat enhancement, and management techniques.

The majority of potential facility development recommended in the plan would occur in areas that have been previously disturbed (such as picnic areas and parking and circulation enhancements in the Entrance and Facilities Zone). There would be minimal adverse impacts to vegetation and wildlife in these portions of the park. Site-specific impact evaluations will occur when projects and facilities are proposed. The General Plan recommends preparation of comprehensive natural resource management plans, including marbled murrelet, fire management, trails and watershed management plans that, when completed, will also provide guidance for identification, protection, habitat restoration,

and adaptive management of the park's resources, especially special status species and sensitive habitats.

The General Plan recommends actions, in coordination the USFWS and CDFG, for the long-term recovery and survival of the marbled murrelet, state-listed as endangered and federally-listed as threatened (see guideline **Murrelet 1**). Included are guidelines for minimizing recreational facility development in areas of marbled murrelet nesting habitat and in other special status species habitat. Noise-producing activities such as construction or maintenance activities would be minimized during the breeding season and would comply with applicable federal and state regulations (see guidelines **Special Animals 3** and **Murrelet 1**). Human food and garbage will be controlled with wildlife-proof trash containers and public education that addresses the detrimental effects of these materials on wildlife (see guideline **Wildlife 4**).

Structures would be inspected for special status species, including bat populations, and protective measures established prior to major maintenance, construction, renovation, or structure demolition (see guideline **Special Animals 5**). The federally-threatened steelhead trout and state-endangered and federally-threatened coho salmon spawn in Gazos Creek, and Little Butano Creek provides limited but good quality spawning for anadromous fish. The plan recommends that the timing of streambed alterations or disturbance to wetlands or riparian habitat take into account the needs of special status aquatic species, including migrating fish and the California red-legged frog (see guideline **Special Animals 4**).

Facility removal, rehabilitation, and development, including trails, have the potential to disturb, degrade, or remove wildlife habitat or sensitive plant communities. If there is any potential for significant adverse effects to sensitive habitat, including wetland and riparian habitat, proposed facilities will be redesigned to avoid adverse impacts. Negative impacts from activities and facility development in critical resource areas would be avoided or minimized (see guideline **Wildlife 2**). This may include limiting access to some areas of the park, or temporarily closing or relocating facilities to promote restoration (see guideline **Vegetation 2**). The plan's adaptive management process, outlined in Section 4.6, Managing Visitor Capacity, describes a process for evaluating, monitoring, and mitigating visitor impacts so that adverse impacts to wildlife are minimized.

Park management will pursue cooperation with regulatory agencies, adjacent public and private landowners, and local jurisdictions to continue resource protection and enhancement of existing habitat linkages.

Ground disturbance, including grading, soil compaction, vegetation removal, and some recreation activities, has the potential to provide habitat for non-native invasive species. The spread of invasive exotic plant species and exotic animal species may have adverse impacts by promoting the loss of native habitat and reducing species diversity. Ground disturbance could include new facility construction (structures, parking lots) as well as trail and trail camp development. Trails and roads can also become dispersal corridors for invasive plants. The plan proposes goals and guidelines to reduce and avoid any negative impacts to prevent the spread of invasive non-native plant and animal species in the park and region (see guidelines **Wildlife 3** and **Vegetation 3**).

There are important habitat linkages both within the park and between the park and surrounding properties, such as riparian corridors with continuous vegetative cover and coast redwood stands. To continue resource protection and enhancement, on-going cooperation with regulatory agencies, local jurisdictions, adjacent landowners, and recreation and open space providers will be pursued to encourage conservation easements and property acquisition from willing sellers for habitat preservation and to maintain buffers and habitat linkages (see guideline **Regional Planning 3**).

The planning areas outlined in the General Plan also support additional resource protections by designating appropriate land use, facility development, and visitor use areas. Visitor use impacts to wildlife can be substantially reduced or eliminated by placing facilities away from known nesting sites and sensitive habitat, as outlined in guidelines **Special Animals 3** and **Murrelet 1**. An expanded interpretive program for natural resources is proposed that would promote greater public understanding, education, and stewardship (see guidelines **Interpretation 4** and **Interpretation 5**).

Foremost among the necessary precautions observed during the planning and implementation of resource management actions are adherence to existing laws, regulations, and protocols. Specific activities with the potential for impacts beyond park boundaries will include disclosure of potential impacts specific to each activity. Mitigation for future significant impacts for site-specific projects shall be developed as part of the project level planning and environmental review process.



CULTURAL RESOURCES

This section analyzes impacts to cultural resources that could result from the implementation of the General Plan.

Impact Analysis

Butano State Park contains potentially significant cultural resources that could be disturbed, destroyed or degraded by new development and facility improvements proposed in the General Plan. These resources include prehistoric and ethnographic sites, historic and ethnohistoric resources, and historic trails. A complete inventory of the park's cultural resources has not yet been done; therefore, the potential exists for the discovery of previously unknown prehistoric and historic sites during facilities construction, rehabilitation, resource management projects, restoration, or maintenance operations. The General Plan recommends a comprehensive inventory be undertaken for historical-period resources to assist in significance evaluations, especially for those associated with historic logging activities (see guideline **Cultural 1**). Areas of high probability for prehistoric archaeological sites will be surveyed and recorded and criteria of significance developed for each class of resource for sites encountered in the future (see guideline **Cultural 2**).

To avoid or reduce any potential impacts to cultural resources, the Department will inventory and review areas of potential impact to determine the presence and significance of cultural resources, the potential impact, and recommended mitigation, if appropriate. Impacts may be reduced by project avoidance, site capping, structural stabilization/renovation, project redesign, and data recovery (see guideline **Cultural 4**).

All construction, maintenance, or improvements of historic buildings, structures, and features will be in conformance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties* (see guideline **Cultural 5**). The General Plan's designated planning areas may provide additional resource protections by authorizing specific park areas for appropriate development and recreational activities.

GEOLOGY AND SOILS

This section analyzes impacts related to geology and soils that could result from the implementation of the General Plan.

Areas of potential impact will be inventoried and reviewed to determine the presence and significance of cultural resources.

Impact Analysis

The General Plan provides guidelines to protect the public from natural hazards, such as using interpretive media to educate visitors about natural hazards and how to avoid danger (see **Interpretation and Education Goal B** and guideline **Interpretation 3**). The park is subject to earthquakes, and has the potential for damage from ground shaking, ground surface rupture, liquefaction, lateral spreading, and landslides. Guideline **Geology/Hydrology 7** directs the Department to conduct professional geologic and engineering evaluations to identify potentially hazardous soils or geologic areas prior to any permanent facility development and to avoid or reduce damage to people and property from unstable soil and seismic hazards.

Areas of the park contain highly erodible soils. Land disturbance, such as grading and trail development, can trigger or accelerate soil erosion. Development of some of the General Plan's proposals would decrease permeable areas in the park, leading to greater runoff rates and concentrated flows that have greater potential to erode exposed soils. Guidelines **Geology/Hydrology 3, 4, and 5** direct the Department to follow best management practices to reduce soil erosion and stormwater runoff and to ensure water quality during facility removal, maintenance, or construction. California State Parks has developed BMPs for road recontouring and rehabilitation, road removal, road to trail conversion, and culvert replacement. In addition, the standard construction BMPs for erosion and sediment control from the California Stormwater Quality Association will also be used where appropriate. The plan also recommends biotechnical methods where possible to provide embankment stabilization and enhance stream restoration (see guideline **Geology/Hydrology 6**).

HAZARDS AND HAZARDOUS MATERIALS

This section analyzes impacts related to hazards and hazardous materials that could result from implementation of the General Plan.

Impact Analysis

During construction of facilities, ground disturbance may expose hazardous materials through excavation, especially in areas of historic land uses. Construction activities may require the use of certain potentially hazardous materials, such as fuels, oils, and solvents for construction equipment. Hazardous materials spills may occur, including into drainages. If hazardous materials are found in the park, including during

construction, building removal, renovation, and maintenance activities, all regulations for hazardous material transport, use, and disposal will be adhered to, following Department policies and procedures (Department Operations Manual, Chapter 0800, Hazardous Materials).

The Department uses pesticides and herbicides where appropriate in the park to help control pests and vegetation. Staff will follow Department policies and other state and federal requirements for herbicide and pesticide application, incorporating all safety measures and recommended concentrations. Only chemicals that are appropriate for use near water will be used in or near wetland areas. Sustainable maintenance and management practices also discourage the use of environmentally-damaging or hazardous materials (see guideline **Sustainability 1**).

The General Plan proposes the development of new facilities in the park, potentially increasing the risk of wildfire from construction activities, campfires, smoking, and other potential fire sources. The General Plan recommends the development of a comprehensive Wildfire Management Plan that will address potential wildfire risks and specify emergency actions for public safety, park structures, and adjacent landowner structures (see guideline **Fire 1**). The Wildfire Management Plan will also specify strategies for pre-suppression measures, such as the creation of defensible space around structures, wildfire education programs, and park fire regulations.

The Department shall follow the fire management policy, including wildfire management (DOM Section 0313.2.1). State Parks is also guided by an Interagency Agreement with Cal Fire concerning wildland fire protection, has prepared a draft Wildfire Local Operating Agreement (a regional wildfire plan for Butano SP, Big Basin Redwoods SP, Año Nuevo SP, and Año Nuevo SNR), and has developed guidelines for the protection of structures from wildland fire (2007). These guidelines outline actions to minimize the probability that structures near flammable vegetation will ignite and burn during a wildland fire. The guidelines consider structural design, maintenance, and specific actions to minimize fuel in the structure ignition zone, defensible space zone, and wildland fuel zone. Some of these actions include, but are not limited to installing fire screens on chimneys; enclosing the area beneath overhanging wooden decks and foundations to prevent accumulations of organic debris below; removing dead organic matter within two feet of any wooden part of the structure; and removing all needles, leaves, and organic debris from roofs, gutters, exterior beams, and decking.

The park is not located on hazardous materials sites nor will the plan proposals physically interfere with an adopted emergency response plan or evacuation plan. Should any hazardous substances or other health hazards be identified, appropriate warning and protective methods would be developed and implemented. Implementation of the General Plan will not result in or expose people to substantial health hazards.

HYDROLOGY AND WATER QUALITY

This section analyzes impacts related to hydrology and water quality that could result from the implementation of the General Plan.

Impact Analysis

The General Plan proposals may potentially have an impact on water quality in the park. Adverse impacts to water quality and resources can be avoided or reduced by implementing the General Plan's guidelines for protecting hydrology and water resources.

Development and recreation facilities in general have the potential to cause adverse impacts to water quality in the park's creeks and wetlands. Under guideline **Geology/Hydrology 3**, the Department would comply with applicable water quality objectives developed by the San Francisco Regional Water Quality Control Board. Guideline **Geology/Hydrology 5** recommends the use of best management practices to control erosion and surface runoff. Impacts to park water quality from grading, filling, construction equipment use and storage, and mechanical or chemical control in resources and facilities management programs would be minimized by implementing guidelines **Geology/Hydrology 2, 3, 5, 6, and 7**. Guideline **Geology/Hydrology 2** also recommends an assessment of human activities on park geological and hydrological processes, and identification of appropriate management actions that would reduce or avoid negative impacts.

Little Butano Creek and Gazos Creek contain spawning and potential spawning grounds for threatened and endangered anadromous fish species; therefore, any increase in sediment loading to the park's creeks may be considered a significant impact. Guideline **Special Animals 2** recommends protection of all special status native wildlife species and their habitats, which would include the protection of anadromous fish from the impacts of any activity that results in disturbance to riparian habitat, including increased sediment loading in

creeks. Appropriate biotechnical stream bank erosion control methods will be used where feasible to reduce sediment (see guideline **Geology/Hydrology 6**).

The plan proposes further study and analysis to determine where any remediation efforts are necessary to improve water quality in the park (see guideline **Geology/Hydrology 9**). These studies would analyze such elements as sediment sources, transport functions, and fluvial geomorphic conditions in streams, and assess impacts to ecology, the watershed, and water quality from recreation and other park activities. Based on the analysis and findings the Department would restore geomorphic function to the watershed to the extent possible, thereby substantially reducing or eliminating unnatural soil and stream bank erosion, stream sedimentation, and habitat degradation.

As part of the process for preparation of site-specific plans, resource management plans, or facility construction, site-specific studies of soil conditions and facility siting will be conducted. All new projects and increased visitor use in the park will be evaluated to ensure that they do not contribute to degradation of water quality, substantially alter existing drainage patterns, or result in on- or offsite erosion, siltation, pollution, or flooding (see guidelines **Geology/Hydrology 1, 3, and 7**). Measures to reduce construction impacts include avoiding storage of surplus or waste materials in the floodplain, in areas of potential landslides, near surface waters, or in drainages (see guideline **Geology/Hydrology 5**). The Federal Emergency Management Agency has not delineated the full extent of the 100-year floodplain for Butano Creek, Little Butano Creek, and Gazos Creek. The plan calls for determination of the 100-year floodplain to ensure that developed structures in these areas would not impede or redirect flood flows (see guideline **Geology/Hydrology 9**).

Interpretive programs will educate the public about park management goals, including information on the potential effects of recreation to water quality and the importance of water quality and the environment (see guideline **Interpretation 5**).

The park would not be affected by seiches or tsunamis because it is at a higher elevation than the potential flood limits identified for these events. Mudflows may present a hazard to people and structures. Potential adverse impacts would be minimized with the implementation of guideline **Geology/Hydrology 7** which directs the Department to prepare professional geological and engineering evaluations when locating facilities.

NOISE

This section analyzes impacts from noise that could result from implementation of the General Plan.

Impact Analysis

The primary sources of noise expected to occur within Butano State Park are related to construction activities, facility operations, and vehicular traffic. The addition of day use, campground, interpretive, and volunteer facilities may also add increased noise levels through normal park use. Facility development will involve construction equipment that may cause temporary increased noise levels. By implementing guidelines **Aesthetics 6** and **Aesthetics 7**, the park would take appropriate measures to minimize construction and maintenance noise and would comply with federal and state noise ordinances.

Noise impacts from vehicles would be reduced by separation of use areas, screening, and other appropriate techniques, and maintenance and service functions would be located away from public areas as much as possible (see guideline **Aesthetics 6**). The Department will follow the Soundscape Protection Policy (Department Operations Manual, Chapter 0300, 2004) by restricting sound from human-made devices and enforcing park noise standards.

The park is not located within two miles of a public use airport or in the vicinity of an active airstrip and will not expose people working or residing in the project area to excessive noise levels associated with airports. The plan proposals will not generate or expose people to excessive groundborne vibrations or groundborne noise levels.

RECREATION

This section analyzes impacts from recreation that could result from implementation of the General Plan.

Impact Analysis

The plan proposes a minimal increase of recreational resources at Butano State Park with the development of day use picnicking and trail camping facilities, new interpretive facilities and information, additional trails (including loop trails), and connections to local and regional trails outside the park boundaries. The plan also calls for recreational facilities to accommodate accessibility for disabled persons.



The plan proposes the evaluation and potential development of new forms of recreation and new technologies to respond to visitor demand and recreation trends, but also calls for restricting or modifying some types of recreation activities as necessary in order to minimize adverse resource impacts (see guideline **Recreation 2**). The plan recommends providing increased opportunities for interpretation and education, and to expand facilities and programs that allow more recreational opportunities in the spring and fall (see guideline **Recreation 3**).

The plan recommends the use of an adaptive management process that would help implement the General Plan's vision and desired conditions for natural, cultural, and recreational resources and visitor experiences in the park. This process would provide an ongoing method to evaluate and avoid or reduce impacts associated with recreational uses, visitor experiences, and park resources. Using the adaptive management process, any potentially significant impacts will be minimized to ensure protection of the park's important values and visitor opportunities as expressed in the General Plan.

The plan's proposals may increase the use of regional parks, open space, and recreation facilities by encouraging regional trail connections and interpretation of the natural, cultural, aesthetic, and recreational resources in the Santa Cruz Mountains region (see guidelines **Recreation 4** and **Recreation 5**). However, this increased use would be minor and would not cause or accelerate significant physical deterioration of the facilities. There will not be significant adverse impacts from recreational activities or facilities resulting from the implementation of this plan.

TRANSPORTATION AND TRAFFIC

This section analyzes transportation and circulation impacts that could result from implementation of the General Plan.

Impact Analysis

The General Plan proposes facilities that may require modifications to existing roads and parking facilities, directional signage, multi-use trails and trailheads, and multi-modal transportation facilities.

In the summer season and during other peak use periods, increased visitor traffic and an inadequate number of existing picnic sites and parking spaces in the park entrance area are resulting in congestion in the park along the main park entrance road. This situation would be remedied by the plan's

proposal for additional group and individual day use parking sites, monitoring parking and visitor use, and reconfiguring parking spaces in the Entrance and Facilities Zone (see guidelines **Entrance 9**, **Parking 1**, and **Parking 2**).

Separation of vehicle traffic from pedestrians, bicyclists, and equestrians, where feasible, is recommended by guideline **Access 7**, and the installation of safety signage by guideline **Access 6**. These provisions would improve traffic safety. The plan also recommends adequate roadway signage and coordination with San Mateo County and Caltrans to implement roadway maintenance and improvements to increase traffic safety (see guideline **Access 1**).

The plan does not conflict with adopted policies, plans, or programs supporting alternative transportation, such as the Regional Transportation Plan. The General Plan calls for the development of alternative transportation facilities to support more efficient and energy-saving modes of transportation, and the development of a shuttle system to transport visitors through the backcountry and to other state parks and destinations in the region (see guideline **Access 5**).

There could be a minor increase in regional vehicle traffic due to the improvement or addition of new park facilities and programs. The plan's proposals would not cause the current levels of service standards established by the county congestion management agency for roads or highways to be exceeded. The plan proposals will not cause a change in existing air traffic patterns, result in inadequate emergency access or parking capacity, or conflict with adopted policies, plans or programs supporting alternative transportation.

UTILITIES AND SERVICE SYSTEMS

This section analyzes impacts on utilities and service systems that could result from implementation of the General Plan.

Impact Analysis

The General Plan recommends facility development that may require additional sewer and water systems and additional or upgraded stormwater drainage systems. The Department would comply with the water quality objectives and requirements of the San Francisco Bay Regional Water Quality Control Board (see guideline **Geology/Hydrology 3**) and would utilize sustainable design strategies to construct and maintain utility and service systems in the park (see guideline **Sustainability 1**).

Implementation of guidelines **Utilities 1** through **Utilities 4** would evaluate the current park infrastructure, repair and upgrade the current water supply and distribution system as necessary, identify utility needs, and develop recommendations for utility upgrades and replacement.

Currently, Butano State Park is served by state-owned septic systems; therefore, plan proposals would not impact outside wastewater treatment providers. The plan's recommended development will continue to be served by state-owned septic systems.

5.7 OTHER CEQA CONSIDERATIONS

UNAVOIDABLE SIGNIFICANT ENVIRONMENTAL EFFECTS

Evaluation at the specificity of this first tier review indicates that the potential effects from projects proposed in this General Plan can be reduced to less than significant levels with appropriate facility siting, the implementation of the goals, guidelines, and resource management programs, and further reduced with the development of specific mitigation measures when future site-specific development plans are proposed.

Until the uses, locations, and scope of facilities or management plans are specified, the actual level of impact cannot be determined. However, all plans and projects are required to be in compliance with applicable local, state, and federal permitting and regulatory requirements and subject to subsequent tier CEQA review and project-specific mitigation.

At this level of planning, unavoidable significant environmental effects are not anticipated as a result of the proposals in this General Plan/Environmental Impact Report.

SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

This first-tier environmental review indicates that no significant irreversible changes to the physical environment are anticipated from the adoption and implementation of this General Plan. Appropriate facility siting, implementation of goals and guidelines included in this plan, and the development of specific mitigation measures during the project-level environmental review process can maintain any impacts at a less-than-significant level.

Facility development, including structures, roads, and trails, may be considered a long-term commitment of resources; however, the impacts can be reversed through removal of the facilities and discontinued access and use. The Department does remove, replace, or realign facilities, such as trails and campsites, where impacts have become unacceptable either from excessive use or from a change in environmental conditions.

The construction and operation of facilities may require the use of non-renewable resources. This impact is projected to be minor due to the limited amount of facilities planned for development and to the consideration of sustainable practices in site design, construction, maintenance, and operations as proposed in the General Plan. Sustainable practices used in design, management, and operations emphasize environmental sensitivity in construction, the use of non-toxic materials and renewable resources, resource conservation, recycling, and energy efficiency.

Destruction of any significant cultural or natural resources would be considered a significant irreversible effect. To avoid this impact, proposed development sites will be surveyed for sensitive resources; all site and facility designs will incorporate methods for protecting and preserving significant resources; and human activities will be managed to ensure resource protection.

GROWTH-INDUCING IMPACTS

With complete development of all proposals, park visitation is likely to increase. This would be due to the proposed improvements and development of additional day use and overnight facilities, interpretive opportunities, and improvements to park circulation, including new trails and trail connections from the park to regional trails, and multi-modal opportunities to access the park and surrounding areas. Additional directional and informational signage and interpretive information outside the park boundaries (on the highway, in other state and regional parks, and in the community) should raise the park's profile as a destination for recreational opportunities and the appreciation and enjoyment of natural and cultural resources.

Any improvement to recreational facilities and programs or increase in the park's design capacity can encourage increased use, which may create additional tourism and the need for tourist services (such as recreation equipment, supplies, food, and related facilities) in adjacent communities, state parks, open space and recreation areas, and the

surrounding region. The economy of the central California coast depends considerably upon recreation and tourism, and an increase in visitor use may be considered an economic benefit.

The increased visitor capacity and interpretive potential of the plan's proposals may result in the need for an increased number of permanent and seasonal park staff. The General Plan recommends consideration of additional staff housing within the park boundaries which may result in a slight housing demand to the region.

CUMULATIVE IMPACTS

Cumulative impacts refer to two or more individual effects that when considered together, are considerable or that compound or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time (CEQA Guidelines Section 15355).

Maximum development in the Santa Cruz Mountains and along the San Mateo coast would be based on the build-out of the San Mateo County Local Coastal Plan and the San Mateo County General Plan. In the vicinity of Butano State Park future development may include residences in the adjacent Santa Cruz Mountains and recreation facility development in adjacent parks and open space preserves. In general, land management agencies in the Santa Cruz Mountains region recognize the importance of the natural qualities of the area that have been preserved over time, and base their planning and development efforts on the importance of preserving these values into the future. The general intent of the San Mateo County General Plan and LCP in this portion of the county is to maintain rural open space and regulate new development.

The General Plan for Butano State Park was prepared concurrently and in coordination with the general plans for Año Nuevo State Park and State Natural Reserve and Big Basin Redwoods State Park. The planning effort also coordinated as much as possible with surrounding land use planning, resource management, and recreation networks, such as POST's adjacent Cloverdale Coastal Ranches. This

coordination resulted in a general plan that is integrated with the surrounding regional open space planning on multiple levels. Future land use conflicts should be minimal.

The Department will continue to work cooperatively with regional land management agencies to achieve common management strategies that would enhance and preserve existing natural, cultural, and recreational resource values region-wide. To the extent that the loss of biological, cultural, and aesthetic resources is occurring in the region, any loss, disturbance, or degradation of these resources would contribute to cumulative impacts.

As described above, the facility development and resource management efforts that may occur with the implementation of the General Plan would not result in significant project-level environmental impacts. The goals and guidelines in the General Plan would direct management actions that would preserve, protect, restore, or otherwise minimize adverse effects related to biological resources, cultural resources, aesthetics, seismic hazards, water quality, traffic, water supply, etc. These management actions would also maintain Butano State Park's contribution to cumulative impacts to a less-than-significant level.

5.8 ALTERNATIVES TO THE PROPOSED PLAN

The guiding principles for the alternatives analysis are provided by the State CEQA Guidelines Section 15126.6. The analysis describes a range of reasonable alternatives to the project (the preferred alternative) that could feasibly attain most of the basic objectives of the project, considers alternatives that could reduce or eliminate any significant environmental impacts of the proposed project, and evaluates the comparative merits of the alternatives. Following CEQA Guidelines Section 15126.6(d), the evaluation of alternatives is in less detail than is done for the proposed project. A description of the project alternatives, including the no project alternative, is provided to allow for a meaningful evaluation, analysis, and comparison of these alternatives with the preferred alternative which is described in Chapter 4. **Table 5-1** summarizes the preferred alternative, Alternative 1, and Alternative 2.

ALTERNATIVE 1: FACILITY IMPROVEMENT AND RESOURCE PROTECTION

Description

This alternative focuses on improvements to the entrance area and current visitor facilities (including the visitor center, campground, campfire center, picnic areas, parking, trails, and trailheads), with a greater emphasis on resource protection. Also, new facility development or facility improvements in other areas of the park would be limited. This alternative contains less new development of recreation facilities and visitor opportunities in the backcountry and the Gazos Mountain Camp area than what is proposed in the preferred plan. This alternative would rely more on other public lands and private facilities to serve visitors and respond to current and future recreation demand in the region. The entrance area would remain the most accessible and most concentrated visitor use area in the park.

Additional parking, trails, and trailheads would be located in the entrance area away from the most sensitive habitats. Parking would be redesigned in order to accommodate vehicles while reducing congestion and minimizing resource impacts. Additional picnic areas would be located in accessible and convenient areas to accommodate visitor activities and use. Interpretive panels would be located at trailheads, along trails, and in picnic areas. Contact with park staff and other visitors would be frequent in this area of concentrated visitor use.

Although new facility improvements would occur in the entrance area, some facilities in this same location would be removed if they are in sensitive habitats or prevent restoration of habitats and natural processes. This could reduce the overall amount and variety of visitor facilities in the park. To reduce impacts to special status species and restore habitats, structures currently located in the riparian area would be removed, trails would be realigned where possible, and visitor use near sensitive areas would be restricted and closely monitored. The campground would be reduced in size and visitor use would be rotated to reduce negative impacts to the forest understory and minimize soil compaction around the trees.

Adaptive use of the current facilities at the Gazos Mountain Camp area would be reduced to serve a very limited amount of environmental education and research activities. Renovations of the existing facilities in order to accommodate school groups would not occur. There would not be any

trailhead development (including parking or picnic areas) along Gazos Creek Rd. to connect to regional trails, nearby state parks, and other open space lands.

Access into the backcountry would be reduced with the potential removal or relocation of trails and trailheads, based on sensitive resource evaluations. Additional trail camps and trails serving as links to a regional trail network would not be developed in the backcountry.

Evaluation

This alternative provides moderate facility improvement and development in response to increasing demand for recreation facilities and programs, especially for day and overnight use. Improvements to recreation and interpretive facilities that are compatible with the park's natural and cultural resource management goals would be developed in the entrance area of the park. This alternative would achieve many of the General Plan objectives but would limit the use of the entire park by reducing access and reducing the use of or eliminating facilities.

Traffic and circulation improvements in the entrance area would be accomplished with this alternative and improvements to informational and directional signage would also occur. With increases in park visitation these improvements will more effectively accommodate the park traffic and circulation, although the visitor use and activities would be more highly concentrated in one area of the park.

If this alternative was implemented some, but not all, improvements to the visitor center, picnic areas, trails, trailheads, parking, and campground would be achieved as proposed in the preferred plan. The facility improvements would reflect existing visitor demand for more day use facilities and parking, but would not respond to the desire for additional overnight facilities in the backcountry, regional trail connections, and a variety of recreation experiences. This alternative would reduce the number and variety of visitor facilities parkwide, and it would not adequately respond to the future recreation demand.

This alternative would not provide multiple access routes into the backcountry, and the backcountry trail connections to regional open space and other nearby state parks would not occur. Current visitor use would become more concentrated on the trails and in the campground and day use areas (picnicking, visitor center, and parking), due to a lack of facilities elsewhere in the park. This area of the park would

require constant monitoring by park staff to ensure the desired level of resource protection. The quiet, remote quality of this park may be replaced by frequent visitor and staff contact and intense visitor use and activity.

ALTERNATIVE 2: INCREASED BACKCOUNTRY DEVELOPMENT

Description

This alternative would provide additional facility improvements, development, and activities in the backcountry to encourage greater use of this area and to disperse visitor use throughout the park. This alternative was considered to reduce potential negative impacts in the park's most sensitive habitats by limiting entrance area visitor facility development while providing improvements and development to primarily serve backcountry recreation.

Facility improvements in the core area of the park would be reduced and would consist of minor improvements to circulation and parking to reduce congestion and those necessary for visitor safety. Some facilities in the core area, such as the campground and picnic areas, may also be reduced in size or use intensity in order to focus management on sensitive natural resource preservation and restoration. This alternative would transfer concentrated visitor use from areas with more sensitive plant and wildlife habitats (i.e. the core area) to multiple use of the outlying areas of the park. The backcountry would offer additional trail camps for individuals and groups; trailheads and multi-use trails that would connect to regional trails, adjacent state parks, and open space areas; interpretive elements, including vista points and interpretive panels; and the potential for interpretive or special event shuttle tours. The existing facilities at the Gazos Mountain Camp area would be renovated for adaptive use to support environmental education and research for individuals and school groups. Sensitive resource protection would be a priority and interpretation of the natural and cultural resources would support this goal.

Evaluation

This alternative would achieve the General Plan objectives for recreation and resource protection and would provide additional visitor facilities in the backcountry area. The reduced amount of visitor facilities in the entrance area proposed in this alternative would avoid or minimize potential negative impacts to sensitive resources. Minimum traffic and circulation improvements for safety would be accomplished with this alternative.

Facility improvements at the Gazos Mountain Camp area would provide environmental education and research facilities for the region, supporting continued resource protection and preservation.

This alternative also supports additional opportunities to create a high quality visitor experience through trail connections to the California Coastal Trail, to regional state parks, and open space areas, such as the Cloverdale Coastal Ranches, and to local or regional community destinations.

As projected park visitation increases, the moderate improvements provided for in this alternative would not meet the expected future recreation demand or accommodate the traffic and increased park circulation that will increase with visitation.

ALTERNATIVE 3: NO PROJECT

Description

The California Environmental Quality Act requires an evaluation of the “no project” alternative and its impact (CEQA Guidelines §15126.6[e][1]). The no project alternative represents perpetuation of existing management actions, and its analysis is based on the physical conditions that are likely to occur in the future if the project (the proposed General Plan) is not approved and implemented. The purpose of describing and analyzing the no project alternative is to allow decision-makers to compare the impacts of approving the proposed General Plan with the expected impacts of not approving the General Plan. Without a general plan for Butano SP, it is assumed that the existing patterns of operation and management would continue under this alternative and no major recreational or operational facilities would be developed. Visitation increases would be somewhat smaller than under the proposed project due to less recreational opportunities and visitation capacity under this alternative. However, overall use would still be expected to increase as the state-wide and regional populations grow. Many of the management actions that would protect, preserve, and restore natural and cultural resources beyond the requirements of laws and regulations may not occur under the no project alternative.

Evaluation

The existing conditions, lack of needed facilities, and limitations would continue if the General Plan was not adopted. Without the facility improvements to

accommodate the existing visitor demand as well as a projected increase in visitor use, sensitive natural and cultural resources may be expected to degrade over time due to overuse.

Under the no project alternative the park's natural and cultural resources may not receive an increased level of protection. Resource management plans and policies for natural and cultural resources may not be developed.

Demand for recreation facilities and programs are increasing along with population increases in the San Francisco Bay Area and Central Valley. However, without a general plan, the Department would not have the authority to develop or enhance facilities to respond to this demand, especially for day and overnight use. Recreational and interpretive improvements that could enhance the visitor experience at the park's current level of use or anticipated future needs would not be developed.

Under the no project alternative a comprehensive evaluation of park, regional, and statewide trail systems may not be accomplished. Opportunities would be missed to create a higher quality visitor experience through trail linkages to the California Coastal Trail, to regional state parks and recreation and open space areas such as POST's Cloverdale Coastal Ranches property, and to local or regional community destinations.

Also under the no project alternative, land use management may not be evaluated on a parkwide basis, and the park's potential for planned and integrated land use, recreational facility development, and possible future acquisitions may not occur. Without organized land use or management plans and development guidelines, incremental cumulative impacts may adversely impact the park in the future.

Traffic and circulation improvements may not be accomplished with the no project alternative. Improvements to traffic flow and congestion at the existing entrance area may not be accomplished and improvements to informational and directional signage may not occur. The existing visual and aesthetic character of the park may not be improved under the no project alternative and existing scenic and other aesthetic resources may be affected.

**Table 5-1
 Plan Alternatives**

	Preferred Alternative	Alternative 1 - Facility Improvement and Resource Protection	Alternative 2 - Increased Backcountry Development
Entrance and Facilities Zone	<p>Desired facilities and improvements:</p> <ul style="list-style-type: none"> ▪ Provide additional parking, trails, and trailheads. ▪ Redesign parking along the entrance road to reduce congestion and improve visitor experience. ▪ Provide additional picnic areas. ▪ Provide additional interpretive panels expanding visitor understanding of the park's natural and cultural features. ▪ Remove the former nature lodge building from the Little Butano Creek riparian zone; potential for additional facility removal or redesign if located in sensitive area. <p>Potential impacts from facility development and visitor use. Impacts will be minimized or avoided through the implementation of plan goals and guidelines ensuring protection of significant resources, appropriate facility location, and application of the adaptive management process.</p>	<p>Facility improvements same as the preferred plan, except:</p> <ul style="list-style-type: none"> ▪ Reduce the size of the Ben Ries Campground to improve wildlife habitat and restore natural conditions. <p>Less potential for impacts from a reduction in the size of the existing campground.</p>	<p>Less development than the preferred plan:</p> <ul style="list-style-type: none"> ▪ Minor improvements to circulation and parking (for congestion reduction and safety). ▪ Facility size reduction or reduced use intensity. <p>Less potential impacts based on fewer improvements and possible facility size reductions and/or visitor use restrictions.</p>

Table 5-1 Plan Alternatives			
	Preferred Alternative	Alternative 1 - Facility Improvement and Resource Protection	Alternative 2 - Increased Backcountry Development
Backcountry Zone	<p>Desired facilities and improvements:</p> <ul style="list-style-type: none"> ▪ Provide additional trail camps, trailheads, and trails for multiple users, including trail connections to regional trail systems. ▪ Potential for interpretive or special event shuttle tours. ▪ Evaluate existing and potential trails and roads (including unpaved roads), roads and trails management, maintenance, location, and use intensity through a parkwide Roads and Trails Management Plan. ▪ Develop trailheads/ vehicle pullouts along Gazos Creek Rd. <p>Potential impacts from facility development and visitor use. Impacts will be minimized or avoided through the implementation of plan goals and guidelines ensuring protection of significant resources, appropriate facility location, and application of the adaptive management process.</p>	<p>Less development and visitor opportunities than the preferred plan:</p> <ul style="list-style-type: none"> ▪ Remove or relocate some trails and trailheads to restore wildlife habitat corridors. ▪ No additional trails or trailheads developed. ▪ No trailhead development along Gazos Creek Rd. <p>Less potential for impacts than preferred alternative due to fewer proposed visitor facilities (trails and trailheads), no additional regional trail connections, and less potential visitor use.</p>	<p>More facility development than the preferred plan; more improvements, and activities providing visitor use dispersal throughout the park:</p> <ul style="list-style-type: none"> ▪ Additional trail camps. ▪ Additional trailheads and multi-use trails. <p>More potential for impacts due to increased facility development, multiple access points, and substantially more potential visitor use throughout the backcountry than the preferred alternative.</p>

Table 5-1 Plan Alternatives			
	Preferred Alternative	Alternative 1 - Facility Improvement and Resource Protection	Alternative 2 - Increased Backcountry Development
Gazos Mt. Camp Zone	<p>Desired facilities and improvements:</p> <ul style="list-style-type: none"> ▪ Renovate existing facilities in former Mt. Camp area for day use and overnight use (individual visitor and group use). <p>Potential impacts from facility renovation and visitor use. Impacts will be minimized or avoided through implementation of plan goals and guidelines and permit or operating agreement conditions, ensuring protection of significant resources and appropriate visitor use and intensity.</p>	<p>Less development than preferred plan:</p> <ul style="list-style-type: none"> ▪ Adaptive use of facilities reduced. ▪ No renovations for group use. <p>Less potential for impacts due to a reduced number of facilities renovated for adaptive use and no allowable group use in former Gazos Mt. Camp area, as well as no trailhead development along Gazos Creek Rd.</p>	<p>Same as preferred plan.</p>



Photo on reverse: Trail Camp

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- Appendix A Location of EIR-Required Content in the General Plan/EIR
- Appendix B Publicly-Owned Recreational Facilities in the Vicinity of Butano State Park
- Appendix C Privately-Owned Recreational Facilities in the Vicinity of Butano State Park
- Appendix D Existing Trails
- Appendix E Existing Roads
- Appendix F Soil Types
- Appendix G Beneficial Uses of Water
- Appendix H Sensitive Plant Species for Which Suitable Habitat Exists within Butano State Park
- Appendix I Sensitive Wildlife Species That Occur or for Which Potential Habitat Exists within Butano State Park
- Appendix J California Population 1960-2020
- Appendix K Acronyms and Abbreviations
- Appendix L Glossary

Photo on reverse: Former landing strip

APPENDIX A**Location of EIR-Required Content in the General Plan/EIR**

CEQA Guidelines Content	Location in General Plan/EIR
Section 15122. Table of Contents or Index	Beginning of this document/Table of Contents
Section 15123. Summary	Executive Summary
Section 15124. Project Description	Ch. 4 Park Plan (description) Sec. 5.3 Project Description (summarized) Ch. 1 Introduction (information about project objective and general plan process)
Section 15125. Environmental Setting	Ch. 2 Existing Conditions Sec. 5.4 Environmental Setting
Section 15126. Consideration and Discussion of Environmental Impacts	Ch. 5 Environmental Analysis
(a) (and Section 15126.2) Significant Environmental Effects of the Proposed Project	Sec. 5.6 Environmental Impacts
(b) Significant Environmental Effects Which Cannot be Avoided if the Proposed Project is Implemented	Sec. 5.7 Other CEQA Considerations, Unavoidable Significant Environmental Effects
(c) Significant Irreversible Environmental Changes Which Would be Involved in the Proposed Project Should it be Implemented	Sec. 5.7 Other CEQA Considerations, Unavoidable Significant Environmental Effects
(d) Growth-Inducing Impact of the Proposed Project	Sec. 5.7 Other CEQA Considerations, Growth-Inducing Impacts
(e) (and Section 15126.4) The Mitigation Measures Proposed to Minimize the Significant Effects	Ch. 4 Park Plan, Goals and Guidelines (intended to minimize adverse environmental effects) Sec. 5.6 Environmental Impacts
(f) Alternatives to the Proposed Project	Sec. 5.8 Alternatives to the Proposed Action
Section 15127. Limitations on Discussion of Environmental Impact	Sec. 5.7 Other CEQA Considerations, Significant Irreversible Environmental Changes
Section 15128. Effects Not Found to be Significant	Sec. 5.5 Environmental Effects Eliminated from Further Analysis
Section 15129. Organizations and Persons Consulted	Ch. 6 References
Section 15130. Discussion of Cumulative Impacts	Sec. 5.7 Other CEQA Considerations, Cumulative Impacts
Section 15131. Economic and Social Effects (optional topic)	Ch. 4 Park Plan Throughout the document under discussions of recreation and visitor experience

APPENDIX B

Publicly-Owned Recreational Facilities in the Vicinity of Butano State Park

NAME OF FACILITY	CAMPSITES	PICNIC SITES	TRAILS	OTHER(S)	COMMENTS
STATE PARKS					
Año Nuevo SNR	None	10 picnic tables	3-mile round trip		Guided tours to view the seals
Año Nuevo SP	None	None	The 1.5-mi. Whitehouse Ridge Trail connects with Big Basin		
Big Basin Redwoods SP – Inland	233 campsites park-wide, in campgrounds trail and horse camps	135 picnic sites	64.2 miles trails for hiking. Biking, horseback riding on fire roads only		Guided nature walks and campfire programs offered year-round
Big Basin Redwoods SP - Rancho del Oso	Horse camp with 6 units	4 picnic sites at the horse camp	~.5 mi. west end of Skyline –to-the-Sea trail; ~.5 mile Marsh Trail; ~.5 mi. connection to other park trails	Nature Center	
Portola Redwoods SP	53 tent spaces: 1 for disabled, 9 tent/RV; 4 walk-in group camps: 3 hold 50, 1 holds 25; also 6 sites for backpackers	Group day use for 75; also 2 parking for 30 cars; 3 picnic areas with 20 sites	18 miles of trails - hiking only		
Castle Rock SP	Primitive for backpackers only: 26 units	None	32+ miles: hiking, riding trails	Rock climbing	The 6.5 miles of the Skyline-to-the-Sea trail closest to Castle Rock is in that park. Only one fire road open to bikes to access the trail camp.
Henry Cowell Redwoods SP	110 campsites	Group picnic for 50-60; 15 family sites	20 miles: hiking, riding; bikes on paved or fire roads	Nature Center; nature trail	The Roaring Camp and Big Trees Railroad is in the park

NAME OF FACILITY	CAMPSITES	PICNIC SITES	TRAILS	OTHER(S)	COMMENTS
<i>COUNTY PARKS - San Mateo County</i>					
Pescadero Creek	Primitive walk-in camps (18 sites in two groups)	None	46.8 miles with loops; for hikers & equestrians	Biking on designated service roads only; Important plant and wildlife resources	Trail connections to Sam McDonald, Memorial and Portola Redwoods parks; also Hikers' Hut, a hostel run by the Sierra Club, with a capacity of 14 people
Memorial Park	156 campsites; 6 youth grp areas; 2 group camps (75 people each)	4 reservable picnic areas (350 people max.)	12.5 miles of hiking and interpretive trails	Campfire center	Emphasis on interpretation: walks, programs
Sam McDonald	3 youth group camps (300 capacity); also horse camp for individuals or groups (8 sites, 80 people max.)	None	6.7 miles for hikers, joggers, and equestrians	Biking on designated service roads only	Trail connections to Memorial and Pescadero Creek parks; park has volunteer program
Heritage Grove	None	None	1.5 miles	Largest redwood trees in the Santa Cruz Mts.	Used for access to Pescadero Creek Park and the Hikers' Hut.
<i>COUNTY PARKS - Santa Cruz County</i>					
Ben Lomond Park	None	12 picnic sites	No trails; street parking only	1-acre neighborhood park	Basketball court, playground; historic dam
Felton Covered Bridge	None	6 picnic sites	~1/4 mile trail around park	32 parking spaces	Covered bridge; recreational amenities include a volleyball court, playgrounds, lawn, fishing
Highlands Park	None	2 reservable group sites; ~12 family picnic sites	~1/2-mile trails	26 acres	Reservable house, sports field

NAME OF FACILITY	CAMPSITES	PICNIC SITES	TRAILS	OTHER(S)	COMMENTS
Quail Hollow Ranch	None	10 picnic sites	3.5 - 4 miles of trails	Gravel lot - 50 cars	Emphasis on interpretation of natural resources; docent-led walks, nature programs available (also has historic ranch house, pond - no fishing), weddings
COUNTY PARKS - Santa Clara County					
Sanborn County Park	13 RV sites plus 1 for disabled persons; 1 youth group camp for 35-40; 1 walk-in campground with 33 sites	3 reservable grp areas: 2 hold 100; 1 holds 200; 3 other areas first come first served for up to 420 (42 sites x 10 each)	15 miles of hiking & horse trails; 1-mile nature trail; 267 parking spaces plus 10 for disabled persons	Lake for fishing	Emphasis on nature study, interpretation, ranger-led walks. Is adjacent to Castle Rock State Park and has connecting trails
Upper Stevens Creek	None	None	~8 miles of trails for hiking, mt. biking, and horseback riding; only 5 parking spaces	"Wilderness" experience	
Stevens Creek	None	3 group picnic areas, capacity: 100, 75, and 50 people; also family sites, first come first served, total capacity of 800; 363 parking spaces	~8 miles of trails for hiking, mt. biking, and horseback riding (on specific trails)	Small lake – boating, fishing – no motorized craft	Archery, birding. Adjacent to Midpeninsula Open Space Preserve (Fremont-Older)

NAME OF FACILITY	CAMPSITES	PICNIC SITES	TRAILS	OTHER(S)	COMMENTS
MIDPENINSULA OPEN SPACE DISTRICT					
Russian Ridge Open Space Preserve			8 mi. trails	Open grasslands, wildflowers, wildlife (raptors); views	Connections to: Bay Area Ridge Trail to Skyline Ridge Open Space Preserve
Coal Creek Open Space Preserve			5 mi. trails; hiking, biking, equestrian	Forested areas, seasonal waterfalls	Connections to Skyline Blvd., Russian Ridge, and Portola Valley. Trail loops.
Los Trancos Open Space Preserve			5 mi. trails; no bicycles; 1.5-mi San Andreas Fault Trail	Grasslands, brushlands, forested areas; views	Self-guided geology interpretation along the Fault Trail
Skyline Ridge Open Space Preserve		Several tables at Horseshoe Lake overlook	10 mi. trails; ~2 mi. of accessible trails; 3 mi. of Bay Ridge Trail	Meadows; pond with pier for nature study; lakes; chaparral; ridgetop views	Nature center offers docent-led tours
Monte Bello Ridge Open Space Preserve	Backpack walk-in camp; 4 single sites and 1 group site		~15 mi. trail system for hikers, bikers. Stevens Creek Nature Trail is a self-guided 3-mile loop	Grasslands, creekside forests; vistas; rich wildlife area	The 72-year-old Picchetti Ranch Area is in the southwestern corner of the preserve and features a working winery complex
Long Ridge Open Space Preserve			10 mi. trails	Grasslands and oak, madrone and Douglas-fir forests; great views.	Many connections, possibilities for trail loops. Connects to Skyline Ridge and Saratoga Gap preserves and Upper Stevens Creek County Park; also access from Highway 35 and 3-mile segment of Bay Area Ridge Trail; hiking trail to Portola Redwoods SP

NAME OF FACILITY	CAMPSITES	PICNIC SITES	TRAILS	OTHER(S)	COMMENTS
Saratoga Gap Open Space Preserve			Less than 2 miles of trail; ~1 mile paralleling Skyline Blvd.	Largely Douglas-fir forest	Many trail connections: Sanborn-Skyline Park, Castle Rock SP, Big Basin Redwoods SP, Upper Stevens Cr. Park, Monte Bello Open Space Preserve, Saratoga Gap-Page Mill Rd. trail, Bay Area Ridge Trail; 9-mi. loop through Long Ridge
Fremont Older Open Space Preserve			~9 mi. hiking, biking, and equestrian trails	Open grasslands, brushy hillsides; historic house; vistas	
El Sereno Open Space Preserve			5.6 mi. hiking, biking & equestrian trails	Chaparral	

APPENDIX C

**Privately-Owned Recreational Facilities
in the Vicinity of Butano State Park**

GROUP/ ORGANIZATION	ADDRESS	TYPE OF FACILITY
Environmental Education		
Sempervirens Outdoor School	20161 Big Basin Hwy. Boulder Creek, CA 95066	Environmental education for Bay Area Sixth Graders
Campgrounds available to the general public		
Costanoa	2001 Rossi Rd. Pescadero, CA 94060	Resort and Campground
Cotillion Gardens RV Park	300 Old Big Trees Rd. Felton CA 95018	Campground
Redwood Resort	150 East Grove, Boulder Creek, CA 95006	Campground
River Grove Park	4980 Highway 9 Felton, CA 95018	Campground
Smithwoods RV Park	4770 Highway 9 Felton, CA 95018 or PO Box 27 Felton, CA 95018	Campground
Private campgrounds		
Boulder Creek Scout Reservation	250 Scout Ranch Road (formerly 14586 Bear Creek Rd.) Boulder Creek, CA 95006	Boy Scout Camp
Camp Butano Creek	1400 Canyon Rd. Pescadero, CA 94060	Girl Scout Camp
Camp Chesebrou	25005 Highway 9 Boulder Creek, CA 95006-9078	Boy Scout Camp
Camp Krem	Boulder Creek, CA	Camp for developmentally disabled
Cutter Scout Reservation	2500 China Grade Boulder Creek, CA 95006	Boy Scout Camp
Little Basin	21700 Little Basin Rd. Boulder Creek, CA 95006	Campground and recreation facilities (currently closed; being evaluated for public ownership and use)
Red White and Blue Beach	5021 Coast Rd. Santa Cruz, CA 95060	Campground, day use, beach access (currently closed)
YMCA Camp Jones Gulch	11000 Pescadero Rd. La Honda, CA 94020	YMCA Camp/Lodging
YMCA of the East Bay Camping	990 Pescadero Creek Rd. Loma Mar, CA	YMCA Camp/Lodging
YMCA of the Redwoods, Camp Campbell	16275 Hwy. 9 Boulder Creek, CA 95006-9652	YMCA Camp/Lodging

GROUP/ ORGANIZATION	ADDRESS	TYPE OF FACILITY
Retreats/lodging		
Camp Hammer	21401 Big Basin Hwy. Boulder Creek, CA 95066-9097	Group Retreats/Lodging (Twin Lakes Church ownership; open for Christian groups)
Camp Harmond	16403 Hwy. 9 Boulder Creek, CA 95006	Retreats/Lodging
Mission Springs Conference Center	1050 Lockhart Gulch Rd. Scotts Valley CA 95066	Retreats/Lodging
Mount Hermon Christian Conference Center	PO Box 413 Mount Hermon CA 95041	Retreats/Lodging
Mount Cross Lutheran Camp	PO Box 387 Felton, CA 95018	Retreats/Lodging
Quaker Center	PO Box 686, Ben Lomond CA 95005	Retreats/Lodging
Redwood Christian Park	15000 Two Bar Rd. Boulder Creek, CA 95006	Retreats/Lodging
Redwood Glen Camp and Conference Center	3100 Bean Creek Rd. Scotts Valley, CA 95066	Retreats/Lodging (Salvation Army ownership) 205 acres; 300 people overnight capacity
Taungpulu Monastery	18335 Big Basin Hwy. Boulder Creek, CA 95006	Retreats/Lodging
Vajrapani Institute	19950 Kings Creek Rd. Boulder Creek, CA 95006 or PO Box 213 Boulder Creek, CA 95006	Retreats/Lodging
Overnight accommodations		
Boulder Creek Lodge and Conference Center	16901 Big Basin Hwy. Boulder Creek, CA 95006	Lodge and Conference Center
Pigeon Point Lighthouse Hostel	210 Pigeon Point Rd. (@ Hwy 1) Pescadero, CA 94060-9713	Hostel operated by Hostelling International
Costanoa	2001 Rossi Rd. Pescadero, CA 94060	Lodge, Cabins
Best Western Inn	6020 Scotts Valley Drive Scotts Valley, CA 95066	Motel
Davenport Bed and Breakfast Inn	31 Davenport Avenue Davenport, CA 95017	Bed and Breakfast
Econo Lodge	9733 Highway 9 Ben Lomond, CA 95005-9204	Motel
Fairview Manor Bed and Breakfast Inn	245 Fairview Avenue Ben Lomond, CA 95005	Bed and Breakfast
Felton Crest Inn	780 El Solyo Heights Drive Felton, CA 95018	Bed and Breakfast
Fern River Resort Motel	5250 Highway 9 Felton, CA 95018	Motel
The Hilton Santa Cruz/Scotts Valley	6001 La Madrona Drive Scotts Valley, CA 95060	Hotel

GROUP/ ORGANIZATION	ADDRESS	TYPE OF FACILITY
Jaye's Timberlane Resort	8705 Highway 9 Ben Lomond, CA 95005	Motel
Merrybrook Lodge	13420 Big Basin Way Boulder Creek, CA 95006	Motel
Pescadero Creek Inn Bed and Breakfast	393 Stage Road Pescadero, CA 94060	Bed and Breakfast
Valley View Inn	600 Hacienda Scotts Valley, CA 95066	Bed and Breakfast

*Additional privately-owned overnight accommodations, recreation facilities, and conference facilities are located in Santa Cruz.

APPENDIX D Existing Trails

Butano State Park, Big Basin Redwoods State Park,
Año Nuevo State Park, Año Nuevo State Natural Reserve

TRAIL # (as noted on Fig. 4)	NAME	DESIGNATED USE	LENGTH IN PARK (MILES)	# BRIDGES	YEAR CONSTRUCTED
1	Skyline to the Sea	Hiking	14.4	24	1914
		Equestrian	7.2		
2	East Ridge Trail	Equestrian, Hiking	4.6	2	Unknown
3	Eagle Rock Trail	Hiking	1.0	0	1985
4	Shadowbrook Trail	Hiking	2.8	5	Unknown
5	Sequoia Trail	Hiking	2.9	2	1875
6	Pine Mountain Trail	Hiking	1.8	0	1932
7	Basin Trail	Hiking	3.2	0	Unknown
8	Hollow Tree Trail	Hiking	3.2	3	1977
9	Meteor Trail	Hiking	1.0	0	Unknown
10	Creeping Forest Trail	Hiking	1.3	0	Unknown
11	Dool Trail	Hiking	0.8	1	Unknown
12*	Redwood Trail	Hiking, Interpretive	0.6	0	1938
13	Blooms Creek Trail	Hiking	0.6	1	Unknown
14	Sunset Trail	Hiking	4.9	6	1914
15	Howard King Trail	Hiking	4.7	0	1972
16	Timms Creek Trail	Hiking	0.9	0	1914
17	McCrary Ridge Trail	Equestrian, Hiking	2.6	0	Unknown
18	Berry Creek Falls Trail	Hiking	1.1	1	1914
19	Henry Creek Trail	Equestrian, Hiking	2.0	0	1964

TRAIL # (as noted on Fig. 4)	NAME	DESIGNATED USE	LENGTH IN PARK (MILES)	# BRIDGES	YEAR CONSTRUCTED
20	Westridge Trail	Equestrian, Hiking	4.1	0	Unknown
21	Clark Connection	Equestrian, Hiking	1.1	0	Unknown
22	Marsh Trail	Equestrian, Hiking	0.4	0	Unknown
23	Nature Trail	Equestrian, Hiking	0.8	0	Unknown
24	Whitehouse Ridge Trail	Equestrian, Hiking	0.6	0	Unknown
25**	Conn. Sempervirens Campground- Blooms Ck. Campground	Hiking	0.2	0	Unknown
26**	Conn. Blooms Ck. Campground-Park HQ	Hiking	0.4	0	Unknown
27**	Conn. Hihn Hammond-Skyline to the Sea	Hiking	0.4	0	Unknown
28**	Conn. Sunset- Skyline to the Sea	Hiking	0.2	0	Unknown
29**	Conn. Eastridge- Shadowbrook (Hwy. 236)	Hiking	0.2	0	Unknown
30**	Conn. Eastridge- Shadowbrook (Huckleberry)	Hiking	0.4	0	Unknown
31**	Conn. Sequoia- Shadowbrook	Hiking	0.1	0	Unknown

TRAIL # (as noted on Fig. 4)	NAME	DESIGNATED USE	LENGTH IN PARK (MILES)	# BRIDGES	YEAR CONSTRUCTED
32**	Conn. Shadowbrook- Wastahi Campground	Hiking	0.3	0	Unknown
33**	Conn. Shadowbrook- Huckleberry Campground	Hiking	0.1	0	Unknown
34**	Conn. Sequoia Campground-Park HQ	Hiking	0.4	0	Unknown
35**	Sempervirens Falls Trail	Hiking	0.1	0	Unknown
36	Ray Linder Trail	Hiking	1.0	0	Unknown
37	Indian Trail	Hiking	0.9	0	Unknown
38	Canyon Trail	Hiking	2.8	0	Unknown
39	Doe Ridge Trail	Hiking	1.6	0	Unknown
40	Jackson Flats Trail	Hiking	2.8	0	Unknown
41	Butano Creek Trail	Hiking	1.5	0	Unknown
42	Goat Hill Trail	Hiking	1.8	0	Unknown
43	Gazos Trail	Hiking	0.8	0	Unknown
44	Mill Ox Trail	Hiking	0.5	0	Unknown
45	Six Bridges Trail	Hiking	1.0	0	Unknown
46	Año Nuevo Trail	Hiking	1.3	0	Unknown
47	Whitehouse Ridge Trail	Hiking	1.5	0	Unknown
48	New Years Creek Trail	Hiking	0.25	0	Unknown
49	Cove Beach Trail	Hiking	0.04	0	Unknown
50	Pond Loop Trail	Hiking	0.4	0	Unknown
51	Año Nuevo Point Trail	Hiking	1.3	0	Unknown

TRAIL # (as noted on Fig. 4)	NAME	DESIGNATED USE	LENGTH IN PARK (MILES)	# BRIDGES	YEAR CONSTRUCTED
52	Cascade Creek Trail	Hiking	0.5	0	Unknown
53	Whitehouse Creek Trail	Hiking	0.19	0	Unknown
54	Atkinson Bluff Trail	Hiking	1.8	0	Unknown
55	Franklin Point Trail	Hiking	0.6	0	Unknown
56	Unmaintained Trails	Hiking	1.8	0	Unknown
57	Candelabra Trail	Hiking	1.5	0	Unknown

* ADA accessible trail

** Trail/Connector not located/numbered on Existing Roads and Trails Map

Total Hiking Only	73.88
Total Equestrian and Hiking	23.4
TOTAL TRAIL	97.28 miles

APPENDIX E Existing Roads

Butano State Park, Big Basin Redwoods State Park,
Año Nuevo State Park, Año Nuevo State Natural Reserve

ROAD # (as noted on Fig. 4)	NAME	DESCRIPTION	TYPE OF USE	LENGTH IN PARK (MILES)	# BRIDGES	YEAR CONSTRUCTED
1	China Grade Road	Road-Paved	Public Road	3.7	0	1880
2	Rogers Road	Road- Paved/Unpaved	Public Road	0.6	0	1880
3	Lodge Road	Road-Paved	Public Road	1.8	0	1903
4	East Ridge Road	Road-Unpaved	Authorized Vehicles, Hiking, Mt. Biking, Equestrian	1.4	0	Unknown
5	Sky Meadow Road	Road-Paved	Public Road	3.8	0	
6	Little Basin Road	Road-Paved	Public Road, Authorized Vehicles	0.6	0	Unknown
7	Pine Mountain Road		Authorized Vehicles, Hiking, Mt. Biking, Equestrian	1.1	1	1960
8	North Escape Road	Road-Paved	Public Road	3.1	1	1895
9	Gazos Creek Road	Road- Paved/Unpaved	Authorized Vehicles, Hiking, Mt. Biking, Equestrian	5.3	0	1934

ROAD # (as noted on Fig. 4)	NAME	DESCRIPTION	TYPE OF USE	LENGTH IN PARK (MILES)	# BRIDGES	YEAR CONSTRUCTED
10	Middle Ridge Road	Road-Unpaved	Authorized Vehicles, Hiking, Mt. Biking, Equestrian	3.8	0	1905
11	Johansen Road	Road-Unpaved	Authorized Vehicles, Hiking, Mt. Biking, Equestrian	1.8	0	Unknown
12	Hihn Hammond Road	Road-Unpaved	Authorized Vehicles, Hiking, Mt. Biking, Equestrian	2.5	1	1940
13	Last Chance Road	Road-Unpaved	Authorized Vehicles, Hiking, Mt. Biking, Equestrian	2.2	0	1970
14	Anderson Landing Road	Road-Unpaved	Authorized Vehicles, Hiking, Mt. Biking, Equestrian	0.9	0	Unknown
15	Whitehouse Canyon Road	Road-Unpaved	Authorized Vehicles, Hiking, Mt. Biking, Equestrian	2.4	0	Unknown

ROAD # (as noted on Fig. 4)	NAME	DESCRIPTION	TYPE OF USE	LENGTH IN PARK (MILES)	# BRIDGES	YEAR CONSTRUCTED
16	Chalks Mountain Road	Road-Unpaved	Authorized Vehicles, Hiking, Mt. Biking, Equestrian	3.1	0	Unknown
17	East Waddell Road	Road-Unpaved	Authorized Vehicles, Hiking, Mt. Biking, Equestrian	5.1	0	1945
18	Upper Canyon Road	Road-Paved	Public Road	0.5	0	1940
19	Lower Canyon Road	Road-Paved	Public Road	0.3	0	1947
20*	Sky Meadow Campground Road	Road-Paved	Public Road	0.2	0	Unknown
21*	Huckleberry Campground Road	Road-Paved	Public Road	1.0	0	1968
22*	Sempervirens Campground Road	Road-Paved	Public Road	0.3	0	1949
23*	Blooms Creek Campground Road	Road-Paved	Public Road	0.4	1	1930
24*	Alder Campground Road	Road-Unpaved	Authorized Vehicles, Hiking, Mt. Biking, Equestrian	0.1	0	1945
25	Highway 236	Road-Paved	Public Road	6.5	0	1929-1938
26	Highway 1	Road-Paved	Public Road	1.2	1	Unknown
27*	Union Creek Road	Road-Unpaved	Public Road	0.2	0	1974

ROAD # (as noted on Fig. 4)	NAME	DESCRIPTION	TYPE OF USE	LENGTH IN PARK (MILES)	# BRIDGES	YEAR CONSTRUCTED
28	Butano Fire Road	Road-Unpaved	Authorized Vehicles, Hiking, Mt. Biking, Equestrian	5.2	6	Unknown
29	Olmo Fire Road	Road-Unpaved	Authorized Vehicles, Hiking, Mt. Biking, Equestrian	3.2	7	Unknown
30	Butano SP Entrance Road	Road-Paved	Public Road	1.0	1	Unknown
31	Gazos Creek Road	Road-Paved	Public Road	3.6	8	Unknown
32	Old Womans Creek Road	Road-Unpaved	Public Road	1.6	5	Unknown
33	Whitehouse Canyon Road	Road-Unpaved	Public Road	1.4	4	Unknown
34	Chalk Mountain Fire Road	Road-Unpaved	Authorized Vehicles, Hiking, Mt. Biking, Equestrian	0.78	3	Unknown
35	Año Nuevo SR Entrance Road	Road-Paved	Public Road	0.4	1	Unknown
36	Año Nuevo SR Service Road	Road-Paved	Authorized vehicles	0.5	2	Unknown

* Road not located/numbered on Figure 4, Existing Roads and Trails

APPENDIX F

Soil Types

Soil Series	Soil type/ Parent Material	Depth and Drainage	Runoff	Permeability	Erosion Hazard	Shrink Swell
Butano	Silt loam Siliceous shales	Moderately deep Well drained	Rapid to moderate	Moderate	Moderate to high	Moderate
Hugo & Josephine	sandy loam to loam Sandstone & Shale	Deep, well to excessively drained	Very rapid	Moderately rapid	Very high	Low to Moderate
Pomponio	Loam to clay loam Shale	Shallow to moderately deep, moderately well drained	Medium	Moderate to slow	High	High
Santa Lucia	Shaley clay loam Shale	Moderately deep, well drained	Very low to high	Moderate	Slight to high	Low

Sources: USDA 1961, 1973, and 2002

APPENDIX G

Beneficial Uses of Water

Beneficial Use	Pescadero Creek	Gazos Creek
Municipal and Domestic Supply (MUN)	√	√
Agricultural Supply (AGR)	√	√
Groundwater Recharge (GWR)		√
Water Contact Recreation (REC1)	√	√
Noncontact Water Recreation (REC2)	√	√
Wildlife Habitat (WILD)	√	√
Cold Freshwater Habitat (COLD)	√	√
Warm Freshwater Habitat (WARM)	√	
Migration of Aquatic Organisms (MIGR)	√	√
Spawning, Reproduction, and/or Early Development (SPWN)	√	√
Rare, Threatened or Endangered Species (RARE)*	√	
Freshwater Replenishment (FRSH)		√

APPENDIX H

Special Status Plant Species for Which Suitable Habitat Exists Within Butano State Park

SPECIES	COMMON NAME	STATUS*	PROBABILITY IN BUTANO SP
<i>Amsinkia lunaris</i>	Bent-flowered fiddleneck	CNPS List 1B, SLC	Possible
<i>Arabis blepharophylla</i>	Coast rock cress	CNPS List 4, SLC	Possible
<i>Arctostaphylos andersonii</i>	Santa Cruz manzanita	CNPS List 1B	Possible
<i>Arctostaphylos glutinosa</i>	Schreiber's manzanita	CNPS List 1B	Not Likely
<i>Calandrinia breweri</i>	Brewer's calandrinia	CNPS List 4	Possible
<i>Calochortus umbellatus</i>	Oakland star-tulip	CNPS List 4	Not Likely
<i>Cirsium andrewsii</i>	Franciscan thistle	CNPS List 1B	Not Likely
<i>Collinsia multicolor</i>	San Francisco collinsia	CNPS List 1B	Possible
<i>Corethrogyne filagnifolia</i> (= <i>C. leucophylla</i>)	Branching beach aster	CNPS List 3	Possible
<i>Cypripedium fasciculatum</i>	Clustered lady's-slipper	CNPS List 4	Not Likely
<i>Cypripedium montanum</i>	Mountain lady's-slipper	CNPS List 4	Not Likely
<i>Elymus californicus</i>	California bottle-brush grass	CNPS List 4	Possible
<i>Erodium macrophyllum</i>	Round-leaved filaree	CNPS List 2	Possible
<i>Erysimum franciscanum</i>	San Francisco wallflower	CNPS List 4	Not Likely
<i>Fritillaria agrestis</i>	Stinkbells	CNPS List 4, SLC	Not Likely
<i>Leptosiphon grandiflorus</i>	Large-flowered linanthus	CNPS List 4	Not Likely
<i>Lotus formosissimus</i>	Harlequin lotus	CNPS List 4	Possible
<i>Microseris paludosa</i>	Marsh microseris	CNPS List 1B	Not Likely
<i>Pedicularis dudleyi</i>	Dudley's lousewort	CNPS List 1B, SR	Not Likely
<i>Perideridia gairdneri</i> ssp. <i>gairdneri</i>	Gairdner's yampah	CNPS List 4	Possible
<i>Piperia michaelii</i>	Michael's rein orchid	CNPS List 4	Possible
<i>Ranunculus lobbii</i>	Lobb's aquatic buttercup	CNPS List 4	Possible
<i>Stebbinoseris decipiens</i>	Santa Cruz microseris	CNPS List 1B	Possible
<i>Trifolium buckwestiorum</i>	Santa Cruz clover	CNPS List 1B	Possible

*Status Codes: SR = State Rare; CNPS List 1B = Plants rare, threatened, or endangered in California and elsewhere; CNPS List 2 = Plants rare, threatened, or endangered in California, but more common elsewhere; CNPS List 3: = Plants about which we need more information; CNPS List 4 = Plants of limited distribution, a watch list; SLC= USFWS Species of Local Concern.

APPENDIX I
Special Status Wildlife Species That Occur, or for Which Potential Habitat Exists
within Butano State Park

TYPE	SPECIES	COMMON NAME	STATUS	PROBABILITY IN BUTANO SP
AMPHIBIANS	<i>Rana aurora draytonii</i>	California red-legged frog	FT, CSC, CP	Present
	<i>Ambystoma tigrinum</i>	Tiger Salamander	FT, CSC, CP	Unlikely
BIRDS	<i>Phalacrocorax auritus</i>	Double-crested cormorant	CSC	
	<i>Ardea herodias</i>	Great blue heron	Local concern	
	<i>Nycticorax nycticorax</i>	Black-crowned night heron	Local concern	
	<i>Accipiter cooperi</i>	Cooper's hawk	CSC	
	<i>Accipiter striatus</i>	Sharp-shinned hawk	CSC	
	<i>Aquila chrysaetos</i>	Golden eagle	CSC, CFP	
	<i>Circus cyaneus</i>	Northern harrier	CSC	
	<i>Elanus caeruleus</i>	White-tailed kite	CFP	
	<i>Falco columbarius</i>	Merlin	CSC	
	<i>Falco peregrinus anatum</i>	American peregrine falcon	SE, CFP	
	<i>Haliaeetus leucocephalus</i>	Bald eagle	CE, FT (FPD),CFP	
			CSC	
			CSC	
			CSC	
			FT, SE, CFP	Present
			CSC	
			CSC	Present
			CSC	
			CSC	
			CSC	
		SE		
		CSC		
		CSC		
		ST	Present	
		FSC, CSC		
		FSC, CSC		
		CSC		

TYPE	SPECIES	COMMON NAME	STATUS	PROBABILITY IN BUTANO SP
MAMMALS	<i>Corynorhinus townsendii townsendii</i> <i>Antrozous pallidus</i> <i>Myotis evotis</i> <i>Myotis yumanensis</i> <i>Myotis thysanodes</i> <i>Eumops perotis</i> <i>Bassiriscus astutus</i>	Townsend's western big-eared bat Pallid bat Long-eared myotis Yuma myotis Fringed myotis Western mastiff bat Ringtail	FSC, CSC CSC FSC FSC, CSC FSC, FSC, CSC CFP	
REPTILES	<i>Clemmys marmorata</i> <i>Phrynosoma coronatum frontale</i> <i>Thamnopsis sirtalis tetrataenia</i>	Western pond turtle California horned lizard San Francisco garter snake	FSC, CSC FSC, CSC, CP FE, CE, CFP	Potential Present
FISHES	<i>Onchorynchus kisutch</i> <i>Onchorynchus mykiss</i> <i>Eucyclogobius newberryi</i>	Coho salmon – Central California coast ESU Steelhead – Central California coast ESU Tidewater goby	FT, SE FT FE (FPD), CSC	Potential Present
INVERTEBRATES	<i>Danaus plexippus</i> <i>Speyeria adiastra adiastra</i> <i>Tryonia imitator</i>	Monarch butterfly Unsilvered fritillary butterfly California brackishwater snail	Local concern FSC FSC	Present

*Status Codes: FE = Federal Endangered; FT = Federal Threatened; FPD = Federal Proposed for Delisting; FSC = Federal Species of Concern; SE = State Endangered; ST = State Threatened; CFP = California Fully Protected; CP = California Protected; CSC = California Species of Special Concern.

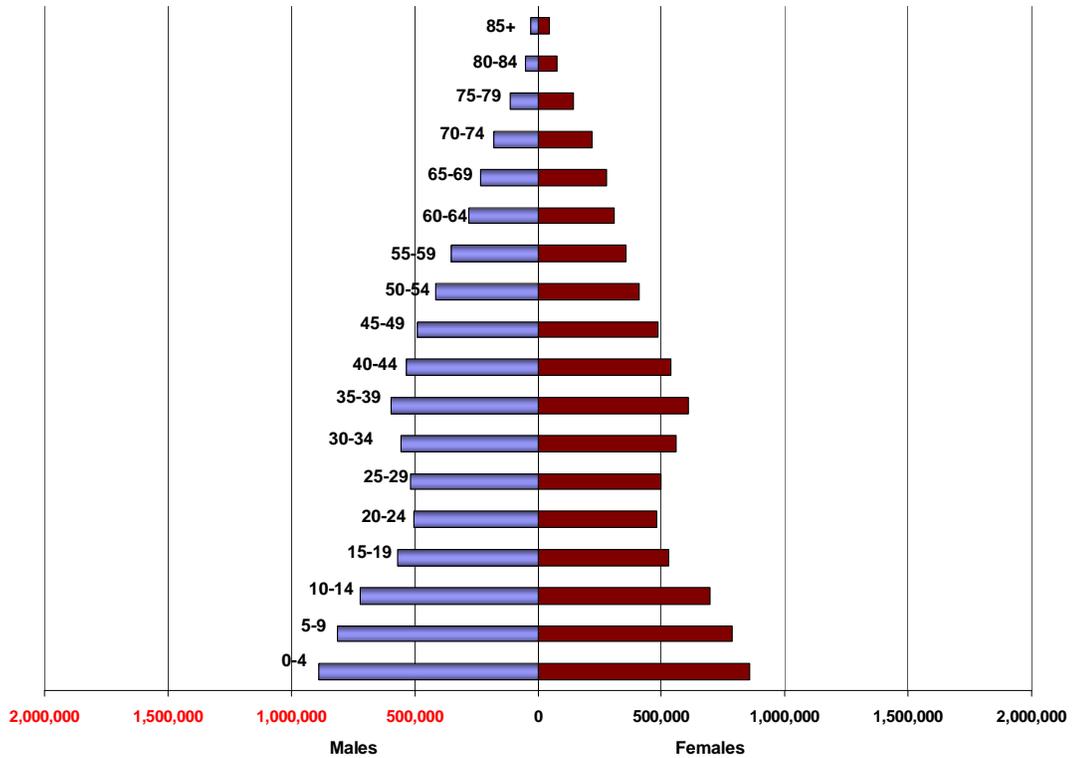
Information Sources:

CNDDDB, 2005

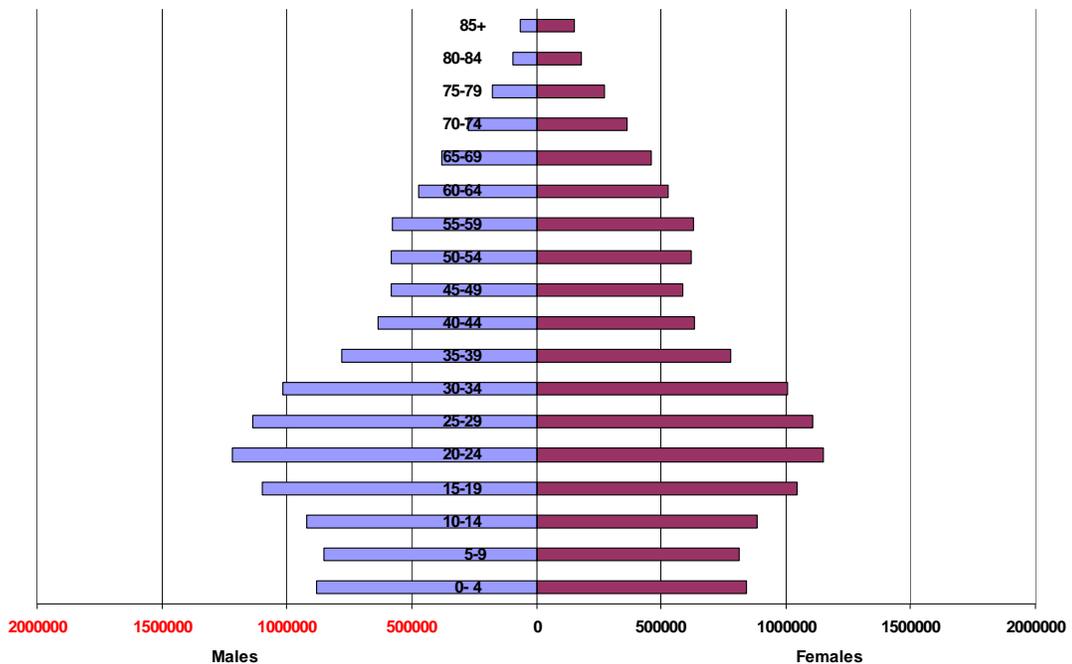
California State Parks Natural Resources Baseline Condition Assessment

APPENDIX J California Population 1960 - 2020

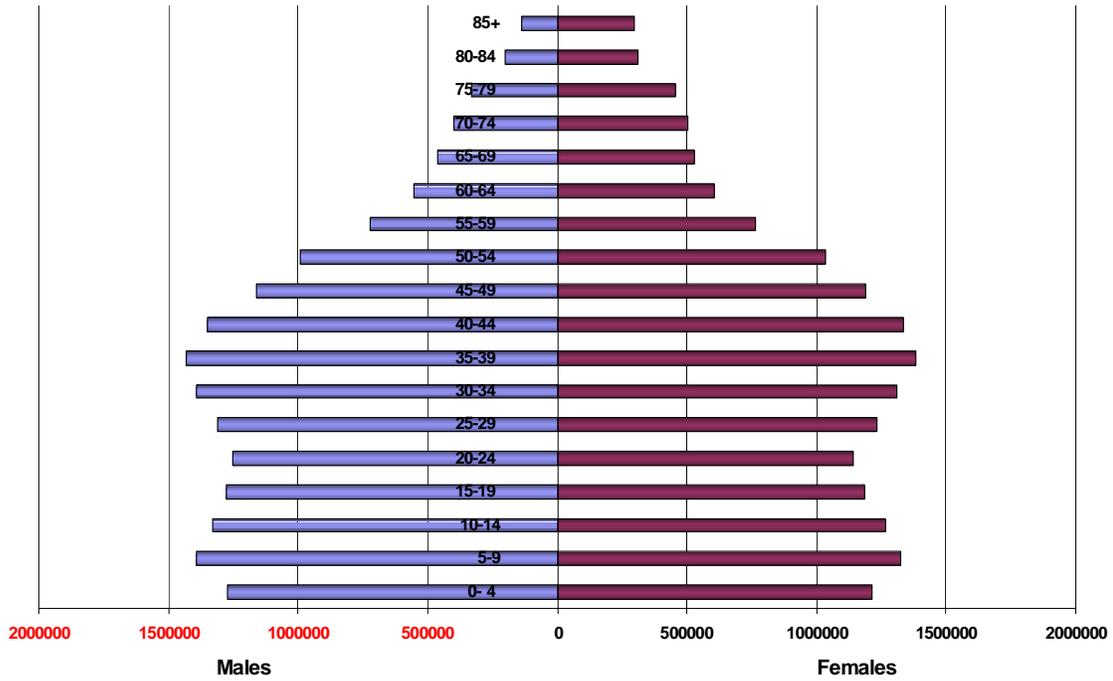
California Population 1960 (Source: CA Dept. of Finance)



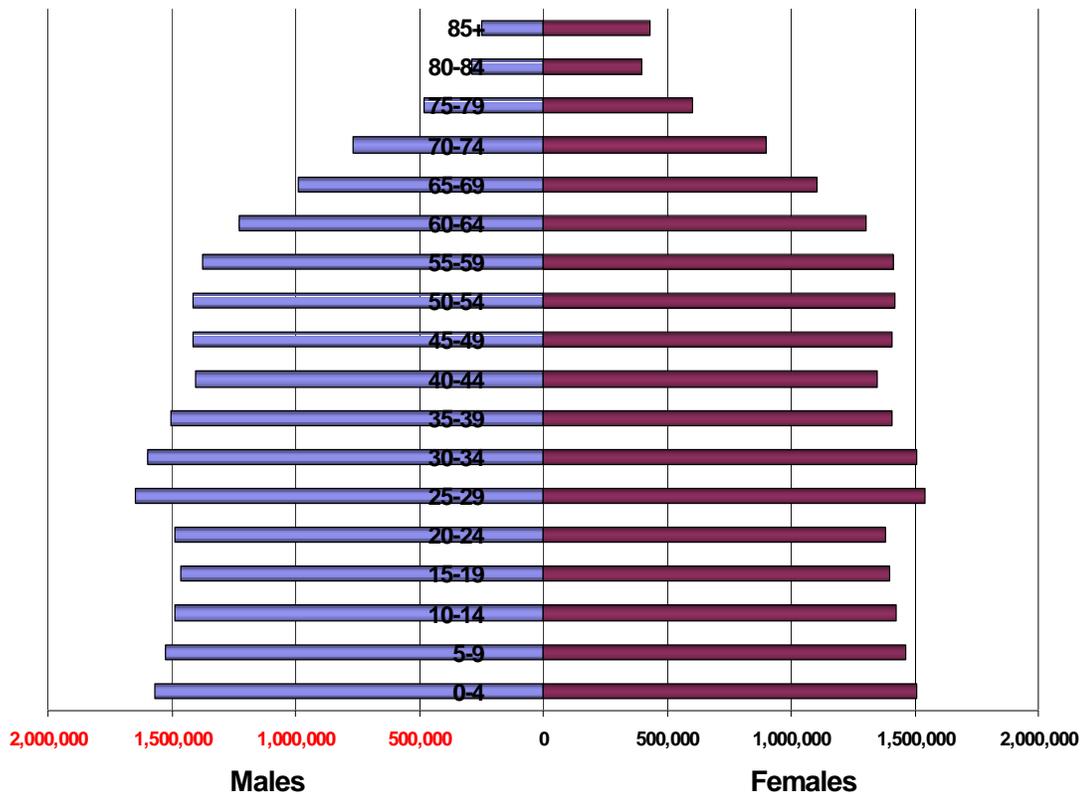
California Population 1980 (Source: UCData Center/CA Dept. of Finance)



California Population 2000 (Source: CA Dept. of Finance)



California Population 2020 (Source: CA Dept. of Finance)



APPENDIX K

Acronyms and Abbreviations

ABAG	Association of Bay Area Governments
ADA	Americans with Disabilities Act
AMBAG	Association of Monterey Bay Area Governments
BLM	U.S. Bureau of Land Management
BMP	Best Management Practice
Caltrans	California Department of Transportation
CCC	Civilian Conservation Corps
CCRWQCB	Central Coast Regional Water Quality Control Board
Cal Fire	California Department of Forestry and Fire Protection
CDFG	California Department of Fish and Game
CEQA	California Environmental Quality Act
CNPS	California Native Plant Society
CSP	California State Parks
CWHR	California Wildlife Habitat Relationships
DOM	Department Operations Manual
DPR	California Department of Parks and Recreation
DWR	California Department of Water Resources
EIR	Environmental Impact Report
ESU	Evolutionarily Significant Unit
GPS	Global Positioning System
LCP	Local Coastal Program/Plan
MROSD	Midpeninsula Regional Open Space District
NOP	Notice of Preparation
PCA	Pescadero Conservation Alliance
PRC	Public Resources Code
POST	Peninsula Open Space Trust
RWQCB	Regional Water Quality Control Board
RV	Recreational Vehicle
SB	State Beach
SFBAB	San Francisco Bay Air Basin
SFRWQCB	San Francisco Regional Water Quality Control Board
SOCS	Scope of Collections Statement
SP	State Park
SNR	State Natural Reserve

SWRCB	State Water Resources Control Board
TPL	The Trust for Public Land
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VCM	Visitor Capacity Management

APPENDIX L

Glossary

Access (Egress/Ingress) – The ability to enter a site (ingress) from a roadway or trail and exit a site (egress) onto a roadway or trail by vehicle, walking, bike, horse, etc.

Accessibility (for people with disabilities) – Under the Americans with Disabilities Act of 1990, state and local governments that construct new buildings and facilities, or make specific alterations to existing buildings, facilities and programs, must make them accessible. Title II requires a public entity to ensure that persons with disabilities are not excluded from services, programs, and activities because existing building and facilities are inaccessible. Beyond Federal law, the state has established standards for accessibility in the California Building Code. Title I and Title III would also be applicable. See Americans with Disabilities Act of 1990.

Alluvium – Sand, gravel, silt, and clay deposited by rivers and streams in valley bottoms.

Americans with Disabilities Act of 1990 (ADA) – Ensures equal access to all users of public (and private) facilities and programs. This federal civil rights legislation for persons with disabilities passed in 1990. The ADA covers a wide range of disabilities, from physical conditions affecting mobility, stamina, sight, hearing, and speech, to conditions such as emotional illness and learning disorders. The ADA also addresses access to the workplace. See **Accessibility**.

California Environmental Quality Act (CEQA) – The California Environmental Quality Act, Public Resources Code Section 21000 et. seq.; Title 14, California Code of Regulations Section 15000 et. seq. CEQA is a statute that requires state and local agencies to identify the significant environmental and historical impacts of their proposed actions and to avoid or mitigate any adverse impacts, if feasible.

California State Park and Recreation Commission – Established in 1927 to advise the Director of Parks and Recreation on the recreational needs of the people of California. The commissioners are appointed by the Governor and conduct public hearings on naming, classification and the approval of general plans (and amendments) for State Park System units.

Clay – A particle of sediment less than 1/256 of a millimeter in diameter. Also, a family of platy silicate minerals that commonly form as a product of weathering.

Concessions – A contract with persons, corporations, partnerships, or associations for the provision of products, facilities, programs and management and visitor services that will provide for the enhancement of park visitor use, enjoyment, safety, and convenience. Concessions may be for food service, overnight accommodation, equipment rentals (canoes, raft, skis), gift stores, etc.

Carbon Sequestration – The uptake and storage of carbon. Trees and plants, for example, absorb carbon dioxide, release the oxygen and store the carbon.

Direct Impacts – Primary environmental effects that are caused by a project and occur at the same time and place.

Environment – The California Legislature defined ‘environment’ to refer to “the physical conditions which exist within the area which will be affected by a proposed project, including land, air, water, noise, objects of historic or aesthetic significance.”

Environmental Analysis – The task of addressing the potential impact of any given plan or development project on the state’s environment, an analysis that can range across any number of topics including air pollution, toxins, and impacts on plants, animals and historical resources.

Environmental Impact Report (EIR) – An informational document prepared by the lead agency responsible for carrying out a project as part of the CEQA public review process that describes and analyzes a project’s potential significant environmental effects and discusses ways to mitigate or avoid those effects. See **California Environmental Quality Act, Tiered Approach/Tiering**.

Evolutionarily Significant Unit (ESU) – A genetically distinct population segment of a species. An ESU is protected under the federal Endangered Species Act, which defines species to include “any subspecies of fish or wildlife or plants, and any distinct population segment of any species of vertebrate fish or wildlife, which interbreeds when mature.”

Exotic Species (or alien, non-native or non-indigenous species) – A species occurring in an area outside of its historically known natural range that has been intentionally introduced or has inadvertently penetrated the system. Also known as introduced, non-native, non-indigenous or ornamental species. See **Non-native Species**.

General Plan – A document providing broad public policy and programmatic guidance regarding development and management of an individual unit of the State Park System, essential to the managers, staff and stakeholders. A General Plan is sometimes called a “comprehensive plan” or “master plan.” See **Master Plan**.

Global Warming – An increase in the near surface temperature of Earth. Global warming has occurred in the distant past as the result of natural influences, but the term is most often used to refer to the warming predicted to occur as a result of increased emissions of greenhouse gases.

Gravel – All sedimentary particles (rock or mineral) larger than 2 millimeters and smaller than 64 millimeters in diameter.

Greenhouse Gas – Any gas that absorbs infra-red radiation in the atmosphere. Greenhouse gases include water vapor, carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), halogenated fluorocarbons (HCFCs), ozone (O₃), perfluorinated carbons (PFCs), and hydrofluorocarbons (HFCs).

Guidelines – General statements of policy direction around which specific details may later be established.

Habitat – The physical location or type of environment in which an organism or biological population lives or occurs, often characterized by a dominant plant form or physical characteristic (e.g., the oak-savanna, wetland, or a coastal habitat).

Holocene – An epoch of the Quaternary Period, from the end of the Pleistocene, approximately 8,000 years ago to the present time.

Indirect Impacts – Also referred to as secondary effect, indirect impacts are caused by a project and occur later in time or at some distance from the project.

Interpretation – A mission-based communication process that forges emotional and intellectual connections between the interests of the audience and the meanings inherent in the resource.

Interpretive Activities – Hikes, talks, tours or demonstrations that provide the participants with information and inspiration on a given natural or cultural resource. Participants learn and discover new ideas or concepts about the subject.

Lead Agency – The governmental agency responsible for compliance with CEQA for a proposed project. Generally, it is the agency with the broadest permit discretion for the project or the agency actually carrying out the project. For example, California State Parks is the Lead Agency for Departmental projects, and has the authority to approve its own projects, even though permits may also be required from other agencies. See **California Environmental Quality Act (CEQA)**.

Liquefaction - In cohesionless (sand and silt) soil, the transformation from solid to a liquid state due to increased pore water pressure and resulting reduction of effective stress (loss of soil strength). Often induced by earthquake shaking.

Management Plans – In California State Parks, management plans define the objectives, methodologies, and/or designs regarding how management goals will be accomplished. Occurring on an as-needed basis, they are typically focused on specific management topics, goals, or issues. Depending on their focus, the plans can apply to all or part of a unit. Management plans are consistent with systemwide plans and policies, and with the unit's general plan. See **Specific Plan**.

Master Plan – Master plans are tangible statements of where the park is now, what it should be in the future and what is required to get there. While circumstances vary from place to place, the decision to develop a master plan is often determined by the need to understand the current conditions of the park, to generate and build community interest and participation, to create a new and common vision for the park's future, and/or to develop a clear and solid set of recommendations and implementation strategies. See **General Plan**.

Mitigate, Mitigation – To ameliorate, alleviate, or avoid to the extent reasonably feasible – usually impacts to the environment associated with a project or undertaking. According to CEQA, mitigation for environmental impacts include: (a) avoiding an impact by not taking a certain action or parts of an action; (b) minimizing an impact by limiting the degree or magnitude of the action and its implementation; (c) rectifying an impact by repairing, rehabilitating or restoring the environment affected; (d) reducing or eliminating

an impact by preserving and maintaining operations during the life of the action; (e) compensating for an impact by replacing or providing substitute resources or environments. Refer also to Section 106 of the National Historic Protection Act.

Mitigation Measure – Under the California Environmental Quality Act (CEQA), when an environmental impact or potential impact is identified, measures must be proposed that will eliminate, avoid, rectify, reduce or compensate for those environmental effects.

Multi-use or Multi-purpose Trail – An appropriately surfaced trail intended as a circulation connection for a variety of uses (bicycle, hiking, equestrian). Also referred to as a shared use trail.

Native Species – A plant or animal that is historically indigenous to a specific area.

Non-native Species – Introduced species or exotic species; refers to plants and animals that originate in other regions of the world and are brought into a new region, where they may dominate the local species or in some way negatively impact the environment for native species. Also known as non-indigenous species. See **Exotic Species**.

Pleistocene – An epoch of the Quaternary Period, after the Pliocene of the Tertiary and before the Holocene. It began 1.6 million years ago and lasted until about 8,000 years ago (Holocene). Syn: *ice age*; *glacial epoch*

Public Resources Code (PRC) – California law that addresses natural, cultural, aesthetic, and recreational resources of the State, in addition to the State Constitution and Statutes.

Riparian – (land or area) – The strip of land adjacent to a natural watercourse such as a river or stream. Often supports vegetation that provides fish habitat when growing large enough to overhang the bank.

Sand – Loose particles of rock or mineral that range from 0.0625-2.0 millimeters in diameter.

Scenic Corridor – A transportation corridor, bikeway or waterway of outstanding scenic beauty, warranting special scenic conservation treatment.

Shale – A fine-grained detrital sedimentary rock, formed by the deposition and compaction of clay, silt, or mud. It has finely laminated (layered) structure, which gives it a fissility along which the rock splits readily, especially on weathered surfaces. Shale is well indurated, but not as hard as argillite or slate. It may be red, brown, black, or gray. A diatomaceous shale is usually a light colored, soft rock composed mostly of the opaline frustules (the hard, siliceous bivalve shell of a diatom).

Significant Effect – A substantial, or potentially substantial, adverse change in the environment.

Silt – Loose particles of rock or mineral that range from 0.002-0.0625 millimeters in diameter.

Specific Plan – A tool for detailed design and implementation of a defined portion of the area covered by a General Plan. Specific plans put the provisions of the local general plan into action.

Stakeholder – Group or individual who can affect, or is affected by, the achievement of the jurisdiction or organization’s mission; examples include managers, employees, policy makers, suppliers, vendors, citizens, users, community activists, businesses, and community groups; and who should have a right to participate in the decision-making process.

Tiered Approach (Tiering) – In general plans, used to meet the requirement of CEQA. The first tier EIR will be prepared for the general plan. Subsequent management plans, area development plans, and specific project plans, implementing the general plan may be subject to additional environmental review (second and third tiers, etc.) The degree of specificity will reflect the level of detail in the general plan and subsequent plans. **See California Environmental Quality Act, Environmental Impact Report, and General Plan.**

Unit Data File (UDF) – In California State Parks, the working file that contains an organized body of information about a unit, and references the location of other information. It acts as an organized library of both unit data and the status of current issues.

Viewshed – The total area within a view from a defined observation point.

Vision Statement – A vision statement is a compelling image (description) of a desirable state of reality made possible by accomplishing the mission in a way that is consistent with the core values of key stakeholders. The vision statement is an inspiring view of the preferred future.

Watershed – The total area above a given point on a waterway that contributes water to its flow; the entire region drained by a waterway or watercourse that drains into a lake, reservoir, or other body of water. A watershed may, and often does, cover a very large geographical region.



- Figure 1 Regional Map
- Figure 2 Location Map
- Figure 3 Existing Facilities
- Figure 4 Existing Roads and Trails
- Figure 5 Alquist-Priolo Fault Zones
- Figure 6 Watersheds and Streams
- Figure 7 Coastal Zone
- Figure 8 Vegetation Communities
- Figure 9 Wildlife Habitat
- Figure 10 Natural Resource Sensitivity
- Figure 11 Cultural Resources
- Figure 12 Planning Zones
- Figure 13 Proposals

Photo on reverse: Jackson Flats

REPORT CONTRIBUTORS

PLANNING TEAM

California State Parks, Planning Division General Plan Section – Sacramento

David Keck, Senior Landscape Architect, Supervisor, General Plan Section

Scott Green, Associate State Archaeologist

Alan Kilgore, Research Analyst II (GIS)

Carolyn Schimandle, State Park Interpreter II

Alan Tang, Associate Landscape Architect

Ellen Wagner, Associate Landscape Architect

Laura Westrup, Associate Park and Recreation Specialist

California State Parks, Santa Cruz District

Dave Vincent, State Park Superintendent V (Retired)

Chet Bardo, State Park Superintendent III, San Mateo Coast Sector

Bill Dall, State Park Superintendent III, Santa Cruz Mountains Sector

Mark Hylkema, Associate State Archaeologist

Gary Strachan, Supervising State Park Ranger, Santa Cruz Mountains Sector

Victor Roth, Staff Park and Recreation Specialist

Additional planning team members who made significant contributions to this plan:

Gudrun Baxter, Associate Landscape Architect

Matt Bischoff, Historian III

Kathleen Considine, Engineering Geologist

Robin Ettinger, Associate Landscape Architect

Curtis Gray, Research Analyst II (GIS)

Robert Hare, Associate Park and Recreation Specialist

Roy W. Martin, Environmental Scientist

Cyndy Shafer, Environmental Scientist

Jason Spann, Associate Landscape Architect

