CASTLE ROCK STATE PARK
GENERAL PLAN AMENDMENT
and Supplement EIR
For

Walk-in Campsites at Partridge Farm

Approved by the
State Park and Recreation Commission
October 25, 2000
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Resolution 19-00
adopted by the
CALIFORNIA STATE PARK AND RECREATION COMMISSION
at its regular meeting in San Jose
October 25, 2000

WHEREAS, the California State Park and Recreation Commission directed the Department of Parks and Recreation to re-evaluate the issue of camping at Castle Rock State Park and, if appropriate, to prepare an amendment to the General Plan addressing this subject at a Commission meeting; and

WHEREAS, the Director of Parks and Recreation has presented to this Commission for approval the proposed amendment to the General Plan for Castle Rock State Park; and

WHEREAS, this document reflects long-range development plans to provide for optimum use and enjoyment of the unit as well as the protection of its quality, resources, and diversity;

NOW, THEREFORE, BE IT RESOLVED that the California State Park and Recreation Commission hereby approves the Department of Parks and Recreation’s Castle Rock State Park General Plan Amendment dated June 20, 2000, subject to such environmental changes as the Director of Parks and Recreation shall determine advisable and necessary to implement the provisions of said plan.
CASTLE ROCK STATE PARK
GENERAL PLAN AMENDMENT
and Supplement EIR
For
Walk-in Campsites at Partridge Farm

State Clearinghouse #1997121108

Approved by the
State Park and Recreation Commission
October 25, 2000

GRAY DAVIS                           RUSTY AREIAS                 MARY NICHOLS
Governor      Director           Secretary for Resources

Department of Parks and Recreation
P.O. Box 942896  Sacramento, California 94296-0001
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INTRODUCTION

On March 8, 2000, the State Park and Recreation Commission approved the preliminary general plan for Castle Rock State Park and classified a large portion of the park as a natural preserve. In approving this plan, the commissioners also expressed their support for walk-in campsites to improve access opportunities for visitors in the Partridge Farm area. The purpose of this amendment is to include a development proposal of approximately 20 walk-in campsites in the Castle Rock State Park General Plan. The original camping component of the plan was withdrawn from Commission consideration at the general plan hearing due to concerns raised with regard to the analysis of the impacts of the camping proposal in the draft plan that had been circulated for public comment (see Appendix A for Commission Resolution).

BACKGROUND

Castle Rock State Park offers visitors an opportunity to visit a ridge-top environment, which is a portion of the Foothills and Low Coastal Mountains Landscape Province. It provides trailhead opportunities for use of trails at Castle Rock and in the Midpeninsula Regional Open Space Preserves and Bay Area Ridge Trail, and hikes from the ridge to the ocean via the Skyline-to-the-Sea Trail (approximately 30 mile, three-day trail hike). Most of the Santa Cruz Mountain’s region is very accessible to the local communities of the lower peninsula for a bicycle day-trip or visit by automobile any time of the day. Castle Rock State Park also provides primitive trail camps for park visitors and backpackers along this regional trail system.

Camping opportunities in the Santa Cruz Mountains and vicinity of Castle Rock State Park exist at Portola Redwoods State Park (12 miles or 35 minutes to the northwest), Big Basin Redwoods State Park (15 miles or 40 minutes to the southwest), and Sanborn-Skyline County Park (6 miles or 25 minutes to the east). These state and county parks provide an overnight experience for conventional car campers in the redwood forest and canyons, and focus the users on recreational activities within those park units. Camping facilities at these other parks include walk-in and family tent campsites, group facilities, tent cabins, as well as recreation vehicle hook-ups provided at the county park. Overnight visitors from major metropolitan areas outside the Santa Cruz Mountains region must make reservations for campsites due to the popular demand for these facilities. Campsites in county parks are available on a first-come, first-served basis.
The park was evaluated during the general plan process for its potential to create opportunities for high-quality outdoor recreation, consistent with its resource values and classification. It was recognized at that time, some park visitors enjoyed a primitive type of recreational experience and would like extended hours of use; still, others wanted campsites that were more accessible from the main parking lot. However, potential sites for locating new campground facilities is limited. Partridge Farm is considered the only site within current state park ownership that is favorable for this type of facility. It is also recognized that sensitive natural and cultural resources exist in adjacent areas.

**PROJECT DESCRIPTION**

The management intent is to establish approximately 20 walk-in campsites in the Partridge Farm Area. These campsites will be designed for a visitor experience similar to trail camps, but with greater accessibility to parking and restroom facilities. Visitors will be required to walk a reasonable distance from a common parking area to walk-in campsites situated in a natural setting. Unlike automobile campgrounds, campers will not have vehicle parking next to each campsite. Campsites and support facilities will be designed to create an accessible environment for visitors and minimize visitor impacts on natural and cultural resources.

As directed by the general plan, an overall site plan will be prepared for Partridge Farm, with the guidance of resource inventories, studies, and review. This site plan will include such components as: vehicle access, visitor contact, park office, parking and circulation, day use and overnight use areas, interpretive and operations facilities, cultural protection, buffer zones, and native plant restoration. The proposed campsites would be developed in a third phase of park development, only after the first two phases, which includes day use parking and visitor contact facilities. Resource assessment and monitoring will occur in the vicinity of Partridge Farm prior to development, which is subject to further environmental review.

**GOAL: Expand access and overnight opportunities for visitors.**

**Guidelines:**

- Approximately 20 walk-in campsites may be developed for a tent camping experience in the Partridge Farm Area. Campsites will be set into a natural setting and accessible by trail to and from developed parking and restroom facilities located out of view from the campground.

- Overnight visitor parking (approximately 30 spaces) will be screened with native plants and centralized or clustered away from the walk-in campsites.

- Restroom facilities will be small in scale and blended into the existing terrain and landscaped with native vegetation. Restroom locations shall be based on the overall
site plan prepared for the Partridge Farm Area, including provisions for day use and overnight use facilities.

- The design and layout of campground facilities shall consider compatibility with other uses and programs (i.e., day use, special activities, operations, natural and cultural resource management, and interpretive programs) identified in the general plan for the Partridge Farm Area.

- Pathways connecting campsites to park trails shall guide users through the least sensitive resource areas.

- Campsite provisions should be made for people with disabilities.

- Prior to any facility development, a resource assessment and monitoring program will be implemented in order to evaluate impacts and guide future management decisions regarding public access and visitor use in the Partridge Farm Area and its surroundings. Development projects shall include provisions for the restoration and protection of native vegetation and protection of cultural features.

- A campfire center may be considered in the overall site plan for the Partridge Farm Area.

PROPOSED WALK-IN CAMPSITES - MAP NO. 2

The map shown on the following page describes the area of potential development for walk-in campsites at Partridge Farm. This area also includes the site for day-use parking facilities proposed in the approved general plan for this unit. This area shown is considered to be conceptual for general plan purposes only, and does not reflect the actual boundaries of proposed facilities development. A future area development plan and detailed site investigations will determine actual facilities location and design.
Area of Potential Development
(Includes Day Use & Overnight Use Facilities)

Note: This area is considered to be conceptual for general planning purposes only, and does not reflect the actual boundaries of proposed facilities development.
ENVIRONMENTAL ANALYSIS

SUMMARY/INTRODUCTION

This document is a supplement to the EIR prepared for the Castle Rock State Park General Plan that covers the proposal for an addition of approximately twenty walk-in sites at Partridge Farm.

This supplement examines the potential environmental impacts of camping in greater detail than the EIR for the General Plan recognizing the concerns the public expressed for campground development during the CEQA review of the preliminary general plan. However, this supplement is a first tier review whereby subsequent area development plans for the Partridge Farm area will be subject to further environmental review requirements of the California Environmental Quality Act.

This supplement considers the impact of the addition of camping and the cumulative impact of camping along with the development previously approved in the General Plan.

DESCRIPTION OF THE EXISTING ENVIRONMENT

The Partridge Farm area is described in the General Plan, Natural Resources Inventory of Castle Rock State Park and the Upper San Lorenzo River Basin Boisseranc Inventory and An Inventory of the Cultural Features of the Boisseranc Unit, Castle Rock State Park, Santa Cruz County. These documents, incorporated by reference, are available for public review at the Santa Cruz District Office at 600 Ocean Street, Santa Cruz and the Northern Service Center at 1725 23rd Street, Room 200, Sacramento, California.

In summary, the Partridge Farm area has been substantially modified by agricultural activities and other uses over the last 100 years. It is recovering to a more natural-appearing landscape as native vegetation reestablishes itself. It is surrounded by the Black Oak woodland and the unique and sensitive Lion Caves and Castle Rock Ridge areas.
SIGNIFICANT ENVIRONMENTAL EFFECTS AND MITIGATION

CULTURAL RESOURCES

Area of Potential Effect

The area of potential impact includes the Partridge Farm area, and adjacent Lion Caves and Castle Rock Ridge Areas.

Threshold

Loss, destruction, or human-induced deterioration of a known cultural resource, recognized by the Department to have integrity and significance, will be considered a significant impact.

Impact of Camping

There is a significant cluster of six prehistoric sites in the Partridge Farm area. These sites represent a seasonal camp of undetermined age. Some possible rock art was recently identified in the large rock formations within the vicinity of Partridge Farm; other rock art sites may exist within the park. In general, prehistoric resources are scarce in the park and, therefore, all are potentially significant.

The Partridge House/Bungalow is the remaining significant historic resource in the Partridge Farm area. The existing apple and pear orchards are potentially historically significant.

The General Plan calls for the protection of all historic and prehistoric sites and features from adverse effects resulting from park use, development, and management activities. The Partridge House will be maintained with consideration of appropriate adaptive uses. No camping facilities would directly impact these sites. The continuation of the house as an employee residence or other use (i.e. unit administrative) would discourage public vandalism of the sites.

The camping facility would not be located near the Partridge House or existing orchards. There would be no significant impact.

There is a potential significant impact to unrecorded or unknown resources in the Castle Rock Ridge Area.
Impact – Cumulative

The cumulative impact of camping and day use on cultural resources will be the same as the impact for camping.

Mitigation

1. Site-specific cultural resource surveys will be conducted in areas proposed for development and where other surface disturbing activities occur in the Lion Caves and the adjacent Castle Rock Ridge Areas. No public use facilities will be constructed on or near known prehistoric or historic sites, in accordance with the Department’s resource management directives and professional standards for the treatment of historic properties.

2. A buffer zone will be designated around the facility development area at Partridge Farm to protect the cultural resources and other sensitive habitats and resources.

3. Any modification, maintenance, or improvements to the Partridge House will be done in conformance with the Secretary of Interior’s Standards for the Treatment of Historic Properties.

4. All development and resource management plans will be subject to meeting PRC 5024.5 review requirements. These cultural effect review requirements will be met at the time the plans are prepared.

TRAFFIC

Area of Potential Effect

The area of potential effect includes the two state highways (35 and 9) along the borders of Castle Rock State Park, the intersection of the two highways (Saratoga Gap), and the proposed entrance to the Partridge Farm area.

Threshold

A reduction in the level of service below “Level C” or development of an access with inadequate sight distance will be considered a significant impact.

Impact – Camping

Caltrans rates level of service on roadways with a scale from “A” to “F”. The rating is not wholly dependent on the number of vehicles but also on the nature of the flow, speeds, and delays. Level of service “A” represents unrestricted operation; Level F represents overcapacity flows with heavy congestion and
considerable reductions in speed. Level “C” is still stable flow; although it approaches the range where instability may occur because of small changes in flow. Caltrans design standard level of service for freeways and highways is Level “C”. Maximum volume (passenger cars per hour in one direction) for rural two-lane highway for “B” level of service is 900 under ideal conditions (Fundamentals of Traffic Engineering, 8th edition, Institute of Transportation and Traffic Engineering, University of California, Berkeley, 1973).

The camping proposal will add about 60 trips per day maximum (30 parking spaces X 2 trips/space/day). The increase in traffic volume would be less of an impact than the potential safety hazard of vehicles accessing and egressing at the present Partridge Farm entrance. Regular visitor use of the Partridge farm area would require an improved developed access and entrance road for public safety reasons. Visitors tend to avoid peak (commute) traffic periods and, therefore, should not contribute to peak traffic volumes.

The current peak hour traffic on Highway 35 between Partridge Farm and Saratoga Gap is 440 trips per hour. The practical capacity of this roadway is about 900 vehicles per hour. If the daily traffic volume from camping (60 vehicle trips) were generated in one hour, in addition to the peak hour traffic of 440 trips/hour, it would not exceed the practical capacity of this roadway.

**Impact – Cumulative**

The cumulative increase of the day use and camping proposals at Partridge Farm could add 460 trips per day maximum (100 spaces X 2 trips/day/space X 2 (turnovers) + trips generated by camping). The cumulative impact on traffic volume of all development at Partridge farm approaches the practical capacity (if all trips generated by Partridge Farm visitor development occur during the peak hour, an unlikely occurrence). Visitor traffic or trips generally occur during off-peak hours and spaced throughout the day. A more probable scenario would be one trip generated for every parking space (approximately 100 day use and 30 camping) at the peak hour. These 130 trips, in addition to the peak hour traffic, are still below the practical capacity. There is still the potential traffic hazard at the intersection of the highway and the Partridge Farm entrance road. The day use parking at Partridge Farm will replace the parking removed at the current main parking area and the highway; therefore, the impact at the Saratoga Gap intersection will be negligible. The only increase in trips generated is from the proposed camping.

**Mitigation**

Mitigation for the potential safety hazard will not be prescribed now. The Department will consult with the California Department of Transportation to design a safe access into Partridge Farm area at the time site-specific development plans are prepared. Road and access improvements will conform
to Caltrans standards and specifications when implemented. Possible mitigation is the relocation of the entrance road, construction of deceleration lanes, and construction of turn lanes.

HYDROLOGY AND SOILS

**Area of Potential Effect**

The area of potential effect includes the areas of Partridge Farm, Castle Rock Ridge, and Lion Caves.

**Threshold**

A reduction in water quality and/or increased soil erosion will be considered a significant impact.

**Impact – Camping**

Even though project developments will occur within a limited portion of the park (Partridge Farm Resource Management Zone), development, maintenance and use of facilities such as roads, trails, parking lots, campsites, picnic areas, utilities, septic systems, and buildings, have the potential for significant short and long-term impacts to the environment. These impacts could include soil disturbance, dust, increased erosion, altered drainage patterns, and lowered water quality.

Quantification and determination of the impacts is speculative without more defined plans.

**Impact – Cumulative**

The cumulative impacts are considered the same as those described for camping above.

**Mitigation**

Design, construction and maintenance of facilities will follow the best management practices for the elimination or reduction of adverse effects to soil stability, water quality, and drainage patterns. Activities or development that could adversely affect the park’s aquatic systems will be mitigated to a level of non-significance, where feasible.
GEOLOGY

**Area of Potential Effect**

The area of potential effect includes the areas of Partridge Farm, Castle Rock Ridge, and Lion Caves.

**Threshold**

Damage to unique or significant geological features will be considered a significant impact.

**Impact – Camping**

There is a potential impact to tafoni as a result of climbing activities, vandalism, and unintentional damage from intensive use. Improved access at Partridge Farm may encourage greater public use of the surrounding areas possessing tafoni features. Consultations with geologists confirmed that the tafoni are sensitive and endangered. The durability of the tafoni features has not been studied and is most likely variable, with some rock features more durable than others.

**Impact – Cumulative**

The cumulative impacts are considered the same as those above. On the basis of the number of visitors involved, the day use development (460 visitors) has a responsibility for the greater portion of the impact than camping (70 visitors). It should be recognized that the day use visitation at Partridge Farm is a result of the relocation of existing day use parking and may not create any substantial difference in effect.

**Mitigation**

No climbing will be permitted in the area classified as a natural preserve. The Department will prepare a climbing management plan that will include measures to prevent damage to tafoni from climbing activities outside the San Lorenzo Headwaters Natural Preserve. Proposals to protect tafoni in the plan may include designation of climbing areas, equipment restrictions, and closures. Interpretation and education of visitors can reduce the unintentional degradation and vandalism of these features.
WILDLIFE

Area of Potential Effect

The area of potential effect includes the entire state park, depending on the sensitivity and area requirements of the species. The area of greatest effect includes the Partridge Farm resource management zone and adjacent areas.

Threshold

Direct take or removal or individuals of a sensitive species, reduction in area, or alternation or disturbance of required habitat will be considered a significant impact.

Impact – Camping

The additional availability of garbage and the direct feeding of wildlife by campers, in conjunction with that of day use visitors, may attract disproportionately large populations of nest predators, including raccoons, striped skunks, opossums, and corvids (jays, ravens and crows), in and adjacent to the project area. Increased large predator populations may adversely impact Neotropical migrant songbirds, non-migrant native birds, amphibians and reptiles using hardwood, montane-hardwood and grassland habitats occurring in the Partridge Farm and adjacent Resource Management Zones. Evidence of the impact is inconclusive; a determination of significance would be speculative.

The siting of camping facilities may degrade sensitive plant or animal populations or their habitat. Brewer’s calandrina, a sensitive plant species, occurs in the park; however, inventory searches failed to find any in the campground area. Mountain lions have been documented to occur in the park; however, population statistics, regional wildlife movement, and tolerances of humans have not been established. Mountain lions have been documented in the Partridge Farm vicinity by Harvey and Stanley (1979), yet little is known of the species’ use intensity there. No sign of mountain lions was observed in the Partridge Farm Resource Management Zone during 1995/96 inventories; during this time one mountain lion sighting was reported elsewhere in the park.

The project could result in disturbance to amphibian and reptile microhabitat from the illegal gathering of large woody litter for firewood; however, the Department enforces regulations against the illegal collection of firewood.

Impact – Cumulative

The cumulative impacts are considered the same as those described for camping above.
Mitigation

Site-specific searches for sensitive species of plants and animals will be conducted in areas proposed for development or for other activities. The Department will assess movement patterns by large, wide-ranging sensitive animal species using the Partridge Farm area and vicinity. The proposed project will be modified if necessary to avoid significant adverse impacts to any detected sensitive populations or areas that have established movement corridors of sensitive animal species.

ESTHETICS

Area of Potential Effect

The area of potential effect includes the areas of Partridge Farm, Castle Rock Ridge, and Lion Caves. Due to topography and vegetation, the viewshed from Partridge Farm is limited.

Threshold

New development in a natural-appearing landscape visible to neighbors or adjacent traffic would be considered significant.

Impacts – Camping

The area of potential development is not readily visible from the highway or by neighboring landowners. The proposed walk-in campsites will be generally screened by existing vegetation and topography, and thus will not result in significant visual impacts. Campsites will be designed and situated within the Partridge Farm area, with minimal disturbance to the existing landscape. A parking area with reflective parked automobiles and restroom building could be very obvious human imposed intrusions into the landscape. The activity and equipment associated with the walk-in campsites could also be an intrusion to the visual landscape for park users seeking a wilderness experience.

Human activities occurring outside the Partridge Farm area, in the vicinity of Goat Rock and Lion Caves, could impact the visual quality of the natural landscape through indiscriminate use (volunteer trails and deliberate acts of resource damage).

Impacts - Cumulative

The cumulative impacts are considered the same as those described for camping above.
Mitigation

Visual impacts can be mitigated by careful siting, design, and selection of materials. The restroom building design will be low profile and use muted, non-reflective exterior colors that blend, rather than contrast, with the surrounding environment. Designated trails throughout the Castle Rock Ridge and into the Lion Caves area will be designed and situated to minimize the visual impact to the existing landscape, which includes restoration of previously impacted sites.

Parking will be developed and screened by landscaping to help break up surfaces of potential glare and views from the walk-in campsites, highway, and adjacent private properties.

Landscaping with native plant species will be provided at the campground perimeter and throughout the walk-in campsites to screen views from parking areas and nearby trails, if needed. Native plant species compatible with existing vegetation would be required.

Low-profile lighting at the restroom building will be at a minimum level necessary for security and safety. Light fixtures that minimize glare will be required and directed downward to minimize light pollution of the dark skies.

ALTERNATIVES

There are two alternatives to be considered: (1) Traditional campground development alternative (2) the “no project” alternative (development approved by the Park and Recreation Commission).

TRADITIONAL CAMPGROUND DEVELOPMENT ALTERNATIVE

Traditional campground facilities would be developed, including campground roads and individual campsite parking spurs. Approximately twenty campsites would be designed for overnight use at Partridge Farm in addition to the day use and operations facilities already approved in the general plan. This alternative would result in construction of additional roads for campground vehicle traffic, with a reduction in consolidated parking for overnight use. Approximately 10 parking spaces will be developed for overnight visitor use of existing trail camps.

The potential significant environmental impacts resulting from this alternative would be the same as the approved general plan, with the potential increase in vehicle traffic movements related to the use of traditional camping vehicles. Additional surfaced campground roads will result in the loss of vegetative cover and wildlife habitat, increase surface run-off and potential soil erosion, and impact the esthetics of the natural-appearing landscape.
The traffic impacts and visual degradation impacts could be mitigated to non-significance through proper siting of facilities and landscaping. Individual parking spurs would be designed to blend into the natural surroundings to minimize the view of vehicle parking from the highway and adjacent private properties. Identified cultural resources in the Partridge Farm area will be avoided by locating facilities away from the sensitive areas. Impacts to sensitive plants and animals will be avoided by performing surveys for such species and locating facilities away from areas of identified occurrence.

NO PROJECT ALTERNATIVE – (GENERAL PLAN APPROVED DEVELOPMENT)

The “no project” alternative would be the development approved by the general plan. No camping facilities would be constructed. The approved development is reviewed in the General Plan EIR. In summary, the development proposed is 50 day use parking sites relocated from the highway (phase 1) ultimately 100 parking sites (50 sites relocated from the main parking lot), unit administrative office and initial public contact point, and adaptive use of the Partridge House. The potential significant environmental impacts resulting from this alternative would be a reduction in the level of service (congestion and safety hazard) at the existing entrance at Partridge Farm, visual degradation of the natural scenic qualities at Partridge Farm, take of Brewer’s calandrinia, and vandalism or unintentional destruction of cultural resources. The traffic impacts and visual degradation impacts could be mitigated to non-significance through proper siting of facilities and landscaping. The take or loss Brewer’s calandrinia is not possible to assess because unknown variables (prescribed burning, reduction of trails, etc.) affect the net result. Identified cultural resources in the Partridge Farm area will be avoided by locating day use facilities away from the sensitive areas. Some cultural resources have been discovered in the Castle Rock Ridge area; there is a potential impact to these and other unknown resources until they are properly identified and measures are designed to protect them where feasible. Impacts to sensitive plants and animals will be avoided by performing surveys for such species and locating facilities away from areas of identified occurrence.

IRREVERSIBLE ENVIRONMENTAL CHANGES

Any facility development is a long-term commitment of resources; however, impacts can generally be reversed through the removal of facilities, if necessary. Partridge Farm has already been extensively modified by agricultural activities and is recovering naturally. The Department will be monitoring sensitive resources in Castle Rock on an ongoing basis to direct management and development. If there are indications that impacts from visitor use may become excessive, the Department can reduce or remove facilities or take other appropriate actions.
GROWTH INDUCING IMPACT

Growth in the surrounding metropolitan/urban areas is dependent on housing and employment availability. The addition of 20 campsites at Partridge Farm will not remove any constraint to growth, will not require new staff needing new housing, nor will it induce new growth to this area. Population growth in nearby urban areas will generate demand for recreational opportunities and facilities with or without the facility development at Castle Rock State Park.

NON-SIGNIFICANT ENVIRONMENTAL EFFECTS

NOISE

A certain amount of noise will be generated from use and activities associated with the 20 walk-in campsites proposed for the Partridge Farm area. The projected daytime noise levels from campground use would be compatible with surrounding day use activities, highway traffic, and the adjacent gun club, and therefore, are not considered to be a significant noise impact.

Overnight use could affect associated wildlife species located in the vicinity of Partridge Farm, but noise levels are not projected to be significant. The type of camping experience we are offering in walk-in campsites is similar to trail camps, which limits the use of generators, music players, and frequent use of automobiles.

Discussion

The walk-in campsites will provide an outdoor experience for visitors who prefer separation from the automobiles, but for various reasons prefer not to or can not walk greater distances to established primitive sites.

Park rules and regulations for use of overnight facilities will be strictly enforced.

Landscaping for screening and buffers will also reduce noise level disturbance in surrounding areas.

WILDFIRE

Use of camping facilities within wildland areas has the potential to place the public at risk due to wildfires caused by inadvertent ignition from within, as well as from outside the park. Furthermore, the designation of a large portion of the park as Natural Preserve, with its limitations on off-trail travel and mechanized equipment could hamper suppression activities.
Discussion

No campfires or nighttime activity will be allowed outside the designated camping areas, including the Partridge Farm Resource Management Zone. Following State Park standards, these designated areas will be designed to reduce the chance of accidental escape of fire to surrounding vegetation. The existing Wildfire Management Plan will be reviewed and modified, as appropriate, to ensure protection of human lives and property, and will emphasize control of fires along predetermined suppression lines, which divide the park into control compartments. The Wildfire Management Plan will also include evacuation procedures.

BLACK OAK WOODLAND

A Black Oak Woodland, of limited distribution in the Santa Cruz Mountains, occurs directly adjacent to the Partridge Farm area. Adverse impacts from increased visitor use of this area may include soil disturbance by volunteer trails. These disturbed soils may allow for invasive exotic plant establishment.

Discussion

No camping facilities will be located in or near existing Black Oak Woodlands. The Castle Rock General Plan stipulates the development and implementation of an environmental monitoring program for the Partridge Farm and adjacent Resource Management Zones to help manage visitor use and protect resources. This program is intended to: 1) develop a quantitative methodology to establish baseline conditions, 2) set target ranges for resource conditions, 3) monitor environmental indicators, and 4) recommend remediation when impacts exceed target ranges. The General Plan also provides guidelines for: a) the development of a unitwide Vegetation Management Plan to perpetuate natural communities and processes, and control invasive exotic plant species, b) the development of a Watershed Management Plan to control erosion and sedimentation, and c) the development of a Unitwide Trails Plan in order to guide trail location and construction, and provide for appropriate maintenance. The intent of these resource protection mechanisms is to maintain resource impacts to levels less than significant.

WATER AND SEWAGE

Water supply required for the proposed camping would be about 1050 gallons per day (3.5 people/campsite X 20 campsites X 15 gallons/person/day). Day use water requirements would be about 2300 gallons per day (100 parking spaces X 2.3 people/car X 2 cars/parking space (turnover) X 5 gallons/person/day).
Cumulative water requirements for camping and day use would be 3350 gallons per day, or about 2.3 gallons per minute.

**Discussion**

Existing water supply can meet the requirements for both the proposed day use and camping. The existing well and pump at Partridge Farm has been tested to provide 20 gallons per minute for days with no significant draw down on the well water level. There is a 10,000 gallon water storage tank to meet short-term peak requirements in excess of well delivery.

Percolation tests will be conducted to determine the actual location and area requirements for a leach field. Initial restroom facilities may use a vault or tank to hold waste that would be periodically pumped out and treated elsewhere. There is sufficient acreage and percolation capacity to meet leach field requirements.

**REFERENCES / PERSONS CONSULTED**


Sydney Brown, Senior Geologist, California Department of Parks and Recreation

Gary Waldron, Senior Resource Ecologist, California Department of Parks and Recreation
APPENDIX A

Resolution 5-00
adopted by the
CALIFORNIA STATE PARK AND RECREATION COMMISSION
at its regular meeting in San Jose on
March 8, 2000

WHEREAS, the Director of the Department of Parks and Recreation has presented to this Commission for approval the proposed General Plan for Castle Rock State Park; and

WHEREAS, this document reflects long-range development plans to provide for optimum use and enjoyment of the unit as well as the protection of its quality, resources and diversity; and

WHEREAS, it is the Commission’s view that added walk-in camping is desirable at Castle Rock State Park, therefore the Commission directs the staff to re-evaluate the issue of camping in this Plan and, if appropriate, to prepare an amendment to the Plan addressing this subject at a Commission meeting no later than six months from today;

NOW, THEREFORE, BE IT RESOLVED that the California State Park and Recreation Commission hereby approves the Department of Parks and Recreation’s Castle Rock State Park Preliminary General Plan, dated February 1999, subject to such environmental changes as the Director of Parks and Recreation shall determine advisable and necessary to implement the provisions of said plan.
APPENDIX B

Resolution 6-00
adopted by the
CALIFORNIA STATE PARK AND RECREATION COMMISSION
at its regular meeting in San Jose on
March 8, 2000

WHEREAS, the Director of the Department of Parks and Recreation has proposed an 1800-acre Natural Preserve be established in the core ecological area of Castle Rock State Park to provide for the recognition and protection of significant natural resources at the headwaters of the San Lorenzo River; and

WHEREAS, the proposed Natural Preserve contains highly significant natural, geologic and esthetic resources, including rare tafoni sandstone formations and a diversity of plant communities and wildlife habitats; and

WHEREAS, encompassed within the proposed boundaries of the Natural Preserve are plant communities of local or statewide significance, including the black oak woodland, redwood forest, white alder forest and knobcone pine forest, which provides habitat for listed wildlife species, including potential marbled murrelet and peregrine falcon nesting, and spawning steelhead trout; and

NOW, THEREFORE, BE IT RESOLVED pursuant to Section 5019.50 of the Public Resources Code, and after proceedings in accordance with the Administrative Procedures Act, that the California State Park and Recreation Commission hereby classifies approximately 1800 acres in Castle Rock State Park as a Natural Preserve and names the unit San Lorenzo Headwaters Natural Preserve.
GENERAL PLAN INQUIRIES

The California Department of Parks and Recreation Northern Service Center prepared the Castle Rock SP General Plan Amendment. For general information regarding this document or the approved general plan for Castle Rock State Park, please contact the Northern Service Center or Santa Cruz District Office:

California Department of Parks and Recreation
Northern Service Center
1725 23rd Street, Suite 200
Sacramento, California 95816
Phone: (916) 324-0077
Fax: (916) 324-0888

Santa Cruz District Office
Mountain Sector Headquarters
600 Ocean Street
Santa Cruz, California 95060
Phone: (831) 429-2850
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CASTLE ROCK STATE PARK
GENERAL PLAN AMENDMENT
SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

RESPONSE TO COMMENTS

The California Department of Parks and Recreation has circulated the Draft Amendment to the General Plan and Supplemental Environmental Impact Report to federal, state, and local agencies, conservation organizations, and interested members of the public. A Notice of Availability was published in the Santa Cruz Sentinel. Copies of the document were made available at the Saratoga Community Library, Santa Clara Central Library, Santa Cruz Public Library, San Francisco City Library, and the Los Gatos City Library.

Comments were received from the following:

California Regional Water Quality Control Board – San Francisco Bay region
Martin H.R. Donald
Deborah A. Sivas, Earthjustice
Jeff Spencer, Chair, Friends of Castle Rock State Park
Leda Beth Gray, Santa Clara Valley Audubon Society
Bruce Betterncourt, Friends of Castle Rock State Park
Barry Boulton, Sierra Club – Loma Prieta Chapter
Karen Laudon, James Laudon, Sylvia Sippel

The Supplemental Environmental Impact Report will be used by the State Park and Recreation Commission in consideration of the Amendment to the General Plan.

The following numbered responses correspond to the numbered sections identified in the comments.
1. As was stated in the General Plan, the Department is approaching the planning and environmental analysis in a tiered process. The first tier is the non-specific conceptual plan where the general uses, policies, and resource management goals for the unit and the areas within the unit are proposed. The first tier of environmental analysis concerns broad, overview general planning issues. The Department has prepared an amendment to the General Plan for Castle Rock State Park for the approval of the concept of providing limited walk-in camping opportunities at Partridge Farm. If and when the Department chooses to proceed with development of the walk-in campground, further environmental analysis will be done reflecting the greater detail available. The Department would prepare an area development plan, which would delineate the actual road alignments, parking areas, utilities, campsites locations, and other facilities. It is at this project development level of planning that the department will appropriately address the specific recommendations, mitigation, and requirements outlined in these comments in a second tier analysis, including without limitations, any required Storm Water Pollution Plans and Best Management Practices.

2. Our Department acknowledges the need for additional camping facilities to meet the recreation demand in the Santa Cruz Mountains. The type of facility allowed for in the general plan guidelines does not include conventional vehicle camping and is not expected to satisfy that type of demonstrated camping deficiency in the region. Castle Rock State Park currently provides for a primitive camping experience in the existing trail camps. A limited number of walk-in campsites are being considered at Partridge Farm to provide similar opportunities for visitors with improved access to park features, without significantly impacting resources.

3. Proposed walk-in campsites are of limited size and are not considered to be heavy-use facilities. These sites at Partridge Farm are intended to function as trailhead camp facilities, with most of the daytime activity occurring on trails, overlooks, and in specific rock climbing locations. The general plan directs resources management efforts and appropriate visitor use, in order to protect resources and maintain the wilderness experience in the park’s natural areas. Monitoring visitor use and evaluating resource conditions in the vicinity of Partridge Farm will be an on-going process in determining effective actions to eliminate or minimize environmental impacts.

4. Heavily wooded areas cannot necessarily sustain heavier use than open areas. Vegetation sensitivity, soil characteristics, slopes, and design may determine the capability of an area to sustain use. The Department has constructed campgrounds in redwood groves only to learn that the traffic has compacted the soil around the trees, impacted the roots, and led to their decline.

Park staff will have the ability to control the number of campers at any one time, through campsite reservations and park regulations during weekends, holidays, seasonally, and at times of special events. The Department will adjust the number of campsites or its capacity, if necessary, to manage the appropriate level of use while maintaining desirable resource conditions. Twenty campsites are considered the upper limit established by the general plan.

The Castle Rock Ridge, including Goat Rock, is a major attraction. It is apparent that the current hiking distance from the parking lot is well within the range of most visitors. Relocating the parking to Partridge Farm is not going to substantially increase the use. We have observed that the designated trails are generally in good condition. Volunteer trails and the areas immediately around the rock outcroppings have exhibited use impacts. It is possible by
relocating the parking to Partridge Farm and closer to Castle Rock Ridge, the area available for day use may be extended beyond Ridge and relieve some of the current visitor use intensity along the ridge.

5. The Department has not segmented or "piecemealed" the project. As the writer recognizes, the Department did include the camping proposal in the Preliminary General Plan and Draft Environmental Impact Report. The camping proposal was withdrawn at staff recommendation prior to submittal of the General Plan for approval by the State Park and Recreation Commission recognizing that the approval of the entire plan could be jeopardized by the public opposition to the camping proposal without further analysis of the impacts. The Commission approved the General Plan and directed the Department staff to prepare an amendment to reconsider the camping proposal. The Department initially considered the "whole of the action (camping included)." One element (camping) of the project scope was removed, but the General Plan remains a "whole action" without that element. It is possible for the General Plan to be implemented without the camping proposal. The amendment for camping does not necessitate a complete review of the previously approved General Plan. Only those aspects concerning the camping component need be supplemented as not having had appropriate disclosure and discussion.

6. The potential for increase in predators in the proposed campground is acknowledged; however, there is no conclusive evidence that this increase will have a significant impact on listed or other species of special significance at Castle Rock State Park. It should be noted that in the Big Basin study referenced, the campground is located directly in the ancient redwood forest and known marbled murrelet nesting habitat. The proposed walk-in campground will be sited in what appears to be a recovering mixed evergreen forest. In order to mitigate the possible cumulative impacts of potential developments that may come from this project, it is recommended the Department: a) require the use of wildlife-proof garbage containers in the park unit; and b) prepare public information and interpretive programs that discourage visitors from feeding or making food available to wildlife.

7. The Department recognizes the regionally important ecological role that the park plays in protecting the headwaters of the San Lorenzo River and Kings Creek and has developed and begun to implement Guidelines in the Castle Rock State Park General Plan intended to protect and maintain park resources. These include developing an environmental monitoring program in the Partridge Farm area, as well as the development of an Ecosystem Management Plan, Watershed Management Plan, and Prescribed Fire Management Plan, each of which will be a more specific, lower tier plan containing appropriate environmental analysis. One of the major goals of this monitoring and planning effort is to identify and address human impacts in the natural environment of the park. An action item in the watershed management plan will be to routinely inspect the park for illegal trails and to block them off and perform restoration, as necessary.

First-tier mitigation identifies that site-specific searches for sensitive species of plants and animals, as well as wildlife movement, will be conducted in areas proposed for development or for other activities. The proposed project will be modified if necessary to avoid significant adverse impacts to any sensitive populations. The lack of sightings of mountain lions by the unit Ranger that lives at the Partridge Farm suggests that the adjacent ridgeline may not necessarily be a critical node for mountain lion movement through the Santa Cruz Mountains.
Site-specific searches for mountain lion movements in or through the Partridge Farm area will reveal whether development modifications are warranted.

While it is acknowledged that there has been considerable habitat alteration in the region, particularly the San Francisco Bay Area and the Santa Clara Valley, it is also important to note that there are several large state and county parks and other open space areas in the Santa Cruz Mountains that provide important habitat and habitat connectivity. It is not generally accepted that habitat connectivity has been compromised beyond acceptable levels throughout the region. Under the Castle Rock General Plan, approximately 90 percent or more of the land base of the park will experience no facilities development (i.e., no new development-related disturbance to habitat).

While the role of undisturbed habitat at Castle Rock State Park is important, it should be remembered that the park has a natural history of repeated disturbances (i.e., wildfire, landslides and earthquakes). The Department is committed to replicating the process of recurrent fire, where feasible. While prescribed fire may alter the habitat structure and vegetative composition temporarily, community dynamics are such that, absent a catastrophic event, communities typically return to climax or fire-climax state. In the absence of recurrent fire, the native vegetation produces increased loads of dead fuels that, if not reduced, could lead to a catastrophic wildfire. Some areas of the park may not be suitable for treatment with prescribed fire, and alternative treatments will be pursued.

8. The General Plan Amendment and Supplement EIR are the first tier EIR; a site-specific plan is necessary to address site-specific issues (see Response #1).

The Santa Cruz District is preparing an Ecosystem Management Plan that will address the environmental concerns expressed by the writers. Included in this plan is the monitoring of key indicators.

Black Oak Woodland, although locally rare, is widely distributed throughout the mountainous regions of the state, except for the deserts. It is typically associated with grasslands and often includes other oak species, but does not support an understory of coastal scrub.

Since there is already an established trail system adjacent to Partridge Farm, increased visitation will not create additional areas of soil compaction (see Response #7).

9. The writer suggests that the Supplemental EIR is flawed since the alternative of constructing a campground in another location in the Santa Cruz Mountains was not considered. "[P]roject alternatives typically fall into two categories: on-site alternatives, which generally consist of different uses of the land under consideration; and off-site alternatives, which usually involve similar uses at different locations. (Citizen of Goleta Valley v. Board of Supervisors 52 Cal.3d 553, 566 [276 Cal.Rptr. 410]). The "no project" alternative considered was the development approved in the General Plan. A larger campground or different form of campground (typical car spur or RV) were not considered since the impacts would be greater. Given the topography and limited access at Castle Rock State Park, no other locations in the unit were considered feasible. Locations outside the unit could not be "feasibly accomplished in a successful manner considering the economic, environmental, social, and technological factors involved." (Id. [276 Cal.Rptr. 410].) The Department cannot budget money to develop capital improvements on lands the state does not own. There is no existing or scheduled
regional recreation plan for the Santa Cruz Mountains. "[A]n EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative." (Foundation for San Francisco's Architectural Heritage v. City and County of San Francisco (1st Dist. 1980) 106 Cal.App.3d 893;910 [165Cal.Rptr. 401]. ) Therefore, no locations outside of the unit were considered as alternatives.

10. The designation of a state wilderness at Castle Rock State Park was considered in the General Plan. The staff recommended against the designation and the State Park and Recreation Commission approved the General Plan with that recommendation. The proposed amendment is not reconsidering that issue.

11. The discussion of carrying capacity and allowable use intensity on page 70 of the general plan is adequate for this goal-oriented general plan and first-tier environmental review. The general plan defines categories of allowable use intensity that correlate the significance, sensitivities, and constraints of the unit's resources with an allowable degree of disturbance due to human impacts. The evaluations of resource constraints were partly derived from earlier analysis and mapping of soils, slope, vegetation, hydrology, wildlife habitats, seismic potential, and erosion potential. The impact on resources, resource management goals, and visitor perceptions and attitudes are interdependent components that were used to make determinations on carrying capacity or use intensity.

It is the Department's intention to regulate visitor activities and determine use limits, as necessary, based on quantitative information and analysis when detailed management and development plans are prepared.

The general plan states that the theoretical maximum daily use for the proposed project (assuming 428 day use parking sites, 2 turnovers per parking site and 2.3 visitors per vehicle, 40 people per bus) is 2009 per day or 9 less than the existing conditions. With the addition of 20 walk-in campsites, this theoretical maximum would be 2078 visitors per day.

12. See Response #7, above. The Department is aware of studies on meso-predator release and shares concerns in this regard. However, there is presently no site-specific data to indicate that the Partridge Farm area actually provides preferred or critical habitat connectivity for mountain lions or other large carnivores. That is why the first tier mitigation proposes to determine the movements of these animals through the area prior to any camping facilities development. There are other undeveloped areas along the Castle Rock Ridge that may be providing this function for wide-ranging predators.

13. See Response #10.

14. See Response #1. As was stated in the General Plan, the Department is approaching the planning and environmental analysis in a tiered process. The first tier if the conceptual, broad-overview plan where general uses, policies, and resource management for the unit and areas within the unit are prescribed. The first tier of environmental analysis concerns broad view planning. As the Department proceeds with specific project planning proposals or resource management plans, second or third tier environmental analysis will be performed. If and when an area development plan is proposed for Partridge Farm, the second tier of
environmental analysis will be conducted, which will include more detailed and specific data, studies, and analysis appropriate to that level of project development or planning.

15. See Response #6. It is expected that the maintenance of existing historic fruit trees will not increase impacts to native fauna beyond levels experienced prior to the initiation of the general planning project (the existing environment). There is no provision in the General Plan to expand the number of fruit trees in the park. No facilities or programs related to this Castle Rock General Plan Amendment will affect fruit trees or their potential impacts.

16. The significance of impacts from human-induced predators to the species or groups you refer are inconclusive; however, recommendations presented in Response #6 are expected to maintain potential impacts from predatory pressures related to the provision of supplemental food sources by park visitors at levels that are insignificant.

17. As you indicated, gathering of wood is prohibited in this state park, subject to a citation and fine. Additional signs and interpretive panels will be posted near the parking lots and campground facilities to inform campers about the sensitivities of the wildlife habitat and about park rules and regulations. Campfire restrictions and firewood sales are additional methods used to curtail wood gathering. The unit ranger and/or park staff would be available on-site to ensure proper enforcement and provide necessary information to the public.

18. See Responses #7 and #12.

19. The general public prefers flush toilets. Our initial evaluation indicates that there is sufficient water supply and available land for a leach field to meet the requirements for a conventional sewage system. However, should there be a reduction in available water supply, or insufficient percolation capacity, or facility layout dictate against conventional sewage disposal, composting toilets will be considered.

20. Walk-in campsites are similar to trail camps, presenting less impact and changes to the environment than typical campground development. Campsites are connected to the parking lot via a trail, with native vegetation restored between campsites for vegetative screening and buffers. Wildlife-proof trash containers have proven effective in other parks and will be used near parking lots and restroom facilities. Interpretive and informational signing will be provided to inform visitors about the dangers of feeding animals and leaving food accessible to wildlife. Park rules and regulations will be strictly enforced.

21. Monitoring, by itself, has no mitigation value. The Department is a long-term steward of the land. Throughout its tenure, the Department will be undertaking resource management programs (mitigation) to protect, enhance, and restore resources. Baseline studies and regular periodic monitoring will provide a database to evaluate the impacts of use and the effectiveness of any mitigation efforts. Ongoing, active management of the land, based on feedback from monitoring and evaluation activities, will, if shown to be necessary, result in appropriate modification to mitigate any problems.

22. The "Wildlife" section was incorrectly titled. It should have been identified as "Wildlife and Vegetation." Vegetation impacts were discussed in that section.
23. The cumulative impacts considered in the section are the cumulative impacts resulting from the combination of different facilities and uses (day use, camping, visitor contact, etc.) at Partridge Farm. The primary cultural resources at Partridge Farm are the house and nearby archaeological site. There is possibly some rock art near the rock outcroppings on Castle Rock Ridge. The impact of adding camping at Partridge Farm will not change the use patterns or substantially change the use levels at the cultural sites. Therefore, our determination was that there would not be a significant cumulative impact to the cultural resources.

24. Trip generation rates for a campsite are 4.00 daily, 0.16 AM peak, and 0.32 PM peak (Trip Generation, Fifth Edition, Institute of Traffic Engineers). This is in accordance with observations by State Park System staff. These figures indicate that 88% of the campsite generated traffic occurs outside of peak traffic periods.

No mitigation is proposed recognizing that this amendment is for conceptual approval. A design or alignment for the entrance road has not been selected and, therefore, the optimal mitigation, if necessary, cannot be determined. Department of Transportation has requested that this Department contact them when we are preparing those plans that will require access/egress to the state highway. It also possible that the Department could acquire adjacent properties if they were offered for sale which could provide safer highway access.

25. See Response #1. The public will have the opportunity to review future environmental documents during subsequent tiers of project development and management planning to determine if best management practices are proposed as mitigation. It should also be recognized that if best management practices could be prescribed now, they may be outdated or found inadequate by the time the specific projects are planned, analyzed, and decisions made to proceed with development.

26. During the preparation of the General Plan, an independent geologist and a Park staff geologist were requested to field review the geologic features, particularly the tafoni, and make any recommendations regarding their protection. Their opinion was that other resources (i.e. soils, vegetation) were showing far greater impact from visitor use than the tafoni.

The writer refers to the vastly increased traffic (visitation). This increase is not supported by fact. There will be no increase in day use parking; although, it will be relocated closer to Castle Rock Ridge area. The proximity of the existing parking to the Castle Rock Ridge area has not precluded access by any substantial number of visitors. The only potential increase would be from the proposed campground.

27. This conclusion for camping is not predetermined. The General Plan provides for an upper limit of 20 campsites; with a lower limit of 0. Future consideration and study of camping at the Partridge Farm area of the park during the project development process will examine and analyze the potential impacts, which analyses will be available for public review.

28. The "no project" alternative considered for the Supplement EIR is the development currently authorized in the General Plan as approved by the State Park and Recreation Commission; the day use parking, visitor contact station, adaptive use of the Partridge house, native landscape restoration, etc.
29. Contrary to the assumption made in the comment, the department does have a history of reducing or removing facilities when determined to result in inappropriate impacts on the natural and cultural resources. The Department has or is removing roads and trails from several units due to erosion impacts (Sinkyon Wilderness State Park, Humboldt Redwoods State Park, Annadel State Park, Anza-Borrego Desert State Park). The approved General Plan for Pfeiffer Big Sur State Park (1998) calls for the removal of the one of the most popular campgrounds due to the impacts to the redwood grove. Beach camping at Prairie Creek State Park and Humboldt Lagoons State Park is being removed. The approved General Plan for McArthur-Burney Memorial State Park calls for the removal of camping along the bluff above Burney Creek. Low water vehicle fords were removed from the Little River in Van Damme State Park to remove barriers to fish migration. There is an inherent conflict, in some cases, between the Department’s dual mission of providing recreational opportunities and preserving resources. There is a reluctance to remove visitor facilities because of the capital investment and popularity with the visiting public, but the Department will remove facilities where there are unacceptable environmental impacts.

30. The Castle Rock State Park General Plan Amendment project allows for the consideration of campground development in an area that has severe disturbance from past uses, and is now showing evidence of succeeding towards a mixed evergreen forest. Rehabilitation of native plants to supplement those present in the area has been recommended in the Park’s recently approved General Plan. No facilities, beyond existing trails, are intended to occur in the adjacent black oak woodland. A resource monitoring program has been initiated in the black oak woodland to detect and reduce increases in human impacts to below significant levels. Also, please see Response #8.

31. The Department withdrew the camping component from the Preliminary General Plan presented to the State Park and Recreation Commission in March in response to public comments, because it was determined that additional analysis was needed to adequately address the potential impacts of the proposed project. As directed by the State Park and Recreation Commission on 3/08/00, the Department reviewed the camping component, found it to be an appropriate addition to the General Plan, and this amendment and supplemental EIR was prepared to add a camping component to the Castle Rock State Park General Plan. The current analysis is adequate for this goal-oriented general plan and first-tier environmental review.

32. See Response #6.

33. While Castle Rock State Park includes Critical Habitat for marbled murrelets, there is no evidence available to confirm whether or not this species actually nests in the park. Wildlife Management Guidelines in the approved Castle Rock State Park General Plan calls inventorying, and protecting sensitive species and their habitat in the park. It is recommended that the Department take actions to control any potential increase in predator populations related to human use resulting from products generated by this document (see Response # 6, above).

34. Contrary to the comment, cumulative impacts under CEQA refers to impacts resulting from two or more individual projects. An individual project may not have a significant impact, but in combination with other projects in the area, the additive effect may be significant. The writer has defined cumulative impacts as a synergistic effect, that is two or more effects, rather than
impact from two or more projects. As noted previously, current data at the level appropriate for this amendment is general and speculative. At subsequent tiers of project development, more detailed data and analysis will enable more definitive cumulative impact analysis.

In regards to cumulative impacts on marbled murrelets, see Responses #6, #33, and # 38.

35. See Responses #6 and #33.

36. See Responses #6, #7, #12, and #33.

37. See Responses #6, #7, #12, and #33. It is not generally accepted that there is high probability of marbled murrelets nesting in the remaining old growth stands in Castle Rock. Until direct surveys for this species are performed, it is speculative to suggest that the species nests there. The observation of marbled murrelets in Castle Rock that you refer to was a fly-over outside of the nesting season in the late 1970's; this event does not indicate that this species nests in the park. There is evidence in the scientific literature that suggests marbled murrelets in the Central Coast region primarily occupy old-growth coastal conifer habitat at lower elevations than those at which the residual old-growth stand is found at Castle Rock State Park. For reference, see Chapter 20 of:


38. See Response #9. In the absence of any current planning effort to identify regional locations to meet recreational demands, the Department did not consider an alternative location outside of the park unit to be a reasonable alternative.

39. The General Plan is a long-range planning document. It is not the function of the General Plan to determine future staffing requirements. The District is continually evaluating staffing requirements for the units under its jurisdiction.
Mr. Robert Ueltzen  
Department of Parks and Recreation  
1725 23rd Street, Suite 200  
Sacramento, CA 95816  

Re: Castle Rock State Park General Plan Amendment and Supplement Environmental Impact Report (EIR) for Walk-in Campsites at Partridge Farm, Preliminary  
SCH# 1997121108

Date: July 10, 2000  
File No. 2188.05 (JRW)

Dear Mr. Ueltzen:

We have received the above referenced amendment and supplement to the Environmental Impact Report (EIR) and offer the following comments with which the Regional Board is concerned.

The purpose of this project is to establish approximately 20 walk-in campsites to be developed for a tent camping experience. In addition, approximately 30 parking spaces for overnight visitors will be created. Restroom facilities will be in small scale and blended in the existing terrain. Pathways will connect campsites to park trails to guide users through the least sensitive areas of the surroundings.

As proposed, without appropriate control measures, the project may have significant adverse impacts to water quality. These impacts could result from the discharge of polluted runoff to waters of the State, as well as from soil erosion and decreased permeable surface area on the site. In addition, erosion may result from construction without proper control practices, especially on the site's steeper slopes.

In order to establish that the project will not have significant adverse effects on water quality, the final Environmental Impact Report (EIR) should include:

- A Storm Water Pollution Prevention Plan (SWPPP) should be developed and implemented. A SWPPP is required by the General Permit. The SWPPP should be consistent with the terms of the General Permit, the Manual of Standards for Erosion & Sedimentation Control Measures by the Association of Bay Area Governments (ABAG), policies and recommendations of the local urban runoff program (city and/or county), and the Staff Recommendations of the RWQCB. Preparation of a SWPPP
should be a condition of development. Implementation of the SWPPP should be enforced during the construction period via appropriate options such as citations, stop work orders, or withholding occupancy permits. The Regional Board has prepared “Directions for preparing a SWPPP,” which is available from the Board at (510) 622-2304;

• Specific measures to reduce and treat runoff from developed areas of the project by means of vegetative buffers, grassy swales, or other means, to be effective for the life of the project;

• A plan for the employment of Best Management Practices (BMPs) to control sediment and erosion, both during the building process and in the long term;

• In the event that some impact is unavoidable in achieving the goals of the project, the final EIR should show that the negative impact resulting from the development is the smallest possible. The application should describe specific restoration that will be undertaken to offset this impact, preferably on-site.

The Regional Board is unable to offer more specific comment at this time. However, I have attached a copy of our General Comments, which discuss the Regional Board’s area of responsibility, and which should help guide in the preparation of further CEQA documentation. Regional Board staff also encourage the lead agency to obtain a copy of “Start at the Source,” a design guidance manual for stormwater quality protection from the Bay Area Stormwater Management Agencies Association. This manual may be obtained at most city planning offices, or by calling 1-800-773-7247.

If you have any questions, please call Emily Guglielmo at (510) 622-2344 or e-mail at stu26@rb2.swrcb.ca.gov.

Sincerely,

John West
Environmental Specialist
Watershed Division

cc: w/o Attach.: State Clearinghouse
Enclosure
General Comments

The San Francisco Regional Water Quality Control Board (Regional Board or RWQCB) is charged with the protection of the Waters of the State of California in the San Francisco Bay Region, including wetlands and stormwater quality. The Regional Board is responsible for administering the regulations established by the Federal Clean Water Act. Additionally, the California Water Code establishes broad state authority for regulation of water quality. The San Francisco Bay Basin Water Quality Control Plan (Basin Plan) explains the Regional Board's strategy for regulating water quality. The Basin Plan also describes the range of responses available to the Regional Board with regard to actions and proposed actions that degrade or potentially degrade the beneficial uses of the Waters of the State of California.

NPDES

Water quality degradation is regulated by the Federal National Pollutant Discharge Elimination System (NPDES) Program, established by the Clean Water Act, which controls and reduces pollutants to water bodies from point and nonpoint discharges. In California, the program is administered by the California Regional Water Quality Control Boards. The Regional Board issues NPDES permits for discharges to water bodies in the San Francisco Bay Area, including Municipal (area- or county-wide) Stormwater Discharge Permits.

Projects disturbing more than five acres of land during construction must be covered under the State NPDES General Permit for Discharges of Storm Water Associated with Construction Activity (General Permit). This can be accomplished by filing a Notice of Intent with the State Water Resources Control Board. An NOI and the General Permit can be obtained from the Board at (510) 622-2300. The project sponsor must propose and implement control measures that are consistent with the General Permit and with the recommendations and policies of the local agency and the RWQCB.

Projects that include facilities with discharges of Storm Water Associated with Industrial Activity must be covered under the State NPDES General Permit for Discharges of Storm Water Associated with Industrial Activity. This may be accomplished by filing a Notice of Intent. The project sponsor must propose control measures that are consistent with this, and with recommendations and policies of the local agency and the RWQCB. In a few cases, the project sponsor may apply for (or the RWQCB may require) issuance of an individual (industry- or facility-specific) permit.

The RWQCB's Urban Runoff Management Program requires Bay Area municipalities to develop and implement storm water management plans (SWMPs). The SWMPs must include a program for implementing new development and construction site storm water quality controls. The objective of this component is to ensure that appropriate measures to control pollutants from new development are considered during the planning phase, before construction begins; implemented during the construction phase; and maintained after construction, throughout the life of the project.
created as mitigation for the loss of existing jurisdictional wetlands or Waters of the United States cannot be used as storm water treatment controls.

In general, if a proposed project impacts wetlands or Waters of the State and the project applicant is unable to demonstrate that the project was unable to avoid adverse impacts to wetlands or Waters of the State, water quality certification will be denied. 401 Certification may also be denied based on significant adverse impacts to wetlands or other Waters of the State.

Storm Water Quality Control

Storm water is the major source of fresh water to creeks and waterways. Storm water quality is affected by a variety of land uses and the pollutants generated by these activities. Development and construction activities cause both site-specific and cumulative water quality impacts. Water quality degradation may occur during construction due to discharges of sediment, chemicals, and wastes to nearby storm drains or creeks. Water quality degradation may occur after construction is complete, due to discharges of petroleum hydrocarbons, oil, grease, and metals from vehicles, pesticides and fertilizers from landscaping, and bacteria from pets and people. Runoff may be concentrated and storm water flow increased by newly developed impervious surfaces, which will mobilize and transport pollutants deposited on these surfaces to storm drains and creeks. Changes in runoff quantity or velocity may cause erosion or siltation in streams. Cumulatively, these discharges will increase pollutant loads in creeks and wetlands within the local watershed, and ultimately in San Francisco Bay.

To assist municipalities in the Bay Area with complying with an area-wide NPDES Municipal Storm Water Permit or to develop a Baseline Urban Runoff Program (if they are not yet a co-permittee with a Municipal Storm Water Permit), the Regional Board distributed the Staff Recommendations for New and Redevelopment Control for Storm Water Programs (Recommendations) in April 1994. The Recommendations describe the Regional Board's expectations of municipalities in protecting storm water quality from impacts due to new and redevelopment projects, including establishing policies and requirements to apply to development areas and projects; initiating appropriate planning, review, approval, and inspection procedures; and using best management practices (BMPs) during construction and post-construction.

Project impacts should be minimized by developing and implementing a Storm Water Pollution Prevention Plan (SWPPP). A SWPPP is required by the State Construction Storm Water General Permit (General Permit). The SWPPP should be consistent with the terms of the General Permit, the Manual of Standards for Erosion & Sedimentation Control Measures by the Association of Bay Area Governments (ABAG), policies and recommendations of the local urban runoff program (city and/or county), and the Recommendations of the RWQCB. SWPPPs should also be required for projects that may have impacts, but which are not required to obtain an NPDES permit. Preparation of a SWPPP should be a condition of development. Implementation of the SWPPP should be enforced during the construction period via appropriate options such as citations, stop work orders, or withholding occupancy permits.

Impacts identified should be avoided and minimized by developing and implementing the types of controls listed below. Explanations of the controls are available in the Regional Board's construction Field Manual, available from Friends of the San Francisco Estuary at (510) 286-0924, in BASMAA's Start at the Source, and in the California Storm Water Best Management Practice Handbooks.

California Environmental Protection Agency
Impacts and Mitigation Measures

Wetlands

Wetlands enhance water quality through such natural functions as flood and erosion control, stream bank stabilization, and filtration and purification of contaminants. Wetlands also provide critical habitats for hundreds of species of fish, birds, and other wildlife, offer open space, and provide many recreational opportunities. Water quality impacts occur in wetlands from construction of structures in waterways, dredging, filling, and altering drainage to wetlands.

The Regional Board must certify that any permit issued by the U.S. Army Corps of Engineers pursuant to Section 404 of the Clean Water Act (covering, dredging, or filling of Waters of the United States, including wetlands) complies with state water quality standards, or waive such certification. Section 401 Water Quality Certification is necessary for all 404 Nationwide permits, reporting and non-reporting, as well as individual permits.

All projects must be evaluated for the presence of jurisdictional wetlands and other Waters of the State. Destruction of or impact to these waters should be avoided. If the proposed project impacts wetlands or other Waters of the State and the project applicant is unable to demonstrate that the project was unable to avoid those adverse impacts, water quality certification will most likely be denied. 401 Certification may also be denied based on significant adverse impacts to wetlands or other Waters of the State. In considering proposals to fill wetlands, the Regional Board has adopted the California Wetlands Conservation Policy (Executive Order W-59-93, signed August 23, 1993). The goals of the Policy include ensuring “no overall net loss and achieving a long-term net gain in the quantity, quality, and permanence of wetlands acreage and values.” Under this Policy, the Regional Board also considers the potential post-construction impacts to wetlands and Waters of the State and evaluates the measures proposed to mitigate those impacts (see Storm Water Quality Control, below).

The Regional Board has adopted U.S. EPA’s Clean Water Act Section 404(b)(1) “Guidelines for Specification of Disposal Sites for Dredge or Fill Material,” dated December 24, 1980, in the Board’s Basin Plan for determining the circumstances under which fill may be permitted.

Section 404(b)(1) Guidelines prohibit all discharges of fill material into regulated waters of the United States, unless a discharge, as proposed, constitutes the least environmentally damaging practicable alternative that will achieve the basic project purpose. For non-water dependent projects, the guidelines assume that there are less damaging alternatives, and the applicant must rebut that assumption.

The Section 404(b)(1) Guidelines sequence the order in which proposals should be approached. First, impacts to wetlands or Waters of the State must be avoided to the maximum extent practicable. Second, the remaining impacts must be minimized. Finally, the remaining unavoidable adverse impacts to wetlands or Waters of the State must be mitigated. Mitigation will be preferably in-kind and on-site, with no net destruction of habitat value. A proportionately greater amount of mitigation is required for projects that are out-of-kind and/or off-site. Mitigation will preferably be completed prior to, or at least simultaneous to, the filling or other loss of existing wetlands.

Successful mitigation projects are complex tasks and difficult to achieve. This issue will be strongly considered during agency review of any proposed wetland fill. Wetland features or ponds

California Environmental Protection Agency

Recycled Paper
Site Planning

The project should minimize impacts from project development by incorporating appropriate site planning concepts. This should be accomplished by designing and proposing site planning options as early in the project planning phases as possible. Appropriate site planning concepts to include, but are not limited to the following:

- Phase construction to limit areas and periods of impact.
- Minimize directly connected impervious areas.
- Preserve natural topography, existing drainage courses and existing vegetation.
- Locate construction and structures as far as possible from streams, wetlands, drainage areas, etc.
- Provide undeveloped, vegetated buffer zones between development and streams, wetlands, drainage areas, etc.
- Reduce paved area through cluster development, narrower streets, use of porous pavement and/or retaining natural surfaces.
- Minimize the use of gutters and curbs which concentrate and direct runoff to impermeable surfaces.
- Use existing vegetation and create new vegetated areas to promote infiltration.
- Design and lay out communities to reduce reliance on cars.
- Include green areas for people to walk their pets, thereby reducing build-up of bacteria, worms, viruses, nutrients, etc. in impermeable areas, or institute ordinances requiring owners to collect pets' excrement.
- Incorporate low-maintenance landscaping.
- Design and lay out streets and storm drain systems to facilitate easy maintenance and cleaning.
- Consider the need for runoff collection and treatment systems.
- Label storm drains to discourage dumping of pollutants into them

Erosion

The project should minimize erosion and control sediment during and after construction. This should be done by developing and implementing an erosion control plan, or equivalent plan. This plan should be included in the SWPPP. The plan should specify all control measures that will be used or which are anticipated to be used, including, but not limited to, the following:

- Limit access routes and stabilize access points.
- Stabilize denuded areas as soon as possible with seeding, mulching, or other effective methods.
- Protect adjacent properties with vegetative buffer strips, sediment barriers, or other effective methods.
- Delineate clearing limits, easements, setbacks, sensitive areas, vegetation and drainage courses by marking them in the field.
- Stabilize and prevent erosion from temporary conveyance channels and outlets.
- Use sediment controls and filtration to remove sediment from water generated by dewatering or collected on-site during construction. For large sites, stormwater settling basins will often be necessary.
Chemical and Waste Management

The project should minimize impacts from chemicals and wastes used or generated during construction. This should be done by developing and implementing a plan or set of control measures. The plan or control measures should be included in the SWPPP. The plan should specify all control measures that will be used or which are anticipated to be used, including, but not limited to, the following:

- Designate specific areas of the site, away from streams or storm drain inlets, for storage, preparation, and disposal of building materials, chemical products, and wastes.
- Store stockpiled materials and wastes under a roof or plastic sheeting.
- Store containers of paint, chemicals, solvents, and other hazardous materials stored in containers under cover during rainy periods.
- Berm around storage areas to prevent contact with runoff.
- Cover open Dumpsters securely with plastic sheeting, a tarp, or other cover during rainy periods.
- Designate specific areas of the site, away from streams or storm drain inlets, for auto and equipment parking and for routine vehicle and equipment maintenance.
- Routinely maintain all vehicles and heavy equipment to avoid leaks.
- Perform major maintenance, repair, and vehicle and equipment washing off-site, or in designated and controlled areas on-site.
- Collect used motor oil, radiator coolant or other fluids with drip pans or drop cloths.
- Store and label spent fluids carefully prior to recycling or proper disposal.
- Sweep up spilled dry materials (cement, mortar, fertilizers, etc.) immediately—do not use water to wash them away.
- Clean up liquid spills on paved or impermeable surfaces using “dry” cleanup methods (e.g., absorbent materials, cat litter, rags) and dispose of cleanup materials properly.
- Clean up spills on dirt areas by digging up and properly disposing of the soil.
- Keep paint removal wastes, fresh concrete, cement mortars, cleared vegetation, and demolition wastes out of gutters, streams, and storm drains by using proper containment and disposal.

Post-Construction

The project should minimize impacts from pollutants that may be generated by the project following construction, when the project is complete and occupied or in operation. These pollutants may include: sediment, bacteria, metals, solvents, oil, grease, and pesticides, all of which are typically generated during the life of a residential, commercial, or industrial project after construction has ceased. This should be done by developing and implementing a plan and set of control measures. The plan or control measures should be included in the SWPPP.

The plan should specify all control measures that will be used or which are anticipated to be used, including, but not limited to, the source controls and treatment controls listed in the Recommendations. Appropriate control measures are discussed in the Recommendations, in:

- Table 2: Summary of residential post-construction BMP selection
- Table 3: Summary of industrial post-construction BMP selection
- Table 4: Summary of commercial post-construction BMP selection

California Environmental Protection Agency

Revised Paper
Additional sources of information that should be consulted for BMP selection include the California Storm Water Best Management Practice Handbooks; the Bay Area Preamble to the California Storm Water Best Management Practice Handbooks and New Development Recommendations; the BASMAA New Development Subcommittee meetings, minutes, and distributed information; and Regional Board staff. Regional Board staff also have fact sheets and other information available for a variety of structural stormwater treatment controls, such as grassy swales, porous pavement and extended detention ponds.
The camping would be less family oriented and more youth oriented (noise and drinking). That's my prejudice (and experience).

Heavily wooded areas can take heavier use than open areas. Trails in wooded areas need very little maintenance, whereas in open areas erosion is a severe problem. The Partridge Farm would suffer overuse.

Perhaps the major problem is Goat Rock. Goat Rock is very much overused now. It's a devastated area. At present people have to hike about a mile to get there (over a bad trail) and it's still too heavily used. With 20 campsites and 100 cars parked one-quarter mile away it will be like Disneyland. Unsupervised children, of all ages, will be clambering over the rock and falling to their death (imagine the lawsuits).

Sincerely,

Martin H. R. Donald
Comments on General Plan Amendment (Castle Rock State Park)

Please.

Do not have 20 walk-in campsites at Partridge Farm.
Do not have parking for 100 cars at Partridge Farm.

My perspective.

I came to the Bay Area, from Europe, 24 years ago and was immediately captivated by the Santa Cruz Mountains. With fresh eyes I saw the treasure that was there, a semi-wilderness just over the hill from the over-crowded Bay Area. I do not wish to see this magnificent place degraded.

For the past 22 years I have been active in building and maintaining hiking trails in the Santa Cruz Mountains. I’ve done a little work at Butano Redwoods State Park, a little at Big Basin Redwoods State Park, a little for the Midpeninsula Open State District but most of all at Castle Rock State Park. For the past few years I’ve been leading the Castle Rock volunteer trail maintenance group of the Santa Cruz Mountains Trail Association.

The need for more camping in the Santa Cruz Mountains.

It would be nice to have very much more camping available in the Santa Cruz Mountains. It would be nice to just pick up and go at the weekend and get a “first come first serve” site there rather than travel for hours across the Central Valley to the Sierra Foothills. There’s not space though. Big Basin is overcrowded, Henry Cowell likewise. Butano and Portola are just right but should not have any more camping.

It would be nice too to take money out of my limited bank account and spend it at will. It would be nice for a while but I would soon be bankrupt. Likewise, certain types of overuse would destroy the Santa Cruz Mountains.

The need to preserve what we have.

Overuse quickly degrades the environment. Camping is extremely heavy use of a very small area (the campsite) and very heavy use of all the immediately surrounding area. The impact of picnicking is similar to that of camping but is less than one tenth as bad. Day hiking spreads the impact, some trails close to the trailhead get overused but generally the damage is minimal. Many trails still provide a near-wilderness experience.

Castle Rock State Park

Castle Rock State Park is unique (as are all the others, each in their own way). Because Big Basin, Henry Cowell, Butano and Portola have camping it does not follow that Castle Rock has to have camping too.

Castle Rock is too easy to get to. The camping would always be full, even mid-week.
August 7, 2000

VIA U.S. MAIL AND
FACSIMILE: (916) 324-0888

California State Parks
Northern Service Center
1725 23rd Street, Suite 200
Sacramento, California 95816

Comments On Proposed Castle Rock State Park
General Plan Amendment and Supplemental EIR
for Walk-in Campsites at Partridge Farm

To Whom It May Concern:

On behalf of the Loma Prieta Chapter of the Sierra Club and Friends of Castle Rock State Park ("Commenters"), we submit these comments on the so-called "Supplemental Environmental Impact Report" ("SEIR") for the proposed Castle Rock State Park General Plan (the "Plan") amendment to create 20 walk-in campsites at Partridge Farm. As the Department of Parks and Recreation ("Department") is aware, Commenters and their members have been extensively involved in the Plan amendment process for Castle Rock State Park (the "Park") and have previously expressed serious concern about the adverse environmental impacts of further development in the Partridge Farm area, particularly impacts on the area’s biological diversity, ecological integrity and wilderness opportunities. This submittal is intended to supplement and reiterate Commenters’ previous comments on this issue.¹

Below we discuss some of the many defects in the SEIR that render that document vulnerable to legal challenge. Following closely on the heels of the Department’s March 8, 2000 Plan amendment to provide parking and new visitor facilities at Partridge Farm, the campsite

¹ As part of the overall planning process for this Park, over the last three years dozens of individuals and organizations have raised concerns about and objections to development in the Partridge Farm area. The Department has not adequately responded to many of these concerns, even as it has pressed forward with proposed development plans. Rather than repeat here all of the earlier comments on this issue, we attach a list of the prior written comments – most of which are equally relevant to the campsite proposal – and request that the Department revisit and adequately respond to these comments in connection with this latest Plan amendment proposal.
proposal will increase the potentially significant degradation of Park resources and the region’s ecological integrity that will surely result from that earlier decision. While the initial EIR largely ignored these important ecological impacts, the SEIR provides the Department with another opportunity to evaluate the true environmental costs of opening the Partridge Farm area to increased human traffic. Before the Department takes any further action on the campsite proposal, therefore, we strongly urge the agency to step back and undertake a genuine, scientifically defensible ecological assessment of the cumulative impacts of managing this important habitat area for higher density human use. Without such an analysis, neither the public nor the Commission can meaningfully understand the potential impacts of the Department’s proposed actions.

A. The Department Has Unlawfully Segmented the Environmental Review of Plan Amendments

As an initial matter, we note that the Department has improperly segmented the campsite proposal from the related Plan amendments approved only a few short months ago, in an apparent attempt to avoid the thorough cumulative impacts analysis required by the California Environmental Quality Act (“CEQA”). In the February 1999 Preliminary General Plan, the Department proposed to established 20 walk-in campsites in the Partridge Farm area (Preliminary General Plan at 93), but subsequently deleted all reference to the campground shortly before approving the March 2000 Plan amendments, in response to widespread public concern about the impacts of the campsites. Preliminary General Plan Addendum #2 at 5-9. Then, a mere three months after approving these first Plan amendments, the Department put the very same campground proposal back on the table with the issuance of an extremely cursory, uninformative document styled as a supplement EIR. As discussed further below, the text of the SEIR adds nothing meaningful to the analysis of environmental impacts in the original EIR and is so perfunctory that it hardly qualifies as an “environmental impact report” as that document is defined under CEQA.

Such project segmentation is expressly prohibited by CEQA. Under the statute, the “project” to be considered in the EIR is “the whole of an action” that may result in either a direct or reasonably foreseeable indirect environmental impact. 14 C.C.R. § 15378(a). The courts have repeatedly held that an agency cannot split a project into two or more segments for purposes of complying with CEQA. See, e.g., Rural Land Owners Ass’n v. Lodi City Council, 143 Cal.App.3d 1013, 1024-25 (1983). Consideration of the whole project or action in a single document is necessary to ensure that “environmental considerations do not become submerged by chopping a large project into many little ones, each with a potential impact on the environment, which cumulatively may have disastrous consequences.” Burbank-Glendale-Pasadena Airport Authority v. Hensler, 233 Cal.App.3d 577, 592 (1991) (citing Bozung v. Local Agency Formation Commission, 13 Cal.3d 263, 283-84 (1975)).
Where, as here, future phases of a project or action are reasonably foreseeable and will likely change the scope or nature of its environmental impacts, the agency cannot “piecemeal” the environmental analysis into separate EIRs. Laurel Heights Improvement Ass’n v. Regents of the University of California, 47 Cal.3d 376, 395-96 (1988); City of Santee v. County of San Diego, 214 Cal.App.3d 1438, 1451-55 (1989). In this case, the campground was more than reasonably foreseeable when the March 2000 Plan amendment to expand access to the Partridge Farm area was adopted; indeed, at the time it adopted its initial decision, the Department obviously intended to amend the Plan again in the near future to reinsert the deleted campsite proposal. Accordingly, the Department should have fully considered the cumulative impacts of the parking lot, visitor center and campsites in a single CEQA document before taking any action on the amendments. At this point, the only appropriate remedy for the Department’s legal error is to withdraw the March 8, 2000 decision and recirculate an EIR that properly considers all of the proposed Plan amendments in a single EIR. In doing so, the agency should address the legal deficiencies in the existing documents that we describe with more particularity below.

B. The EIR and SEIR Both Fail to Adequately Consider the Direct, Indirect and Cumulative Ecological Impacts of the Proposed Amendments

CEQA requires that an EIR consider not only the direct and indirect impacts of a project or action (14 C.C.R. § 15126.2(a)), but also the project’s cumulative impacts on environmental resources. 14 C.C.R. § 15130(a). The document must give “due consideration” to the resources involved (such as water, historical resources and scenic quality), the physical changes caused by the project, and resulting alterations to ecological systems, among other things. 14 C.C.R. § 15126.2(a). Moreover, the CEQA guidelines expressly note that an “EIR shall also analyze any significant environmental effects the project might cause by bringing development and people into the affected area.” Id.

1. Direct Wildlife Impacts

Under a section entitled “Significant Environmental Effects and Mitigation,” the SEIR purports to assess the effects of the proposed Plan amendment on wildlife, but this discussion is nothing more than a two-paragraph identification of potential impact issues, with no supporting analysis whatsoever. For instance, the SEIR notes that the campsite may disproportionately attract large populations of nest predators (such as raccoons, striped skunks, opossums, and corvids) which “may adversely impact Neotropical migrant songbirds, non-migrant native birds, amphibians and reptiles.” SEIR at 11. Yet the document provides no indication of the nature, scope or scale of such adverse impacts or how they may alter the Park’s and the region’s ecological balance.

Similarly, the wildlife section notes that the campground may degrade sensitive plant or animal populations or their habitat and could result in disturbance to amphibian and reptile microhabitat, but provides no actual discussion or analysis of these potential impacts. For
instance, there is no discussion of how the increase in magnitude, frequency, duration or intensity of visitor use may cause fragmentation of core wildlife habitat and edge degradation of habitat quantity and quality. Habitat fragmentation and adverse "edge effects" from human activities are well-documented in the conservation biology literature\(^2\) and should be assessed in any proposal to increase human activity in the Park’s core wild areas, including the Partridge Farm area and along associated Castle Rock Ridge.

The Department should consider the scientific literature in the context of the Park’s site-specific conditions and species. For instance, there is a sizable body of scientific work on the impacts of corvid predation on federally listed and imperiled species such as the Marbled Murrelet, which is known to inhabit nearby Big Basin State Park and possibly Castle Rock State Park as well. A recent study which recorded observations of two Marbled Murrelet nest failures in Big Basin State Park caused by corvid predation concluded that:

Recreational facilities, such as picnic areas and visitor service facilities, may interfere with the nesting success of Marbled Murrelets. Both 1989 nests were in such areas. Although incubating birds only rarely showed behavior suggesting agitation from human presence or noise, they may have been indirectly affected by supplemental items (table scraps and garbage) made available to potential nest predators. Both Steller’s Jays and ravens have been observed feeding from garbage cans in the Opal Creek picnic area. Ravens, which did not nest in the park prior to 1987, nested successfully near the picnic area in 1989. Elsewhere, unusually large corvid populations have been noted in picnic areas and campgrounds where garbage is available (Gaines 1977, Beedy and Granholm 1985). Work done in Big Basin by Orr (1942) found a correlation between the higher number of Steller’s Jays in campgrounds and the reduced number of passerine birds there. Now that Steller’s Jays and Common Ravens are known to prey on Marbled Murrelet eggs and nestling (this study), visitor activities that favor corvid populations should be minimized.

Steven W. Singer et al., "Discovery and Observations of Two Tree Nests of the Marbled Murrelet" (in The Condor, Cooper Ornithological Society, 1991) (emphasis added). Similar conclusions have been reached by other scientists studying corvid predation. See, e.g., Robert A. Askins, Restoring North America’s Birds: Lessons from Landscape Ecology (Yale Univ. Press, 2000) at 172 ("Nest predation may be particularly frequent near campground and picnic areas

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\(^2\) See, e.g., Reed F. Noss and Allen Y. Cooperrider, Saving Nature’s Legacy: Protecting and Restoring Biodiversity (Island Press, 1994); R. Edward Grumbine, Environmental Policy and Biodiversity (Island Press, 1994). We incorporate both of these publications by reference in these comments and would be happy to provide the Department with copies of relevant articles contained therein.
that attract ravens, crows and other predators. This problem is especially serious in California, where many of the ancient redwoods are in state or national parks".\(^3\)

2. **Cumulative Ecological Impacts**

Like the original EIR, the SEIR simply does not contain any discussion of the cumulative impacts of opening the Partridge Farm area to increased human use in light of other regional development. The Park plays a regionally important ecological role in protecting the headwaters of the San Lorenzo River and Kings Creek. Increased soil compaction and off-trail human activities resulting from increased use of the Partridge Farm area are likely to increase erosion and sedimentation in the upper watershed area of the San Lorenzo River, thereby decreasing watershed integrity and potentially threatening Steelhead and Coho salmon populations. On this issue, the SEIR remains disturbing silent.

Similarly, the SEIR fails to address the impact of the proposed Plan amendment on wide-ranging species such as the mountain lion (*Felis concolor*).\(^4\) The mountain lion is a keystone

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\(^3\) While Commenters incorporate by reference herein and recommend consideration of these particular studies, we note that they do not define the universe of applicable research. For instance, we are aware that a Marbled Murrelet predation study conducted by Dr. John M. Marzluff of the College of Forest Resources in Seattle, Washington concluded that predation rates were higher near campgrounds and towns primarily because of the higher density of American Crows and Steller’s Jays at these sites. We believe that it is the Department’s obligation under CEQA and its governing statute to undertake its own literature review and prepare a site-specific analysis of wildlife impacts before any further development of this area is considered.

\(^4\) The SEIR merely mentions the existence of the species, with no analysis of impacts: “Mountain lions have been documented to occur in the park; however, population statistics, regional wildlife movement, and tolerance of humans have not been established. Mountain lions have been documented in the Partridge Farm vicinity by Harvey and Stanley (1979), yet little is known of the species use intensity there. No sign of mountain lions was observed in the Partridge Farm Resource Management Zone during 1995/96 inventories; during this time one mountain lion sighting was reported elsewhere in the park.” SEIR at 11. Obviously, such cursory treatment is not adequate to comply with CEQA. *See*, e.g., 14 C.C.R. § 15151 (“EIR should be prepared with sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences”); *Dry Creek Citizens Coalition v. County of Tulare*, 70 Cal.App.4th 20, 26 (1999); *Laurel Heights, supra*, 47 Cal.3d at 405 (EIR must contain sufficient detail to “enable those who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed project”); *Kings County Farm Bureau v. City of*
species which plays an ecosystem-regulating function in this region. It is likely that the Park, and especially the ridgeline adjacent to Partridge Farm, serves as a critical node for mountain lion movement through the Santa Cruz Mountains. Male mountain lions have expansive home range sizes and must have sufficient freedom to visit breeding females in dispersed locations. Landscape connectivity in essential for mountain lion (and other wildlife) movement. Intensified human use in and around Partridge Farm and the associated ridgeline, including potential nocturnal use associated with the campsite proposal, is likely to constrain mountain lion movement through this critical area, with cascading ecological effects downward through lower levels of the food web, such as overpopulation and disease of historic mountain lion prey species and population explosions of “mesopredators” (opportunist exotic and native species whose populations are normally controlled by top predators such as mountain lions).

Again, these kinds of broader ecological effects are well-documented in the conservation biology literature and should be discussed in the SEIR, especially since habitat connectivity has already been compromised beyond acceptable levels throughout much of the region. In particular, the role of undisturbed habitat in Castle Rock State Park in maintaining the region’s ecological integrity and function must be assessed as part of any Plan amendment that contemplates development. See Cal. Pub. Res. Code §5002.2 (“the general plan shall evaluate the unit as a constituent of an ecological region”). No decision to develop the Park or the Partridge Farm area should proceed until this assessment is properly completed.

C. The Conclusion in the SEIR that the Plan Amendment Will Not Have a Significant Adverse Impact on Black Oak Woodlands Is not Supported by Any Evidence or Analysis

Commenters remain very concerned about the impact of developing the Partridge Farm area on the directly adjacent black oak woodland. As the Department acknowledges, this habitat type is of very “limited distribution” in the Santa Cruz Mountains. SEIR at __. Indeed, the black oak woodland in this location is locally significant because it constitutes one of the only intact stands of this forest type in the Santa Cruz Mountains. The woodland includes an understory of coastal scrub and inland species, all of which combine to provide habitat for threatened and other native birds in the region. Increased intensity of human activity adjacent to (and inevitably within) this key habitat is likely to result in soil compaction, the spread of exotic pest plant species and the attendant loss of native habitat.

The SEIR notes the potential for such impacts, but then dismisses them with a reference to the Department’s plan to develop an environmental monitoring program and the General

Hanford, 221 Cal.App.3d 692, 733 (EIR must contain sufficient analysis to “ensure the integrity of the process of decisionmaking by precluding stubborn problems or serious consideration from begin swept under the rug”).
Plan’s provision for the development of vegetative and watershed management plans. The SEIR then concludes that “[t]he intent of these resource protection mechanisms is to maintain resource impacts to levels less than significant.” SEIR at 16. This short, one-paragraph listing of potential future monitoring plans and the Department’s “intent” does not constitute an analysis of the project’s impacts on black oak woodland habitat sufficient to support a determination that the proposed Plan amendment will not have a significant impact on the resource.

Given the local significance of the black oak woodland, Commenters are disappointed in the Department’s insistence on moving forward with this amendment, especially since the agency has never offered an overriding justification for jeopardizing this unique and important ecological system. At the very least, the Department should properly analyze the true impacts of increased visitor use on the black oak woodland. More properly, it should reverse its present course and prohibit any further development that will adversely affect this sensitive area.

D. The SEIR Fails to Analyze a Reasonable Range of Alternatives

Given the acknowledged significant impacts from the proposed Plan amendment, it is imperative – and legally required – that the SEIR consider a reasonable range of project alternatives. 14 C.C.R. § 15002(a)(3) (one of the basic purposes of CEQA is to “prevent significant, unavoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures”); Kings County, supra, 221 Cal.App.3d at 720-21; Wildlife Alive v. Chickering, 18 Cal.3d 190, 197 (1976) (assessment of all reasonable alternatives is one of an EIR’s “major functions”).

The discussion of alternatives in the SEIR is fatally flawed. The stated “goal” of the Plan amendment is to “[e]xpand access and overnight opportunities for visitors.” SEIR at 2. Yet the SEIR does not consider the very obvious alternative of developing a campground in another location in the Santa Cruz Mountains to address perceived regional recreational needs. Time and again, the courts have held that such a truncated alternatives analysis is legally defective. See, e.g., San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus, 27 Cal.App.4th 713, 736 (1994) (EIR failed to adequately identify and analyze feasibility of alternative sites); San Bernardino Valley Audubon Society, Inc. v. County of San Bernardino, 155 Cal.App.3d 738, 750-51 (1984) (EIR was inadequate because it did “not discuss whether there actually are other sites within the . . . area which would be suitable for such a project”).

E. The SEIR Fails to Assess the Impacts of the Proposed Campground on Wilderness Values in, and Wilderness Designation of, the Park

As Commenters and others have previously argued, Castle Rock State Park arguably is eligible for wilderness designation under the California Wilderness Act. That statute defines a “wilderness area” as “an area of relatively undeveloped state-owned land which has retained its primeval character and influence or has been substantially restored to a near natural appearance”
and which (1) appears generally to have been affected primarily by the forces of nature, with the
imprint of man’s work substantially unnoticeable, (2) has outstanding opportunities for solitude
or a primitive and unconfined type of recreation, (3) has at least 5,000 acres of land, either by
itself or in combination with contiguous areas possessing wilderness characteristics, or is of
sufficient size as to make practicable its preservation and use in an unimpaired condition, and (4)
may also contain ecological, geological, or other features of scientific, education, scenic or

It is clear that the Park meets this definition. The February 1999 Preliminary General
Plan states that

the recovering park lands provide a glimpse of the original primeval character of the
Santa Cruz Mountains. One can gaze from the ridgetops along Highway 9 and Skyline
Boulevard or hike over a landscape of steep, densely vegetated canyons, dense redwood
and mixed evergreen forests, oak woodlands, and open grasslands. Many of the ridges
are embellished with sandstone rock outcrops that include very rare tafoni formations.
On clear days the outstanding scenic views extend south to Monterey Bay and beyond.
To the west nearly the entire length of forested Ben Lomond Mountain is discernible. A
portion of Big Basin Redwoods State Park is visible in the near distance. To the north
grassland covered ridges and steep, forested canyons extent to the horizon. The
ecological linkage between Castle Rock State Park and other natural areas of the Santa
Cruz Mountains is apparent. Little evidence of human occupation is visible form the
park.

Preliminary General Plan at 2. In other words, the Park (1) has been substantially restored to a
near natural appearance and primeval character, with human occupation substantially
unnoticeable, (2) provides outstanding opportunities for solitude and primitive recreation, and (3)
contains unique ecological and geological resources of scientific, educational, scenic and
historical importance. At approximately 3,800 acres, the Park occupies a relatively large land
area by Santa Cruz Mountain standards and, therefore, is of sufficient size to make practicable its
preservation and use in an unimpaired condition. Additionally, if the proposed acquisition of the
adjacent Waterman Gap property from the San Lorenzo Valley Water District is completed, the
Park would alternatively satisfy the 5,000-acre size criteria set forth in the wilderness statute.

Given the Park’s present recovering status and near-wilderness condition and its clear
potential for future designation as a state wilderness area, further development should not occur
until the Department has analyzed the development’s impact on both the Park’s eligibility for
wilderness status and the wilderness experience it currently provides. See, e.g., National Parks
and Conservation Ass’n v. County of Riverside, 71 Cal.App.4th 1341 (1999) (analysis of
development impacts on wilderness experience required under CEQA).
August 7, 2000

F. The Department Failed to Conduct a Carrying Capacity Survey as Required by State Law

State law requires that, prior to adopting a developmental plan for any state park, the Department "shall cause to be made a land carrying capacity survey . . . including in such survey such factors as soil, moisture, and natural cover." Cal. Pub. Res. Code § 5019.5. This carrying capacity survey then establishes enforceable attendance limits for each park. Id. § 5001.96. As Commenters and their members have previously pointed out, the Department has never completed a carrying capacity survey or established carry capacity-based attendance limits for Castle Rock State Park. Thus, a Plan amendment to develop a campground and increase visitor use of the Park is, at best, premature.

G. Conclusion and Recommendation

In sum, the draft SEIR is legally defective because it fails to provide decisionmakers and the public with meaningful information about the potential ecological impacts of the proposed Plan amendment. Laurel Heights, 47 Cal.3d at 329 ("An EIR is an 'environmental alarm bell' whose purpose is to alert the public and its responsible officials to environmental changes before they have reach ecological points of no return . . . The EIR is also intended 'to demonstrate to an apprehensive citizenry that the agency has, in fact, analyzed and considered the ecological implications of its actions.' . . . Because the EIR must be certified or rejected by public officials, it is a document of accountability. If CEQA is scrupulously followed, the public will know the basis on which its responsible officials either approve or reject environmentally significant action, and the public, being duly informed, can respond accordingly to action with which it disagrees."

Perhaps more to the point, the Department’s decision to pursue increased development of the Park and the Partridge Farm area is seriously flawed from a policy perspective. The Park plays a vital role in protecting the region’s ecological integrity and provides a rare wilderness experience that is difficult to find elsewhere in the San Francisco Bay area. Thus, the proposed development is inconsistent with the Department’s obligation “to preserve outstanding natural, scenic, and cultural values, indigenous aquatic and terrestrial fauna and flora, and the most significant examples of such ecological regions of California as . . . foothills and low coastal mountains.” Cal. Pub. Res. Code § 5019.53. Moreover, given the existence of other nearby campsites at Big Basin Redwoods State Park, Portola Redwoods State Park and Sanborn-Skyline County Park, the development plan directly violates the statutory prohibition on the construction of new improvements “which are otherwise available to the public within a reasonable distance outside the park.” Id.

For these reasons, the Sierra Club and Friends of Castle Rock State Park once again urge the Department to reevaluate its recent management direction for this unique Park and to avoid
any further development of the Partridge Farm area. We would be more than happy to meet with you or your staff to discuss this matter further.

Sincerely yours,

[Signature]

Deborah A. Sivas
Rusty Arieas,
California Department of Parks and Recreation

and

California State Parks
Northern Service Center
1725 23rd Street, Suite 200
Sacramento, California 95816

Dear Rusty Arieas and Northern Service Center,

This letter is some of the testimony being submitted by Friends of Castle Rock State Park (FoCRSP) on the so-called "Supplemental Environmental Impact Report" for the proposed Castle Rock State Park General Plan Amendment.

This letter provides an ecological argument for designating Castle Rock State Park as state Wilderness. Acknowledging the need for reducing our ecological debt, we provide this statement to encourage the planners of our state parks to consider the landscape scale in planning long-term management strategies.

Located high in the Santa Cruz Mountains, Castle Rock State Park (CRSP) has grown to over 3,800 acres since its establishment in 1968. In 1994, the California Department of Parks and Recreation (DPR) drafted a General Plan for Castle Rock State Park. The proposed plan is a manifestation of traditional and outmoded State Park values. DPR has never openly debated the Purpose of the Park. It has systematically deconstructed the planning team to exclude proponents of Wilderness protection. The proposed plan downgrades the park's Declaration of Purpose by removing the mandate to manage the park in a "near-wilderness" state and, instead, proposes development that focuses heavily on accommodating recreation.
Declaration of Purpose

The General Plan process has become dominated by politics, at a time when we need open space planning to be driven by the best available science. This has unfortunately resulted in a polarization between the user groups and the environmental community. The Plan, based on a traditional, outmoded model of concentrated parking, access and facilities, only incidentally accommodates the special interests groups, gaining their uncritical support.

We believe that all traditional recreations can be accommodated at CRSP, including rock climbing, horseback riding, and even some mountain biking, if we determine to do so as we preserve ecological values, the privacy of local homeowners, and another traditional recreational use: hiking to contemplate a wilderness experience. The Planning process should seek to address the fundamental concerns, not just rubber-stamp a development "vision" of the past. A draft of an "Alternative Preferred Plan" has been presented to State Parks.

Castle Rock Ecology

Castle Rock State Park is a mosaic of seven habitat types, including oak woodlands, redwood forests, chaparral, grasslands, and diverse riparian communities. Regionally, Castle Rock State Park protects the headwaters of the San Lorenzo River and Kings Creek. CRSP is an exceptionally scenic and biologically diverse component of the California Coast Range wilderness.

Implementation of the proposed General Plan will have a fragmenting effect on the core wild areas of the park. Moving the focus of visitor intensity to Partridge Farm will increase deleterious "edge effects" on this core wild area, exponentially decreasing the ecologically effective or functional size
of the remaining wildlife habitats. Such effects have been well documented
in the literature of conservation biology and should be greatly considered
in the planning process. The increase in magnitude, frequency, duration and
intensity of visitor impacts on the Goat Rock vicinity will likely promote
edge degradation of habitat quantity and quality for both plant and animal
species, as well as impacting watershed integrity. These effects may, in
turn, reduce the recreational opportunities for visitors seeking to
experience a wilderness experience.

Soil compaction and species displacement will be exacerbated by the illegal,
but inevitable, increase in off-trail traffic through the black oak forest.
Such edge effects along the trails will further increase the spread of
exotic pest plant species, compounding the fragmenting effects on woodland
and forest habitats. THUS, the increase in magnitude, frequency, duration
and intensity of visitor impacts along the ridgeline will cause edge
degradation of habitat quantity and quality for both plant and animal
species, as well increase erosion and sedimentation in this upper watershed
area of the San Lorenzo river, home to threatened Steelhead and Coho salmon
populations.

Mountain Lion (Felis concolor)
We are concerned about the potential impacts of the proposed General Plan on
the movement of necessarily wide-ranging species such as the mountain lion,
a keystone species for its critical ecosystem-regulating function.
Landscape connectivity for wildlife movement is among our primary concerns.
Intensified visitor use at Partridge Farm and the associated ridgeline,
along with use extending into the nocturnal hours, will most likely have a
constraining effect on the movement of mountain lions through the area.
Male mountain lions have expansive home range sizes compared with their female counterparts. In order to ensure overall population stability, males must have sufficient freedom of movement to enable them to visit females in dispersed locations. It is likely that Castle Rock State Park serves as a critical node for mountain lion movement through the Santa Cruz Mountains. Habitat connectivity has already been compromised beyond acceptable levels throughout much of the region. Further degradation of habitat connectivity for mountain lions will lead to cascading impacts down through successively lower levels in the food web. Such effects have been well documented in the literature of conservation biology and should have been considered in the DPR planning process.

Further degradation of habitat connectivity for mountain lions will lead to cascading impacts down through successively lower levels in the food web. Such impacts include overpopulation and disease of historic mountain lion prey species, along with population explosions of "mesopredators" -- opportunistic exotic and native species whose populations are normally controlled by top predators such as mountain lion. In the absence of mountain lions' ecological regulatory role, mesopredators can wreak havoc on native species populations which haven't had sufficient time to adapt their behaviors to changing predator populations (e.g., Soule et al. 1988).

The appropriate carrying capacity of the Park must be systematically determined to be consistent with habitat protection and the preservation of an essentially wilderness visitor experience.

Wilderness Values

Although the Santa Cruz mountain range was extensively logged beginning in the mid-1850s, CRSP is one of the few places with remnant ancient redwood
Friends of Castle Rock State Park
Dedicated to the Preservation, Protection, and Restoration of Castle Rock State Park

stands. CRSP is now a recovering wilderness which supports natural processes, one of the few wild areas in the Bay Area where wildlife can follow its own course. It is a genetic crossroads that facilitates wildlife and genetic flows up and down and transversely across the range, through Big Basin to the coast. These flows are essential for the long term sustainability of healthy natural communities in the mountain range environment. While the Park contains critical habitat, it also presents proof that a grossly degraded environment can recover and thrive without human intervention.

It is time for a more contemporary concept of "wilderness". While there is nothing in the State Code written decades ago, that excludes CRSP from a Wilderness Designation, it focuses primarily on aesthetic considerations. We now understand that we live in a world of complex and fragile ecosystems, threatened by increasing population, decreasing biodiversity, and global warming. We believe that CRSP should be managed to preserve the ecological integrity of the park, the region and the planet.

Castle Rock State Park qualifies for state wilderness designation as it meets the following requirements listed in the California Wilderness Act:
1. Castle Rock State Park has been substantially restored to a near natural appearance and the imprint of man's work is substantially unnoticeable. (PRC Sec. 5093.33(c).
2. Castle Rock State Park is of sufficient size to make practicable its preservation and use in an unimpaired condition. Although the park itself is not reach the 5,000 acres, the adjacent Waterman Gap property owned by the San Lorenzo Valley Water District may soon be acquired by the state. Viewed in the context of the central-west coastal ecoregion, 3,800 acres is of sufficient size for wilderness designation.
We call for Castle Rock State Park to be designated as a State Wilderness, or managed for wilderness recovery with the long-term intent of state wilderness designation.

Sincerely,

Jeff Spencer, Chair
Friends of Castle Rock State Park
1548 Maple St MBX 28
Redwood City, CA 94063

This letter is also signed by a number of supporting independent scientists listed below. Please inform these individuals that you have received their testimony and comments as part of the CEQA comments received related to the Castle Rock State Park General Plan Amendment and Supplemental EIR.

References


Supporting Independent Scientists

Fraser Shilling
2313 Shire Ln.
Davis, CA 95616

affiliation: University of California, Davis

credentials: Ph.D. in aquatic ecology, work in the area of watershed and land-use planning in the Sierra Nevada

Steven Day
Ancient Forest Defense Fund
PO Box 151
Leggett CA 95555

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Andrea Erickson
620 Villanova Ave.
Davis, Ca 95616

affiliation: University of California, Davis

credentials: Ph.D. in avian sciences, study raptor conservation in central California since 1992

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Laura Kindsvater
Affiliation: University of California, Davis

Plant Geography

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John Gallo
Project Director
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Friends of Castle Rock State Park
Dedicated to the Preservation, Protection, and Restoration of Castle Rock State Park

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7/26/00
Commissioner Rusty Areias
California Department of Parks and Recreation.

Dear Rusty -
You have changed your address since we met first in SJ and almost four years ago in Aptos. I congratulate you on your promotion.
I'm writing now asking you to preserve Castle Rock State Park which joins Santa Clara and Santa Cruz Counties and is crucial to both. Thanks.
Cordially,
Dave
David H. Walworth, MD emeritus
Santa Clara County Medical Society (formerly)
President, Citizens for Personal Rapid Transit - Umunum Chapter

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Sacramento, CA 95816  

RE: Castle Rock State Park General Plan Amendment and Supplemental EIR

Dear DPR:

I am writing on behalf of the Santa Clara Valley Audubon Society to express the following comments on the Castle Rock State Park General Plan Amendment regarding "proposed walk-in campsites". Representatives of other local environmental groups and I have already discussed a host of concerns with DPR officials regarding campsites at Castle Rock State Park. These concerns are not alleviated by the supplemental EIR, and I will detail them below.

1) DPR should file an additional Environmental Impact Statement if, after all the evidence that dictates the contrary, it is still decided that a campground will in fact be installed at Partridge Farm. As is admitted in the Supplemental EIR in the hydrology and soils section, "quantification and determination of the impacts is speculative without more defined plans." We believe however that it is clearly a bad idea to allow this proposal to go any further than this. Clearly there exists an abundance of evidence showing that campgrounds constitute a severe disruption to the ecosystems of native species. It is well known that corvids and cowbirds prey on eggs and chicks of native species, and it is also well known that campgrounds, and many other human activities subsidize these species. Specific references are cited by Barry Boulton of the Sierra Club's Loma Prieta Chapter in his response to this EIR.

2) Possible maintenance of existing pear and apple orchards. Please evaluate the potential relationship of these orchards to subsidizing predatory species such as corvids, Brown-headed Cowbirds, raccoons, skunks, opossums, and others, and evaluate the impact of this to native birds, including special status species such as Marbled Murrelet, Yellow-breasted Chat, Willow Flycatcher and Yellow Warbler. According to the Marin County Breeding Bird Atlas, Scrub and Stellars Jays, and Crows all include fruit as part of their diets. In addition, this reference cites fruit orchards as a food source for cowbirds, while its commute range from its breeding range is cited as "4 miles or more", which puts the whole park within the feeding range of cowbirds. Thus, this food source at Partridge Farm could subsidize corvids which are known to prey upon eggs and nestlings of other species, including Marbled Murrelets, and cowbirds, which parasitize
People feeding human food and garbage to predatory birds and mammals is a problem that has not yet been solved. No modification to the development plans to deter this problem are possible. The size of the park puts every corner within range of at least some of the predatory species that are subsidized by humans. This is an unmitigatable impact that suggests to me that the campground should be excluded from the plan in order not to jeopardize the sensitive wildlife in the park.

4) Cumulative Camping Impacts are not the same as camping impacts. Years of subsidies of predatory species do have a cumulative impact of reducing their prey species to below a minimum viable breeding population. Please evaluate the cumulative impacts for specific species, or at least genera of birds, amphibians and other creatures that are subject to predation by human subsidized species.

5) Please explain how the Department will enforce illegal gathering of large woody litter that could result in disturbance to amphibian and reptile habitat. Would there be enforcement staff present in the vicinity of the campgrounds during times when this could occur? Please evaluate this.

6) Verna Jigour of the Coast Range Ecosystem Alliance has communicated to DPR that it may be possible that Partridge Farm is in the vicinity of a corridor to the Diablo Range used by Mountain Lions. Please evaluate the impacts regarding the possibility that the presence of humans at Partridge Farm at night might deter the Mountain Lions or cause encounters between the lions and humans.

7) Water and sewage. Please consider using composting toilets for the day use restrooms. I have seen these in use in Washington State Parks and they are quite nice, and of course, require no water.

Thanks very much for this opportunity to provide input.

Sincerely,

[Signature]

Leda Beth Gray
Board Member and Conservation Chair
Santa Clara Valley Audubon Society
COMMENTS ON GENERAL PLAN AMENDMENT PROPOSED WALK-IN CAMPSITES

BACKGROUND
"It provides trailhead opportunities for Castle Rock and Midpeninsula Regional Open Space...."

Why no mention of Sanborn-Skyline County Park or Upper Stevens Creek County Park?

PROJECT DESCRIPTION
"The management intent is to establish 20 walk-in campsites...."

Why walk-in? How will DPR preserve the considerable area between the parking and the campsites? Car access is discouraged and limited, encouraging campers to keep their food in their camps. Throughout the State, despite decades of attempts at the national and state levels, wildlife continues to become habituated to human food. How will DPR keep people food from entering the environment? How will DPR keep wildlife from becoming acclimated to human food? How can DPR assure us that access to human food by raccoons, blue jays and other animals will not threaten already endangered species such as the marbled murrelet?

"Resource assessment and monitoring will occur...."

So what? What impact will the monitoring have? The General Plan, and the General Plan Amendment are reactive. What will DPR do with the assessment and monitoring to prevent loss of resource.

"GOAL: Expand access and overnight opportunities for visitors."

Why? Few have come forth at the public hearings asking for camping.
Why? The observed impacts in and around the Partridge area show that opportunities should be reduced, not expanded.

ENVIRONMENTAL ANALYSIS
Cultural Resources, Traffic, Hydrology & Soils, Geology, Wildlife and Esthetics are addressed. Where is vegetation addressed?

Impacts-Cumulative

“The Cumulative impact of camping and day use on cultural resources will be the same as the impact for camping”

I find this very unlikely. The very issue that this is cumulative and that these resources are non repairable means that this section should be more adequately addressed. How will a designated buffer zone around the facility development area at Partridge Farm protect cultural resources and other sensitive habitats and resources?

TRAFFIC
“Visitors tend to avoid peak (commute) traffic periods....”

Remembering this is about the camping issue this statement is patently incorrect. Camping traffic is very common during commute periods - especially during the Friday evening commute.

“Mitigation for the potential safety hazard will not be prescribed now.”

Why not? With limited line-of-sight at the entrance to Partridge, with turns through oncoming traffic necessary for access, how can the visiting public and local residents be protected from serious accident? What if CalTrans declares that the present entrance is unsafe and that it cannot be made safe without substantial cost and relocation of the entrance location? Wouldn't that have a impact on whether or not this project should proceed?

HYDROLOGY AND SOILS
This whole section obviously inadequately addresses the impacts due to increased use.

Impact-Cumulative: “The cumulative impacts are considered the same as those described for camping above.” The very nature of cumulative impacts is different from initial impacts. Such a development will definitely make impacts and they will increase over time. Under “Mitigation” this section states: “Design, construction and maintenance of facilities will follow the best management practices for the elimination or reduction of adverse effects to soil stability, water
quality, and drainage patterns." What this really says: Trust us. We will do the right thing.

Mitigation: Activities or development that could adversely affect the park's aquatic system will be mitigated to a level of on-significance where feasible. And where not feasible? Do you develop anyway, or not develop?

GEOLOGY
Once again, this whole section is inadequate. There isn't any real detailed analysis on impacts.

Impact - Camping "There is a potential impact to tafoni...." "Improved access at Partridge Farm may encourage greater public use....."

Potential impact?. Its a certainty - or at the very least in the 99% probability bracket. When you introduce the numbers of people into an area there is going to be impact - and it is non-reversible. How will you protect the fragile and endangered tafoni from the vastly increased traffic?

"The cumulative impacts are considered the same as those above." You have to be kidding. Over time the impacts will grow and only get worse. This isn't a renewable resource like vegetation. Cumulative impacts are very different here. How will you protect the fragile and endangered tafoni and other resources from the vastly increased traffic?

Mitigation: You can designate and area off limits to climbing (natural preserve), but with Lion Caves 10 minutes from 460 visitors per day, how can you realistically keep climbers out of this area, especially after they have placed over 120 bolt/anchors in the rock?

WILDLIFE
The Area of Potential Effect includes the entire region. You document many vulnerable species, both flora and fauna, that will be impacted by camping.

Mitigation: "The project will be modified if necessary to avoid significant adverse impacts...."

Does this include the possibility that camping is inappropriate?

ALTERNATIVES
(2) the "no project" alternative (development approved by the Park and Recreation Commission)" What does this mean? There was no approval by the Commission for a campground - only a request that a amendment be submitted.

"The potential significant environmental impacts resulting from this alternative would be the same as the approved general plan, with the potential increase in
vehicle traffic movements related to the use of traditional camping vehicles." This statement is patently absurd. A traditional campground would significantly increase the environmental impact on the area.

Page 14 -

NO PROJECT ALTERNATIVE
How could this result in reduction of level of service (congestion and safety hazard) at the existing entrance to Partridge?

IRREVERSIBLE ENVIRONMENTAL CHANGES
"If there are indications that impacts from visitor use may become excessive, the Department can reduce or remove facilities or take other appropriate actions." Once again this is the "Trust us, we know what we are doing" syndrome. History has shown us that the DPR rarely ever takes out facilities due to impact - even when they know that significant damage is being done. Why should we believe that DPR will act differently in the future?

NON-SIGNIFICANT ENVIRONMENTAL EFFECTS

WILDFIRE - How can this be considered non significant?
BLACK OAK WOODLAND - How can this be considered non significant?
This issue should have been addressed in a "Vegetation" section. The Black Oak

[Signature]
Northern Service Center  
Department of Parks and Recreation  
1725, 23rd Street, Suite 200  
Sacramento, CA 95816

August 4, 2000

Sierra Club Testimony regarding:

Castle Rock State Park  
General Plan Amendment and Supplemental EIR  
Walk-in Campsites at Partridge Farm  
Preliminary, June 20, 2000

Part 1: Context to this Testimony

Immediately prior to the March 8 meeting of the Parks Commission, the Department withdrew the original “walk-in” camping proposal with no word of explanation. In noting this withdrawal, one of the Commission members asked the critical question: “was the camping withdrawn from the plan for scientific reasons”. The response from the Department was “no”; however, that response is inconsistent with the judgment of the environmental community, an opinion that has been communicated on many occasions to the Department. We were, as a community, disappointed that the Department misrepresented the reasons for our consistent request to withdraw camping, and we note that even in this new amendment, the Department has not presented the scientific case adequately such that the Commission can fully understand the situation and make rational decisions. We think that the resource ecologists in the Department have knowledge of the science, and full access to scientific data, and so we question why the Department consistently refuses to face the issues honestly, and why it refuses to dialogue openly with the public and with the environmental community. This amendment would have been the appropriate place in which to hold the honest dialogue; the Department chose otherwise. Therefore, this testimony on behalf of the Sierra Club is designed to place the full facts before the Commission, and we formally request the Department to respond to this testimony in accordance with CEQA requirements. As we identify in this testimony, the Amendment is deficient in several respects, and those deficiencies are all the more disappointing in that we have been urging State Parks to consider those topics that are still deficient.
Part 2: Deficiencies with regard to Impacts on Wildlife (page 11)

Summary of the Deficiencies

- The Amendment does not adequately explain the impacts of the proposals on wildlife, or their causes. After two years and more of presenting this issue to the Castle Rock Planning Team, we had hoped that the Department would adequately address the issue of wildlife predation resulting from the camping proposal. This General Plan Amendment (relevant section reproduced below) does not adequately describe the predation forces acting, nor the impacts.

- The Marbled Murrelet, even though an endangered species, is not specifically mentioned; a surprising and significant omission since it is thought to nest in Castle Rock SP, because there is a Recovery Plan for the Marbled Murrelet in which the Santa Cruz Mountain Range is one of only six conservation zones in the California-Oregon-Washington region, and because the old-growth redwoods in Castle Rock are designated as marbled murrelet critical habitat. We will use information from that Plan later in this testimony to confirm that the walk-in campground proposed in this amendment would probably constitute an illegal taking under the Endangered Species Act.

- The conclusion that “Evidence of the impact is inconclusive; a determination of significance would be speculative” is misleading as this testimony will demonstrate. We will show conclusively that the three criteria identified under “Threshold” each have a very high probability of being met, and so the conclusion in this GP Amendment is invalid.

- The Cumulative Impact comments do not satisfy CEQA mandates in Section 15355. Cumulative impacts under CEQA refers to two or more individual effects which, when considered together, are considerable, or which compound or increase other environmental impacts. CEQA requires that this analysis be presented in the case of a specific project such as this, when “added to other closely related past, present and reasonably foreseeable future projects”. However, this Amendment does not consider, indeed, does not mention, the potential impacts of this proposal in conjunction with likely and reasonably predictable changes to the Big Basin General Plan on the marbled murrelet or other bird and mammalian populations. The Big Basin general plan has been in discussion within State Parks for over one year, and we can reasonably suppose that the Department is able to identify likely changes that, when added to this Amendment, would have cumulative impacts. We are particularly cognizant that:
  - Big Basin is a significant, perhaps critical, nesting site for the marbled murrelet.
  - The marbled murrelet population in Big Basin is most likely already in decline (source: David Suddjian, Biological Consultant).
  - Castle Rock has potentially good marbled murrelet nesting habitat.
  - In all probability marbled murrelets are already nesting at Castle Rock.
  - The old-growth redwoods in Castle Rock are designated critical habitat for the marbled murrelet.

Under these circumstances, the cumulative impacts comments are deficient, and do not meet CEQA requirements. We formally request that a cumulative impacts analysis be conducted that meets CEQA requirements.
Scientific Data regarding Predation – the Critical Issues
The scientific grounds for not incorporating so-called walk-in camping at Partridge are based on
the following critical questions:
1. Whether camping and its associated human activities generally cause an increase in predators
   in the vicinity of the campground.
2. Whether those predators generally have an impact on sensitive wildlife in the vicinity.
3. Whether Castle Rock contains sensitive wildlife species vulnerable to increased predation.
4. As a subset of question #3, whether endangered or threatened species currently inhabit, or are
   thought likely to inhabit, ecosystems in the vicinity, and may be vulnerable to predation,
   possibly leading to an illegal “take”.

In this testimony, we will summarize scientific papers and critical information that answers all of
the above questions emphatically and in the affirmative. The testimony therefore goes well
beyond hypothesis and conjecture of lay observers, but directly uses scientifically derived data that
are consistent and corroborative. For ease of reading, we reproduce here the section of the
Amendment that is deficient with respect to impacts on wildlife.

For Reference: Reproduction of page 11 (in part), General Plan Amendment

<table>
<thead>
<tr>
<th>WILDLIFE</th>
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<tbody>
<tr>
<td><strong>Area of Potential Impact</strong></td>
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<tr>
<td>The area of potential impact includes the entire state park, depending on the sensitivity</td>
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<td>and area requirements of the species. The area of greatest effect includes the Partridge</td>
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<td>Farm resource management zone and adjacent areas.</td>
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<td><strong>Threshold</strong></td>
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<td>Direct take or removal of individuals of a sensitive species, reduction in area, or</td>
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<td>alteration or disturbance of required habitat will be considered a significant impact.</td>
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<td><strong>Impact — Camping</strong></td>
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<tr>
<td>The additional availability of garbage and the direct feeding of wildlife by campers, in</td>
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<td>conjunction with that of day use visitors, may attract disproportionately large populations</td>
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<td>of nest predators, including raccoons, striped skunks, opossums, and corvids (jays, ravens</td>
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<td>and crows), in and adjacent to the project area. Increased large predator populations may</td>
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<tr>
<td>adversely impact Neotropical migrant songbirds, non-migrant native birds, amphibians</td>
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<td>and reptiles using hardwood, montane-hardwood and grassland habitats occurring in the</td>
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<tr>
<td>Partridge Farm and adjacent Resource Management Zones. Evidence of the impact is</td>
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<tr>
<td>inconclusive; a determination of significance would be speculative. [emphasis added]</td>
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</table>

| Impact — Camping |
| The cumulative impacts are considered the same as those described for camping above. |
Two types of predation that will be exacerbated if overnight camping is implemented at Partridge Farm, can be summarized as follows (both are mentioned too casually and briefly in the GP Amendment section reproduced above):

- Predation by the family of birds known as "corvids". This family includes ravens, jays, crows, rooks and magpies. Species listed in the Castle Rock General Plan are: Steller's Jay, Scrub Jay (now Western Scrub Jay), Clark's Nutcracker, Yellow-billed Magpie, American Crow, and Common Raven.

- Predation by medium size mammals such as skunk, raccoon, opossum and grey fox (known as "mesopredators" after Soulé) that all occur in Castle Rock SP (source: General Plan).

Both types of predators increase in population, and thus in predation potential, in response to human garbage and food discarded in camping and picnic areas. This may be compounded by deliberate feeding of these predators by human visitors.

(i) Corvid Predation on the Marbled Murrelet

In this section on corvids, we will quote extensively from published work by Steven W. Singer (then of the Santa Cruz City Museum of Natural History, now Director of the Santa Cruz Mountain Range Bioregional Council) et al in 1991. The paper was published in "The Condor", a publication of the Cooper Ornithological Society, and was entitled "Discovery and Observations of Two Tree Nests of the Marbled Murrelet".

We will also quote from a newly published book entitled: "Restoring North America's Birds: Lessons from Landscape Ecology". The author is Robert A. Askins, and is published by Yale University Press (2000).

We will also identify other science papers dealing with the corvid predation issue; however, they will be referenced only, not quoted, in the interests of brevity and readability. The point is, of course, that the correlation between increased human activity (with food) and subsequent corvid population increases, followed then by nest predation and reduced bird populations is confirmed by numerous scientific studies. No shred of doubt is involved. Selected quotes in are shown italics.

Quotes from Steven W. Singer's Paper:

In the abstract: "Two nests of the Marbled Murrelet were found in old-growth (300+ years) Douglas-fir trees in Big Basin State Park, Santa Cruz County, California. These were the third and fourth known North American tree nests, and the first to be found by searching from the ground without the use of radio-telemetry". And, "Corvid predation caused both nests to fail, and may be a problem where murrelets nest in areas of high human usage".

In the body of the paper: the nests were described in two different locations, and their predation followed the following patterns.

(a) Nest at Opal Creek

"The nest was observed for 15 days. At discovery, the bird was incubating an egg. On 24 June, at about 6.30, a common raven landed on the branch and displaced the adult murrelet. Both birds disappeared from the nest branch. Approximately 15 minutes later, a raven was seen flying from the direction of the tree carrying what appeared to be a carcass in its bill. The size of the carcass indicated that it was either the embryo or part of the adult. Steller's Jays were observed picking at eggshell fragments in the nest that same day. Periodic observations over the next few weeks showed that no re-nesting occurred".
(b) Nest at Waddell Creek
"At about 0900 on the morning of 31 July, while the chick was unattended, a Steller's Jay landed on the nest and removed the chick, apparently killing it. The nest was observed periodically for the rest of the season, but re-nesting did not occur".

(c) Conclusions quoted by the authors:
"Recreational facilities, such as picnic areas and visitor service facilities, may interfere with the nesting success of Marbled Murrelets. Both 1989 nests were in such areas. Although incubating birds only rarely showed behavior suggesting agitation from human presence or noise, they may have been indirectly affected by supplemental food items (table scraps and garbage) made available to potential nest predators. Both Steller's Jays and ravens have been observed feeding from garbage cans in the Opal Creek picnic area. Ravens, which did not nest in the park prior to 1987 nested successfully near the picnic area in 1989. Elsewhere, unusually large corvid populations have been noted in picnic areas and campgrounds where garbage is available (Gaines 1977, Beedy and Granholm 1985). Work done in Big Basin by Orr (1942) found a correlation between the higher number of Steller's Jays in campgrounds and the reduced number of passerine birds there. Now that Steller's Jays and Common Ravens are known to prey on Marbled Murrelet eggs and nestlings (this study), visitor activities that favor corvid populations should be minimized". [emphasis added]

Quotes from Robert A. Askin's Book (p.172):
"The Marbled Murrelet has specialized requirements both for feeding and nesting, and its population is probably declining for several reasons, but its dependence on old-growth forest makes it particularly vulnerable. Intensive clear-cutting of old-growth forest along the coast has directly eliminated nesting habitat in many regions. Clearcutting may also indirectly degrade remaining stands of old-growth habitat by creating forest edge that attracts such predators as Common Ravens and Steller's Jays. Murrelets nesting near clearcuts and other openings may lose their eggs or young to these nest predators. Of the 32 nests that were monitored by researchers at numerous locations along the Pacific Coast between 1974 and 1993, 72 percent were unsuccessful, and the leading cause of failure was predation of eggs or chicks. Nest predation may be particularly frequent near campground and picnic areas that attract ravens, crows, and other predators. This problem is especially serious in California, where many of the ancient redwoods are in state or national parks. [emphasis added]

The potential impacts of nest predators on Marbled Murrelets was recently tested in an ingenious study in coastal Washington and Oregon. [Note: the work was conducted by Dr. John M. Marzluff, College of Forest Resources, Seattle, Washington]. Because real murrelet nests are so difficult to find, the researchers used artificial nests. These were located in typical Marbled Murrelet nesting sites: close to the trunk on large, moss-covered branches protected by overhanging foliage. Plastic eggs were painted to resemble murrelet eggs, and mounted (stuffed) chicks or live domestic pigeon chicks were placed in these artificial nests. The nests were monitored with video cameras triggered by motion detectors. A high proportion of the nests were visited by predators: 75 percent at the Washington sites and 77 percent at the Oregon sites. Predation rates were higher near campgrounds and towns primarily because of the higher density of American Crows and Steller's Jays at these sites. The results, and the observations of real nests, indicate that old-growth areas remote from human activities should be protected because they provide safer nesting sites. Also, crow and jay populations near campgrounds and other centers of human activity might be reduced by cutting off their access to garbage and other sources of food provided by people".
(ii) Mammalian (Mesopredator) Predation
Predation by small to medium size mammals—mesopredators—has been researched and documented by Soulé et al 1988 (scrub habitats), Vickery et al 1994 (grasslands), Sovada et al 1995 and Garrettson et al 1996 (prairie wetlands), Wilcove 1985 and Faaborg et al 1995 (eastern deciduous forest). All of these research studies show that predation by the mesopredators is directly linked to the decline or disappearance of gamebirds, songbirds, and other small vertebrates.
Much more scientifically researched data is available if required to fully demonstrate the probable impacts on the bird populations of Castle Rock by increased predator populations caused directly by the human activities proposed at Partridge in this Amendment involving food and garbage.

(iii) Recovery Plan for the Marbled Murrelet
Following Federal listing of the marbled murrelet as a threatened species in 1992, the U.S. Fish & Wildlife Service prepared a Recovery Plan for the bird. The Plan was approved on September 24, 1997. The Plan established six Conservation Zones throughout the California-Oregon-Washington region. As part of that Plan, the old-growth redwood stands in Castle Rock State Park are designated as critical habitat for the marbled murrelet. Furthermore, the Plan states (p.142): "It also would be desirable to increase and block up suitable nesting habitat in the Mendocino and Santa Cruz Mountain Zones. Little habitat remains outside parks in these two zones, such that an increase in the short term does not appear feasible". It also says: "Human activities near nesting areas that result in an increase in the numbers of predators could also lead to a greater likelihood of nest predation". And (p.128), "Recovery actions should be focused on preventing the loss of occupied nesting habitat, minimizing the loss of unoccupied but suitable habitat... Much marbled murrelet habitat is found in state and national parks that receive considerable recreational use. [emphasis added] The need to maintain high quality marbled murrelet terrestrial habitat should be considered in planning any modifications to state or national parks for recreational purposes. Both highway and campground construction, including picnic areas, parking lots, and visitors centers, could present threats to the marbled murrelet through loss of habitat, nest disturbance, and/or increasing predation from corvids associated with human activity such as Steller's Jays and Crows".
Specifically on nest predation, the Plan states (p.51): "The potential combined effects of increased nest vulnerability and increased predator populations could be having a great impact on nest success. From 1974 through 1993, of those marbled murrelet nests in Washington, Oregon, and California where success/failure was documented, approximately 64% of the nests failed. Of those nests, 57% failed due to predation. Corvids (ravens, crows and jays) are suspected to have caused the majority of known nest failures".
Two of the several recovery actions are (p.124): Implementing long-term actions to stop population decline and increase population growth by increasing the amount, quality and distribution of suitable nesting habitat;... reducing nest predation..." [emphasis added].

(iv) Criteria for Significant Impacts
The Threshold criteria are defined in the GP Amendment (p11) as follows:
"Direct take or removal of individuals of a sensitive species, reduction in area, or alteration or disturbance of required habitat will be considered a significant impact."

Reviewing the three criteria, we can say:
• **Direct take or removal of a sensitive species** (see attached full list from the GP).
The sensitive species identified in the earlier final General Plan, and that are particularly vulnerable to corvid and mesopredator predation are:
  ➢ Marbled murrelet (California Endangered Species; Federal Threatened Species)
  ➢ Yellow warbler (California Species of Special Concern)
  ➢ Yellow-breasted Chat (California Species of Special Concern)
  ➢ Willow flycatcher (California Endangered Species; Federal Sensitive Species)
The scientific data presented early is very clear that added facilities that provide human garbage (food) will increase the predators populations, will lead to increased predation, and will constitute an illegal take under the Endangered Species Act of some or all of the species listed here.
• **Reduction in area**
Camping and picnic areas with their concomitant food and garbage available for predators will inevitably push back those areas of the sensitive ridgeline and Natural Preserve in the vicinity of Partridge Farm that are suitable for bird habitation and nesting. That is, the reduction in area criterion will be met.
• **Alteration or disturbance of habitat**
From all that has been presented here, it is evident that the existence of increased populations of corvid and mammalian predators will disturb the functioning and ecology of the habitats. The adjacent habitats are likely to be heavily disturbed, while the full extent of the disturbance is not known. This is known in the ecological terms as the "edge effect", and inevitably reduces the area of safe and effective habitation for species at risk.

(v) Conclusions on Predation
These studies relate to Castle Rock State Park General Plan as follows:
• While there is as yet no conclusive evidence on marbled murrelet nesting in Castle Rock, the bird has been observed in the Park. It is generally accepted that there is a high probability of marbled murrelets nesting in the remaining old-growth stands in Castle Rock SP.
• The marbled murrelet has suffered precipitous population declines from California to British Columbia, and therefore was listed by the California Department of Fish and Game as an endangered species in California in 1992. It was designated as a Federally listed Threatened Species in September 1992 throughout the California, Oregon and Washington region.
• The old growth redwoods in the Park have been determined to be marbled murrelet critical habitat under the Recovery Plan of U.S. Fish and Wildlife Service.
• Steller's Jays, ravens and other corvids inhabit Castle Rock SP (source: Castle Rock GP).
• Mammalian predators (mesopredators) also inhabit Castle Rock SP (source: Castle Rock GP).
• The evidence is that camping and picnic facilities would increase the local populations of such predators, and consequently increase predation on the local bird populations, including the marbled murrelet if it does reside and nest in the remaining old-growth stands in the Park.
**Determination**: It would be inappropriate to locate any facilities in the Partridge Farm area that might significantly increase the availability of human-provided food. Camping at or near to Partridge would do just that.
(vi) Predation References


Part 3: Deficiency with regard to the Alternatives Analysis (p.13)

This Amendment considers only two alternatives:

- Traditional Campground Alternative
- "No Project" Alternative

However, no consideration is given to a regional alternative in which the regional camping needs would be assessed, and then provision of camping (and other facilities) considered on a more flexible basis across the region in ways that would both enhance visitor satisfaction, and provide optimal environmental protection. We have, on many occasions, held this discussion with the Department, and its absence is a significant deficiency in the document, and we regard those inputs as part of the formal scoping process that precedes such general plans. Given those inputs and suggestions from myself and others, we think it is reasonable that a regional alternative would be considered in this Amendment.

We would suggest that the Department might do well to read its own website carrying a document entitled: "Key Challenges and Strategies". It is interesting that p.7 is entitled: "Managing Natural Resources and Biodiversity: Shift from Representational Islands to Sustainable Ecosystems". That is exactly what we have proposed, and which the GP Amendment ignores – review the ecosystem called the Santa Cruz Mountain Range as a whole ecosystem, and then determine where human activities may be situated such that the ecological health of the ecosystem and the human recreational needs work together rather than in competition as the Department seems determined to do at Castle Rock.

Conclusions

We have demonstrated here that:

- The GP Amendment is legally deficient
- The Department and Castle Rock team have consistently and deliberately ignored repeated inputs from the environmental community
- There will be major environmental consequences arising from the proposed developments at Partridge Farm if they are implemented
- The lofty ideals preached in the official website have still not filtered down to the working level
Yet, there are ways to proceed - for instance, the Department’s own website, as indicated above, contains many of the ideas that would allow it to move forward and more effectively implement the Department’s mission. In the same website document referred to above, section 8 is entitled: “Create a New Department Image”, and bullet d. says: “Engage the public in stewardship as well as in the enjoyment of the resources”. We in the environmental community have indicated a willingness, ability and desire to do just that – but to date, have been rebuffed by the Department when it comes to discussion of obviously sacrosanct Department goals regardless of their merit. Developing Partridge Farm, including the walk-in campground proposed in this GP Amendment has become part of Department lore without discussion or analysis over the last several years; it is time for the Department to live up to its website words.

Attachments
• “Discovery and Observations of Two Tree Nests of the Marbled Murrelet”.  
  Steven W. Singer et al.
  Robert A. Askins
• Special Animals of Castle Rock State Park.  
  Castle Rock General Plan

Yours Sincerely,

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Bruce Bettencourt, Friends of Castle Rock State Park  
Joe Rigney, California Native Plant Society  
Grey Hayes, Sierra Club Santa Cruz Group  
Chris Erickson, California Wilderness Coalition  
Verna Jigour, Coast Range Ecosystem Alliance
DISCOVERY AND OBSERVATIONS OF TWO TREE NESTS OF THE MARBLED MURRELET

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Abstract. Two nests of the Marbled Murrelet (Brachyramphus marmoratus) were found in old-growth (300 + years) Douglas-fir (Pseudotsuga menziesii) trees in Big Basin Redwoods State Park, Santa Cruz County, California. These were the third and fourth known North American tree nests, and the first to be found by searching from the ground without the use of radio-telemetry. Ground-search techniques for finding nests are presented. Both nests were in the incubation stage when found. Each was observed from a distance for 15 days and 34 days, respectively. Incubation shifts lasted 24 hr with the adults exchanging duties at dawn. Flight behavior near the nest is described. Corvid predation caused both nests to fail, and may be a problem where murrelets nest in areas of high human usage. After nest failure, each tree was climbed. Both nests were located in the inner canopy, mid-crown portion of the trees. Nest branches were large, moss-covered, horizontal branches that were well shaded. One nest was a previously undescribed type of constructed nest made up of small Douglas-fir twigs and foliose lichens. The other nest was a natural depression in a moss-covered limb. Eggshell fragments were similar to previously described eggs. Nest site characteristics are compared to characteristics of the other known Marbled Murrelet tree nests.

Key words: Marbled Murrelet; Brachyramphus marmoratus; tree nests; old-growth forest; California.

INTRODUCTION

The nest sites of the Marbled Murrelet (Brachyramphus marmoratus) are barely known, with only thirteen nests confirmed to date (Marshall 1988, Rodway 1990). Nests have been found in Alaska, California, Siberia and Japan. Day et al. (1983) and some subsequent authors report an additional nest that we question—an egg found in the office of a Washington logging camp (Anonymous 1927) with few details. Two subspecies of the Marbled Murrelet are recognized—in North America, B. m. marmoratus, and in Asia, B. m. perdix. The North American form is found in summer from the Aleutian Islands and Gulf of Alaska south to Santa Cruz County, California (AOU 1983). Asiatic birds range in summer from the Bering Sea and the Kamchatka Peninsula south along the coast of Siberia, the Sea of Okhotsk and Sakhalin Island, to northern Japan (Sealy et al. 1982).

This paper is confined to the North American subspecies’ use of tree nests, which, from southeastern Alaska southward, is the only type of nest known. The southern portion of the range of B. m. marmoratus is coincident with the Pacific Forest Province Ecoregion (Bailey 1980), noted for large, long-lived coniferous trees. Old-growth forests in this ecoregion typically have a canopy height of 50 to 75 m (Franklin and Dymnness 1973) which is much higher than the forests in which B. m. perdix is known to nest.

Evidence is mounting that nests are restricted to old-growth forests. This includes the location of eggshells and grounded flightless young, the intensity of overland flight activity and vocalizations, and the summer distribution of birds at sea, which is primarily off-shore of old-growth forest (Carter and Sealy 1987; Rodway 1990; Pa-
tion and Ralph, in press). Although murrelets commonly use coastal old-growth forests during the breeding season, they are secretive near the nest. Only four tree nests have been found in North America. The first tree nest was found accidentally in an old-growth Douglas-fir (Pseudotsuga menziesii) in Big Basin Redwoods State Park, Santa Cruz County, California, in 1974 (Binford et al. 1975). The second tree nest was found in an old-growth mountain hemlock (Tsuga mertensiana) near Kelp Bay, Baranof Island, southeastern Alaska in 1984 (Quinlan and Hughes 1990). The latter nest was found by radio-tagging birds captured at sea. We report here the discovery of the third and fourth North American tree nests in old-growth Douglas-fir in Big Basin Redwoods State Park, California. Each nest was found by ground-search techniques without using radio-telemetry.

STUDY AREA

Big Basin Redwoods State Park (37°10'N, 122°13'W) is approximately 30 km northwest of Santa Cruz, California in the Santa Cruz Mountains. Most of the range's original old-growth redwood forest was logged around 1900. However some stands remain, primarily in state or county parks, and many have breeding murrelets (Paton and Ralph, in press).

Approximately 1,000 ha of Big Basin Redwoods State Park are old-growth redwood forest (Hill and Hill 1927). Park headquarters, at 300 m elevation, is located in the center of this area approximately 8.5 km from the ocean. Both 1989 nests, as well as the 1974 nest (Binford et al. 1975) were less than one km from park headquarters.

Big Basin is located in the southern part of the Redwood Forest Section of the Pacific Forest Province Ecoregion (Bailey 1980), where the dominant tree species are coast redwood (Sequoia sempervirens) and Douglas-fir. Understory species include tan oak (Lithocarpus densiflora), California wax myrtle (Myrica californica), and a shrub layer primarily of evergreen huckleberry (Vaccinium ovatum) (Thomas 1961).

The region has a cool Mediterranean climate with high humidity, low average summer temperatures, and mild winters. The summers have morning and evening coastal fog or low clouds. Annual precipitation of 125–150 cm is almost entirely rain, with 90% occurring between November and May (Donley et al. 1979).

METHODS

We looked for nests in the old-growth redwood forest using ground-search techniques. We concentrated on areas where birds had been seen flying silently below the canopy around dawn, when murrelets are most active in the forest (Paton et al. 1989). Location of the first nest took seven days. First, a tree in the Opal Creek Picnic Area was closely observed because it had characteristics of the 1974 nest tree described by Binford et al. (1975). It was an old-growth Douglas-fir with large diameter, nearly horizontal branches and natural platforms within the live crown. On 3 June 1989, a few minutes before sunrise (at 04:41 PST), one murrelet was seen flying out of the tree. On 8 June at 04:50, a murrelet was observed landing on a branch. A few seconds of soft low vocalizations were heard, then a murrelet left the same branch. Finally, on 10 June, an adult murrelet was seen sitting on the nest. A second nest, 1.25 km southwest of the first, was found near the park sewage treatment plant bordering Waddell Creek on 28 June using similar procedures.

Observation points were located 40 m or more from each nest and partially screened by trees. Equipment used to make observations consisted of a video camera and recorder on a 25.4-cm Meade telescope for daytime activity, and a Javelin night-viewing device with a 500-mm telephoto lens and a 2× tele-extender mounted on a video camera with recorder for twilight and nocturnal activity. Observations were generally carried out from 45 min before dawn to 45 min after sunset on the Opal Creek nest between 10 June and 24 June, and on the Waddell Creek nest between 28 June and 31 July. Additionally, a few 24-hr observations were made on the Waddell Creek nest. In both nesting pairs, the adults differed in plumage, one being much darker than the other, so that incubation shifts could be accurately determined.

After the nests failed, the Opal Creek and Waddell Creek trees were climbed on 1 and 6 August, respectively. The climber photographed and measured the nests, and collected samples of nest materials, generally conforming to the protocol of Varoujean and Carter (1989). Each nest was left substantially intact.

Tree stand composition was assayed in a 25-m radius circular plot, centered on the nest tree following Varoujean and Carter (1989). One ex-

<table>
<thead>
<tr>
<th>Tree species</th>
<th>&quot;J&quot; Camp Big Basin, California</th>
<th>Kelp Bay Barnegat Is., Alaska</th>
<th>Opal Creek Big Basin, California</th>
<th>Waddell Creek Big Basin, California</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dbh (cm)</td>
<td>167</td>
<td>120</td>
<td>210</td>
<td>196</td>
</tr>
<tr>
<td>Height (m)</td>
<td>61.0</td>
<td>ca. 25</td>
<td>61.2</td>
<td>76.2</td>
</tr>
<tr>
<td>Stage of vigor</td>
<td>Declining (several dead branches)</td>
<td>Declining (top 3 m dead)</td>
<td>Declining (broken top; several dead branches)</td>
<td></td>
</tr>
<tr>
<td>Vertical extent of live crown (m)</td>
<td>27</td>
<td>—</td>
<td>30</td>
<td>50</td>
</tr>
<tr>
<td>Canopy closure (%)</td>
<td>Open canopy</td>
<td>Open canopy</td>
<td>40</td>
<td>25</td>
</tr>
<tr>
<td>Nest branch diameter (cm)</td>
<td>41.0</td>
<td>38.0 (18 cm wood + 20 cm moss)</td>
<td>47.7</td>
<td>36.3</td>
</tr>
<tr>
<td>Nest branch height (m)</td>
<td>45.0</td>
<td>15.5</td>
<td>43.7</td>
<td>38.5</td>
</tr>
<tr>
<td>Direction of branch projection</td>
<td>South</td>
<td>East</td>
<td>North-northwest</td>
<td>Southeast</td>
</tr>
<tr>
<td>Branch position within live crown</td>
<td>Middle</td>
<td>Lower ½</td>
<td>Middle</td>
<td>Middle ½</td>
</tr>
<tr>
<td>Branch condition</td>
<td>Long branch with distal ½ dying</td>
<td>Long healthy limb</td>
<td>Broken stub just distal of nest with several upright projecting limbs</td>
<td>Woody knob just distal of nest with several upright projecting limbs</td>
</tr>
<tr>
<td>Nest distance from trunk (cm)</td>
<td>6.8</td>
<td>124.0</td>
<td>122.0</td>
<td>61.0</td>
</tr>
<tr>
<td>Nest substrate</td>
<td>Moss-covered branch</td>
<td>Moss-covered branch</td>
<td>Natural platform with moss, twigs, dead needles, and lichens</td>
<td>Moss-covered branch</td>
</tr>
<tr>
<td>Nest materials</td>
<td>None</td>
<td>None</td>
<td>Douglas-fir twigs with attached lichens</td>
<td>None*</td>
</tr>
<tr>
<td>Nest dimensions (cm)</td>
<td>9.5 × 6.5</td>
<td>—</td>
<td>16.5 × 14</td>
<td>11.5 × 7.5</td>
</tr>
<tr>
<td>Depth of nest bowl (cm)</td>
<td>1.0-3.0</td>
<td>—</td>
<td>8.0 (3.0 cm due to depression in branch)</td>
<td>2.0</td>
</tr>
<tr>
<td>Departure of nest orientation from branch orientation</td>
<td>30°</td>
<td>—</td>
<td>28°</td>
<td>46°</td>
</tr>
</tbody>
</table>

* Binford et al. 1975.
* Quinlan and Hughes 1990.
* This study.
* At time of collection (see text).

RESULTS

ACTIVITIES AT THE OPAL CREEK NEST

The Opal Creek nest was observed for 15 days. At discovery, the bird was incubating an egg. Incubation duties were shared by both adults, each for 24 hr, confirming Simons (1980). The exchanges took place between 04:26 and 04:41 (PST) each day, with official sunrise between 04:
47 and 04:49. On 24 June, at about 06:30, a Common Raven (Corvus corax) landed on the branch and displaced the adult murrelet. Both birds disappeared from the nest branch. Approximately 15 min later, a raven was seen flying from the direction of the tree carrying what seemed to be a carcass in its bill. The size of the carcass indicated that it was either the embryo or part of the adult. Steller's Jays (Cyanocitta stelleri) were observed picking at eggshell fragments in the nest that same day. On the morning of 25 June, an adult murrelet returned to the nest but did not stay. On 26 June, a large murrelet eggshell fragment was found on the ground below the nest. Periodic observations over the next few weeks showed that no re-nesting occurred.

DESCRIPTION OF THE OPAL CREEK NEST SITE AND TREE

Nest site characteristics are given below and in Table 1.

Location. The tree was located 300 m north of park headquarters in the picnic area east of Opal Creek. An electric power line and a foot trail passed within 10 m of the tree. The nest-tree stand (Table 2) occupied the toe of a hillside and the adjoining alluvial terrace. Slopes ranged from 46% on the hillside to 18% on the terrace. Near the nest tree, the slope averaged 41% towards the west. The closest old-growth trees were two coast redwoods to the northwest, a 200 cm dbh (diameter at breast height) tree at 6.3 m, and a 167 cm dbh tree at 7.5 m.

The nest tree. The main trunk of the nest tree was broken off at about 52 m, and several once-horizontal branches had turned vertical to take the place of the leader (Fig. 1). The tree, estimated to be 300 to 600 years old, had a pronounced lean to the southwest. The nest limb was about 1.5 m long, and extended nearly level to a broken end. Several smaller branches originated from a protuberance at the limb end, including one large branch that immediately turned upwards. A widened platform had formed at this junction. Shading from nearby branches and adjoining trees kept direct sunlight off the nest for all but short periods of time.

The nest. The nest was located on the platform. It was an oval cup with sides and bottom of small Douglas-fir twigs and dead filaments of the epiphytic fruticose lichen, Usnea sp. (Fig. 1). The twigs were approximately 1–4 mm diameter, similar to twigs accumulating naturally on the branch. Attached to many of the twigs were species of foliaceous lichen, including Hypogymnia enteromorpha. Some dried Douglas-fir needles and cone scales were also in the nest. A layer of Antitrichia californica moss, approximately 1.0 cm deep, covered the branch under the nest. Neither droppings nor a ring of excrement, like that described by Binford et al. (1979), were in the nest. This difference is probably due to the presence of a large young in the 1974 nest.

ACTIVITIES AT THE WADDELL CREEK NEST

The Waddell Creek nest was observed nearly continuously during daylight hours and intermittently at night for 34 days. At discovery, the bird was incubating an egg. Incubation and brooding duties were shared by both adults, in 24–hr shifts, with the exchange taking place between 6 and 37 min before sunrise. A chick was first observed on 29 July.

At about 09:00 on the morning of 31 July, while the chick was unattended, a Steller's Jay landed on the nest and removed the chick, apparently killing it. Forty-five minutes later, an adult murrelet returned with a fish, but left shortly after. The nest was observed periodically for the rest of the season, but re-nesting did not occur.

DESCRIPTION OF THE WADDELL CREEK NEST SITE AND TREE

Nest site characteristics are given below and in Table 1.

Location. The tree was located 1.0 km southwest of park headquarters near the east fork of Waddell Creek and within 34 m of a sewage treatment plant. An unofficial hiking trail and a ser-
FIGURE 1. The Opal Creek nest. a. Nest tree with arrow showing nest location. b. Close-up of nest branch with arrow showing nest location. c. The constructed nest as viewed from the trunk looking along the branch to the natural platform. Arrows indicate outside edges of the nest.
vice road passed within 25 and 28 m, respectively, of the nest tree. The area immediately southwest of the tree appeared to have been disturbed 20 to 50 years ago as evidenced by a clump of pole-sized young redwoods, an overgrown dirt road, and the remains of an old wooden bridge.

The nest tree stand (Table 3) occupied the alluvial bench north of the creek and the toe of the adjoining hillside. Slopes varied from 14% to 23% to the south, and 12% to 18% to the east. The slope near the nest tree averaged 24% to the southeast. The closest old-growth trees were two coast redwoods, a 103 cm dbh tree 18.1 m west, and a 137 cm dbh tree 18.4 m southwest.

The nest tree. The trunk of the nest tree was straight and the top intact, although some broken branches occurred near the top (Fig. 2). The nest limb was a live branch with a damaged end. About 12 cm beyond the nest, a large knob projected up from the branch, creating a 27 cm high vertical wall. Branches on the nest tree and nearby trees kept the nest in shade for all but short periods each day. Estimated tree age was 300–600 years.

The nest. The nest was in a mossy depression on the branch, lacking the built-up sides of the other nest (Fig. 2). Underlying most of the nest was a 0.8–1.0 cm layer of moss (Antitrichia californica) with dried Douglas-fir needles, small pieces of bark (2–10 mm across), Douglas-fir cone fragments and seeds mixed in. On the branch surrounding the nest was more moss, the ephytic fruticose lichen, Usnea sp., and other lichens, including Evernia sp. and Parmelia sp. As in the Opal Creek nest, a ring of excrement was lacking. However, five intact droppings were present inside the lip.

DESCRIPTION OF EGGSHELL FRAGMENTS FROM BOTH NESTS

One large eggshell fragment (approximately 18 x 25 mm) and numerous small fragments (mostly less than 3 mm) were collected from the nests (WVFZ 161963 and 161964). Colors and markings were generally similar to those described by other workers (Kiff 1981; Atkinson and Manlow, in press; Reed and Wood, in press). Exceptions are the partially pale turtle green background color of the Waddell Creek egg and pale dull green-yellow background color of both eggs (italicized colors from Ridgway 1912). Colors of spots and splotches not previously described include chestnut brown, aniline black, light seal brown, and olive-gray.

DESCRIPTION OF FLIGHT BEHAVIOR NEAR BOTH NESTS

We observed several distinctive types of flight behavior occurring below the canopy near both nests. This behavior occurred during the morning period of activity, especially in the half hour before dawn. These included:

Tail-chasing. One murrelet flies closely behind another through the canopy at moderate-to-high speed. On one morning three weeks before the discovery of the Opal Creek nest, this behavior was observed six times near the nest tree. On those occasions, another or the same pair was seen flying in the opposite direction along the same course within 15 sec after the first pair flew out of sight.

Buzzing. A single bird flies at a height of 10–30 m through the forest, making a continuous low-pitched buzzing wing sound.

Stall-flight. A low-flying bird or pair hovers over a branch, or lands momentarily, before flying on. This behavior is sometimes associated with tail-chasing.

Fly-bys. A single bird flies silently by the nest tree just outside or through the crown and at approximately the same height as the nest. This was observed frequently at both nests, often occurring 1–2 min prior to and up to several minutes after the dawn exchange.

Both nesting pairs were quite predictable in their flight direction to and from the nest. They used the most direct and least obstructed flight path available. The birds showed a high degree
of maneuverability in take-offs and landings. On one occasion a murrelet was seen flying directly up through the crown of the Opal Creek nest tree from a lower to a higher branch.

At the Opal Creek nest, 19 incubation exchanges were recorded. Most birds arrived from the west and departed to the west, flying over the tops of some younger redwoods on the edge of the clearing. Generally, the murrelets landed on the nest branch near its junction with the trunk and walked towards the nest. Similarly, on departing, birds usually walked towards the trunk before flying from the tree. However, on a few occasions, a murrelet simply dropped off the east side of the nest.

Of the 32 incubation and brooding exchanges recorded at the Waddell Creek nest, all of the arrivals and 94% of the departures were from the south or southwest. Usually, murrelets flew directly up or down Waddell Creek Canyon. Several times departing murrelets flew directly over the sewage treatment plant. At this nest the murrelets typically landed and departed from a point on the limb halfway between the nest and the trunk.

DISCUSSION

The Opal Creek nest is a new type of nest for the North American subspecies, being a cup constructed of twigs and lichens. The three other tree nests were depressions on moss-covered branches. The Asiatic subspecies uses constructed nests, but has not been observed constructing them. A nest found on Sakhalin Island, Siberia, U.S.S.R. (Nechaev 1986), was composed of twigs and small pieces of lichen. It was in the broken top of a larch about 5 m above the ground. The inside dimensions of the nest were 5.5 cm x 3.5 cm, considerably smaller than the Opal Creek nest. We do not know if the Opal Creek nest was constructed by the nesting adults or if it was an abandoned nest of another species. The Band-tailed Pigeon (Columba fasciata), which breeds in Big Basin, constructs nests of similar materials and similar dimensions. However, the incubating murrelet was observed, on at least one occasion, to break off a twig and add it to the nest, and on several occasions, to adjust the positions of existing twigs. At the Waddell Creek nest, the incubating bird also placed twigs, needles, moss, and lichen from the surrounding branch around the nest, although no evidence of nest construction was in place when the tree was climbed. The North American subspecies has now been shown to nest in depressions on the ground surface (Simons 1980, Hirsch et al. 1981), in rock cavities on the ground (Day et al. 1983, Johnston and Carter 1985), on moss-covered branches of old-growth conifers (Binford et al. 1975; Quinlan and Hughes, 1990), and in constructed nests on the branches of old-growth trees (this study).

The four known North American tree nests (Table 1) shared the following characteristics: (1) the tree was in an open canopy stand; (2) the tree was >120 cm dbh (old-growth); (3) the tree was in a declining state of vigor; (4) the nest was within the middle to lower part of the live crown; (5) moss grew on the nest branch; (6) the nest branch was partially shaded; and (7) the nest branch was approximately horizontal with a diameter (including associated moss) of at least 36 cm.

The three Big Basin nest trees were 300–600 years old and had nest limbs greater than 36 cm in diameter. The time required to grow a horizontal branch of this thickness may determine the minimum age at which a tree is suitable for nesting. Conifers in the Pacific Northwest can acquire some old-growth characteristics at 175 years (Franklin et al. 1981). However, the large branches or horizontal platforms that murrelets in the Santa Cruz Mountains apparently need may not be acquired until trees are much older.

Recreational facilities, such as picnic areas and visitor service facilities, may interfere with the nesting success of Marbled Murrelets. Both 1989 nests were in such areas. Although incubating birds only rarely showed behavior suggesting agitation from human presence or noise, they may have been indirectly affected by supplemental

FIGURE 2. The Waddell Creek nest. a. The nest tree with arrow showing nest location. b. The nest, a mossy depression in the branch, as viewed from the trunk looking outward toward the vertical "wall" at the distal end of the branch. Arrows indicate the outside edges of the nest. White flecks are pieces of eggshell or egg membrane. c. Close-up of nest branch with arrow showing nest location.
food items (table scraps and garbage) made available to potential nest predators. Both Steller’s Jays and Common Ravens have been observed feeding from garbage cans in the Opal Creek picnic area. Ravens, which did not nest in the park prior to 1987 (D. Suddjian, pers. comm.) nested successfully near the picnic area in 1989. Elsewhere, unusually large corvid populations have been noted in picnic areas and campgrounds where garbage is available (Gaines 1977, Beedy and Granholm 1985). Work done in Big Basin by Orr (1942) found a correlation between the higher numbers of Steller’s Jays in campgrounds and the reduced number of passerine birds there. Now that Steller’s Jays and Common Ravens are known to prey on Marbled Murrelet eggs and nestlings (this study), visitor activities that favor corvid populations should be minimized. The discovery of additional nests is needed to elucidate the problem and propose a solution.

To aid researchers in locating nests, we summarize here our ground-search techniques:

1. Survey old-growth stands in the breeding season, during the two-hour period around sunrise, for murrelets flying below the canopy. Special attention should be paid to those birds flying silently or making the “buzzing” wing sound.

2. Within a suitable stand, select a large tree for detailed surveillance. Suitable trees have large live horizontal branches or platforms in the inner canopy. The presence of a knob or vertically-projecting limb on the potential nest branch may also be important. All three of the Big Basin nests were located close to a vertical projection formed by either the trunk or a vertical limb.

3. Find an observation point with a view of the live crown with as much sky as possible in the background. Closely observe the tree, and the air space surrounding it, for the two-hour period centered around sunrise. Look for murrelets flying to or from the tree. In the two nests that we discovered, the exchange of incubation duties occurred in the period from 1–57 min before sunrise.

4. Once a murrelet has been seen flying into or from a tree with suitable branches, a nest is possible. Landings or take-offs are difficult to observe in the pre-dawn light, so repeated observations and/or multiple observers may be needed to pinpoint the specific branch the birds are using.

5. Once the branch has been found, look for a nearby vantage point, such as a steep slope, from which to view the top of the suspected nest branch. Observation of an adult murrelet or nestling on the branch during the day will confirm the nest.

ACKNOWLEDGMENTS

We extend special thanks to G. Strachan and R. Burton who helped find the nests, to M. Nixon who climbed both nest trees, and to B. Collom who observed raven predation at the first nest. We are grateful for the able field assistance provided by J. Scheir, D. Craig, R. Burton, and B. Keitt. We thank M. Bourrell and C. Vigno for identifications of moss and lichens; K. Nelson, T. Simons, and an anonymous reviewer for helpful comments on earlier drafts of the manuscript; and S. Miller for assistance in preparation of the manuscript. We gratefully acknowledge the logistical and/or financial assistance received from the California Department of Parks and Recreation (especially the staff of Big Basin Redwoods State Park), the U.S. Fish and Wildlife Service, the U.S. Minerals Management Service, the Oregon Cooperative Wildlife Research Unit, the California Academy of Sciences, D. Brimm, H. Carter, D. Costa, H. Hanna, M. Nastlind, and H. Scheir.

LITERATURE CITED


Ridgway, R. 1912. Color standards and color nomenclature. Published by the author, Washington, DC.


A Seabird That Depends on Ancient Forests

The most unlikely old-growth species is the Marbled Murrelet, a small seabird that nests on the branches of massive conifers in coastal forests from northern California to Alaska. The nesting behavior of this species was an enigma during most of this century. Marbled Murrelets were often seen far inland during the breeding season, but no nests were discovered.45 As early as 1905 they were observed flying over forests, however. At the foot of Mount Baker in Washington, W. L. Dawson wrote that “having risen before daybreak for an early bird walk, on the morning of May 11, 1905, I heard voices from an invisible party of Marbled Murrelets high in the air as they proceeded down the valley as though to repair to the sea for the day’s fishing.”46 Other observers saw birds carrying fish over inland forests, or found eggs, nestlings, or stunned adults with brood patches in the debris left after old-growth forests were logged. Still, no nests were found.
In 1961 the first nest of a Marbled Murrelet was discovered on a lichen-covered branch of a relatively small larch tree in Siberia. The first North American nest was not discovered until 1974, when a tree surgeon cutting dangerous branches from trees in a campground in Big Basin Redwoods State Park in California found a chick squatting on a large, flat branch of an ancient Douglas-fir. The downy chick was sitting in a bowl-like depression on the top of the limb, 150 feet (45 m) above the ground. Like the nests of many seabirds, the murrelet nest was surrounded by a ring of droppings and reeked of fish.

Nearly all of the nests discovered since then have also been on wide branches high above the ground in ancient forest. Marbled Murrelets nest on the ground in treeless or almost treeless areas of northern Alaska, but only a small proportion of the population lives in such areas. The only ground nest found in a forest was nestled in the interlacing roots of a large hemlock tree in southeastern Alaska, but it was perched at the top of a 36-foot (11-meter) cliff, effectively suspended above the forest floor.

The odd (for a seabird) nesting site of the Marbled Murrelet explains its unusual breeding season plumage. Like related species of alcids (auks), Marbled Murrelets are blackish above and white below during the winter. But unlike other species, they molt to a mottled brown plumage, above and below, during the breeding season. Their coloration is effective camouflage for an incubating bird surrounded by the reddish brown bark of a Douglas-fir or hemlock. The related Kittlitz's Murrelet also nests at solitary inland sites rather than in large colonies. It nests on the ground, however, in loose rock on talus slopes, and its breeding plumage is mottled light gray, which matches this background.

Marbled Murrelets are usually found in forests with large trees that are older than 200 years. They nest in sites dominated by Sitka spruce and western hemlock in British Columbia, and coastal redwood in California. Nests are usually located on a large horizontal platform (such as a wide, flat branch) with sufficient moss to accommodate a nest depression, and with cover overhead and easy accessibility for landing birds coming in from the side. On islands in Prince William Sound, Alaska, murrelets nest in trees that are considerably smaller than nest trees farther south in British Columbia or California, but these are still old trees with flat, moss-carpeted branches.

Territorial chases have been observed in murrelet nesting areas, indicating that good nesting sites may be in short supply. Also, birds visit the nest-
ing areas during the winter months, long before the breeding season. Visits to the nesting areas in winter could be important for locating mates, but they might also reflect the importance of defending good nest sites. Territorial chases have occasionally been seen in nesting areas in the fall and winter.

Another indication of the importance of nesting areas is the distribution of Marbled Murrelets in coastal waters during the breeding season. They usually feed in protected waters (bays, fjords, or passageways between islands) near ancient coniferous forest, and they have disappeared in regions of Oregon and California where nearly all of the old-growth forest has been harvested. Most nest sites are within 40 miles (64 km) of the coast, so relatively easily harvested coastal forests are critically important for these seabirds.

Marbled Murrelets are also vulnerable to changes in their coastal feeding areas. Although they sometimes feed on fish in freshwater lakes near the coast, they primarily feed in shallow bays and estuaries where their favored prey, sand lance and surf smelt, are common. Large numbers of Marbled Murrelets have been caught in gill nets in intensively fished coastal waters of British Columbia and Alaska. Also, the concentration of these murrelets near the coast makes them vulnerable to oil spills. The Exxon Valdez spill killed about 8,400 Marbled Murrelets (3 percent of the population of this species in Alaska).

Like many other habitat specialists, the Marbled Murrelet has suffered population declines, and since 1990 it has been listed as a threatened species in British Columbia, Washington, Oregon, and California. Historical records and survey data indicate severe declines in Alaska, British Columbia, Washington, Oregon, and California. Also, there is evidence that reproductive rates are too low to sustain the population. In late summer, only 1–3 percent of the birds in coastal feeding areas have the distinctive juvenile plumage, which is a much lower percentage than in the populations of other well-studied alcids. Using data on the proportion of juveniles in several murrelet populations and estimates of annual mortality, Steven Beissinger developed a model that predicts that the Marbled Murrelet population is declining at a rate of at least 4–6 percent each year. More direct evidence for a recent population decline comes from Christmas Bird Counts for coastal Alaska, which indicate that the population dropped in this region by about 50 percent between 1972 and 1991. Moreover, systematic boat
surveys in Clayoquot Sound off Vancouver Island, British Columbia, showed that the murrelet population declined by 40 percent between 1982 and 1993. Substantial amounts of old-growth forest have been harvested in the area around this sound, particularly at low elevations where murrelets nest.

The Marbled Murrelet has specialized requirements both for feeding and nesting, and its population is probably declining for several reasons, but its dependence on old-growth forest makes it particularly vulnerable. Intensive clearcutting of old-growth forest along the coast has directly eliminated nesting habitat in many regions. Clearcutting may also indirectly degrade remaining stands of old-growth habitat by creating forest edge that attracts such predators as Common Ravens and Steller's Jays. Murrelets nesting near clearcuts and other openings may lose their eggs or young to these nest predators. Of the 32 nests that were monitored by researchers at numerous locations along the Pacific Coast between 1974 and 1993, 72 percent were unsuccessful, and the leading cause of nest failure was predation of eggs or chicks. Nest predation may be particularly frequent near campgrounds and picnic areas that attract ravens, crows, and other predators. This problem is especially serious in California, where many of the ancient redwood forests are in state or national parks.

The potential impact of nest predators on Marbled Murrelet was recently tested in an ingenious study in coastal Washington and Oregon. Because real murrelet nests are so difficult to find, the researchers used artificial nests. These were located in typical Marbled Murrelet nesting sites: close to the trunk on large, moss-covered branches protected by overhanging foliage. Plastic eggs that were painted to resemble murrelet eggs, and mounted (stuffed) chicks or live domestic pigeon chicks were placed in these artificial nests. The nests were monitored with video cameras triggered by motion detectors. A high proportion of the nests were visited by predators: 75 percent at the Washington sites and 77 percent at the Oregon sites. Predation rates were higher near campgrounds and towns primarily because of the higher density of American Crows and Steller's Jays at these sites. These results, and the results of observations of real nests, indicate that old-growth areas remote from human activities should be protected because they provide safer nesting sites. Also, crow and jay populations near campgrounds and other centers of human activity might be reduced by cutting off their access to garbage and other sources of food provided by people.
### Table 2. Special Animals Of Castle Rock State Park

<table>
<thead>
<tr>
<th>COMMON NAME</th>
<th>SCIENTIFIC NAME</th>
<th>LEGAL STATUS&lt;sup&gt;1&lt;/sup&gt;</th>
<th>OCCURRENCE AT UNIT&lt;sup&gt;2&lt;/sup&gt;</th>
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<tr>
<td>Coho salmon</td>
<td>Oncorhynchus kisutch</td>
<td>FT&lt;sup&gt;+&lt;/sup&gt;</td>
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<tr>
<td>Steelhead trout</td>
<td>Oncorhynchus mykiss</td>
<td>FT&lt;sup&gt;+&lt;/sup&gt;</td>
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<td>California red-legged frog</td>
<td>Rana aurora draytonii</td>
<td>CSC, FT</td>
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<tr>
<td>Foothill yellow-legged frog</td>
<td>Rana boylii</td>
<td>CSC</td>
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<tr>
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<td>Ambystoma tigrinum californiense</td>
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<td>X(a)</td>
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<tr>
<td>Leopard frog</td>
<td>Rana peepens</td>
<td>CSC</td>
<td></td>
</tr>
<tr>
<td>Western pond turtle</td>
<td>Clemmys marmorata</td>
<td>CSC</td>
<td>X(a)</td>
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<td>California horned lizard</td>
<td>Phynostomum coronatum frontale</td>
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<td>X(a)</td>
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<tr>
<td>Townsend’s big-eared bat</td>
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<td>Pallid bat</td>
<td>Antrozous pallidus</td>
<td>CSC</td>
<td>X(b)</td>
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<tr>
<td>Spotted bat</td>
<td>Eumops perolis</td>
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<td>Ringtail</td>
<td>Bassariscus astutus</td>
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<td>Mountain lion</td>
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<td>Black-shouldered kite</td>
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<td>Bald eagle</td>
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<td>Northern harrier</td>
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<td>Sharp-shinned hawk</td>
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<td>Cooper’s hawk</td>
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<td>Golden eagle</td>
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<td>Marbled murrelet</td>
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<td>Loggerhead shrike</td>
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<td>Tricolored blackbird</td>
<td>Agelaius tricolor</td>
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<sup>1</sup> Legal status as of 12/92
FE = Listed as endangered by the U.S. Fish and Wildlife Service.
FT = Listed as threatened by the U.S. Fish and Wildlife Service.
FSS = Federal (BLM and USFS) sensitive species.
FC = Candidate species for federal listing - existing biological information is sufficient to support listing, but not yet proposed.
CE = Listed as endangered by the State of California.
CT = Listed as threatened by the State of California.
CP = California Protected.
CSC = State of California Species of Special Concern.

<sup>2</sup> Occurrence at Unit
PRES = Recently observed in the park.
PROB = Likely to be found in the park if looked for; not documented since 1979.
POSS = Range of species may include the park during at least part of the season; some species documented in 1979
but current presence in park is questionable.
(a) = Species documented to occur in the park in 1979.
(b) = Species with no known documentation at the park.

<sup>3</sup> Species extirpated from San Lorenzo River system.
No attempt was made to determine the occurrence of the invertebrates in the park.
July 28, 2000

California State Park and Recreation Commission
Northern Service Center
1725 23rd Street Suite 200
Sacramento, Ca 95816

RE: Castle Rock State Park General Plan Amendment
Walk-in Campsites at Partridge Farm

Having read the EIR and General Plan Amendment for Castle Rock State Park, it was quite noticeable that references were made repeatedly in the mitigation sections to 'interpretation and education of visitors, department enforces regulations, department will assess movement, park rules and regulations will be strictly enforced, no campfires/nighttime activity allowed, modify, review.' Who is going to do that?

Rather than adding these campsites and their additional hazards to the area, it would seem more prudent to increase the ranger force for the entire park. That would be of service to more visitors and protect the park at the same time. The amendment and EIR for the proposed campsites relies on supervision which is not available.

Sincerely,

[Signature]
Karen Laudon
James Laudon
Sylvia Sippel
13456 Indian Trail Road
Los Gatos, Ca. 95033
August 8, 2000

Robert Ueltzen
Department of Parks and Recreation
1725 - 23rd Street, Suite 200
Sacramento, CA 95816

Subject: Castle Rock State Park General Plan
SCH#: 1997121108

Dear Robert Ueltzen:

The State Clearinghouse submitted the above named Supplemental EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on August 7, 2000, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project’s ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

“A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation.”

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Terry Roberts
Senior Planner, State Clearinghouse

Enclosures
cc: Resources Agency
### Project Details

**SCH#** 1997121108  
**Project Title** Castle Rock State Park General Plan  
**Lead Agency** Parks and Recreation, Department of  

**Type** SIR  Supplemental EIR  
**Description** An amendment to the adopted general plan for Castle Rock State Park. The amendment proposes adding walk-in campsites at Partridge farm area.

### Lead Agency Contact

<table>
<thead>
<tr>
<th>Name</th>
<th>Robert Ueltzen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agency</td>
<td>Department of Parks and Recreation</td>
</tr>
<tr>
<td>Phone</td>
<td>916 323-0975</td>
</tr>
<tr>
<td>Address</td>
<td>1725 - 23rd Street, Suite 200</td>
</tr>
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### Project Location

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### Proximity to:

- **Highways**: 9,35,236  
- **Airports**:  
- **Railways**:  
- **Waterways**: San Lorenzo River  
- **Schools**:  
- **Land Use**: Castle Rock State Park  

### Project Issues

- Archaeologic-Historic  
- Forest Land/Fire Hazard  
- Geologic/Seismic  
- Public Services  
- Recreation/Parks  
- Soil Erosion/Compaction/Grading  
- Traffic/Circulation  
- Vegetation  
- Wildlife  

### Reviewing Agencies

- Resources Agency  
- Department of Conservation  
- Department of Fish and Game, Region 3  
- Department of Forestry and Fire Protection  
- Office of Historic Preservation  
- Department of Water Resources  
- California Highway Patrol  
- Caltrans, District 4  
- Caltrans, District 5  
- Regional Water Quality Control Board, Region 2  
- Native American Heritage Commission  
- State Lands Commission  

### Dates

- **Date Received**: 06/21/2000  
- **Start of Review**: 06/22/2000  
- **End of Review**: 08/07/2000  

---

*Note: Blanks in data fields result from insufficient information provided by lead agency.*
Notice of Completion

Project Title: General Plan Amendment

Lead Agency: DEPT. OF PARKS AND RECREATION
Mail Address: 1725 23RD STREET, SUITE 200
City: SACRAMENTO

Contact: ROBERT UELTZEN
Phone: (916)323-0975
County: SACRAMENTO

Project Location

County: Santa Cruz, Santa Clara
Cross Streets: State Highways 9 & 35
Assessor's Parcel No: State Highway # 9, 35, 236
Within 2 miles: Waterways: San Lorenzo River

Document Type

CEQA: [X] Supplmnt/Subsequent
NEPA: [ ] NOI
Other: [ ] Final Document

State Action Type

State Park Unit Development
State Park Unit General Plan
State Park Unit GP Amendment

Development Type

Campground
Day-Use Area
Water Facilities

Project Issues Discussed in Document

Agricultural Land
Air Quality
Archeological/Historic
Coastal Zone
Drainage/Runoff
Economics/Jobs
Flooding
Forestry/Wildland Fire
Geologic/Seismic
Minerals
Noise
Public Services/Facilities
Recreation/Parks
Schools
Septic Systems/Sewer Capacity
Soil Erosion/Compaction/Grading
Solid Waste
Toxic/Hazardous
Traffic/Circulation
Vegetation
Water Quality

Present Land Use/Zoning/General Plan Use

Castle Rock State Park

Project Description

AN AMENDMENT TO THE ADOPTED GENERAL PLAN FOR CASTLE ROCK STATE PARK. THE AMENDMENT PROPOSES ADDING WALK-IN CAMPSITES AT PARTRIDGE FARM AREA.

Note: State Clearinghouse will supply the SCH # upon submission of document. ERS Unnumbered Form, Revised January 1992
CALIFORNIA ENVIRONMENTAL QUALITY ACT
NOTICE OF DETERMINATION

TO: Office of Planning and Research
1400 Tenth Street, Room 121
Sacramento, CA 95814

FROM: California Department of Parks and Recreation
P.O. Box 942896
Sacramento, CA 94296-0001

SUBJECT: Filing of Notice of Determination in compliance with Section 21108 of the Public Resources Code.

Project Title: GENERAL PLAN AMENDMENT

State Clearinghouse Number: 1997121108

Contact Person: ROBERT UELTZEN Phone Number: (916) 323-0975

Project Location: CASTLE ROCK STATE PARK, SANTA CRUZ COUNTY

Project Description: AMEND THE ADOPTED GENERAL PLAN FOR CASTLE ROCK STATE PARK TO ALLOW FOR THE DEPARTMENT TO PROCEED WITH SITE PLANNING AND THE DEVELOPMENT OF ABOUT TWENTY WALK-IN CAMPSITES AND APPURtenant FACILITIES IN THE PARTRIDGE FARM AREA.

The California Department of Parks and Recreation has approved the project and has made the following determinations regarding the project:

1. ☑ The project will not have a significant effect on the environment.
   ■ The project may have a significant effect on the environment.
2. ☑ A Negative Declaration was prepared and adopted pursuant to the provisions of the California Environmental Quality Act (CEQA).
   ■ A Final Environmental Impact Report has been completed in compliance with CEQA and has been presented to the decision-making body of this Department for review and consideration of the information contained in the Final EIR prior to approval of the project.
3. Mitigation measures ■ were ☑ were not made conditions of project approval.
4. A Statement of Overriding Considerations ☑ was ■ was not adopted for this project.
5. Findings ■ were ☑ were not made on environmental effects of the project.

The EIR or Negative Declaration and record of project approval may be examined at the Resource Management Division, California Department of Parks and Recreation located at 1416 Ninth Street, Room 917, Sacramento, CA.

RECEIVED
JAN 2 6 2001
STATE CLEARINGHOUSE
Date Received for Filing

Signature MARY R. WRIGHT

CHIEF DEPUTY DIRECTOR
Title

01/18/01
Date
STATEMENT OF FINDINGS
MITIGATION MONITORING

CULTURAL RESOURCES
Impact
There is a potential significant impact to unrecorded or unknown cultural resources in the Castle Rock Ridge Area.

Mitigation
1. Site specific cultural resource surveys will be conducted in areas proposed for development and where other surface disturbing activities occur in the Lion Caves and the adjacent Castle Rock Ridge areas. No public use facilities will be constructed on or near known prehistoric or historic sites, in accordance with the Department’s resource management directives and professional standards for the treatment of historic properties.

2. A buffer zone will be designated around the facility development area at Partridge Farm to protect the cultural resources and other sensitive habitats and resources.

3. Any modification, maintenance, or improvements to the Partridge House will be done in conformance with the Secretary of Interior’s Standards for the Treatment of Historic Properties.

4. All development and resource management plans will be subject to meeting PRC 5024.5 review requirements. These cultural effect reviews requirements will be met at the time the plans are prepared.

   RESPONSIBILITY: Department Historian/Archeologist
   MONITORING/REPORTING: An evaluation required under PRC 5024.5 is submitted by Department historians or archeologist to the Office of Historic Preservation for their concurrence.

Findings
There remains a potential significant impact to unknown cultural resources if they are vandalized, or inadvertently damaged before they are discovered, recorded, and protected. If mitigation guidelines are followed, there should be no significant impacts to the known cultural resources.

TRAFFIC
Impact
There is a potential traffic hazard at the intersection of the highway and the Partridge farm entrance road.

Mitigation
No mitigation is prescribed at this planning stage. The Department will consult with the Department of Transportation to design a safe access into Partridge Farm area at the time site specific development plans are prepared. An encroachment permit will be required from CalTrans. Road and access improvements will conform to CalTrans standards and specifications when implemented. Possible mitigation is the relocation of the entrance road, construction of deceleration lanes, and construction of turn lanes.

   RESPONSIBILITY: Department project manager
   MONITORING/REPORTING: Project review required as part of the second tier CEQA process. Conformance with CalTrans standards or recommendations will be considered meeting minimum requirements.
Findings
The significance of the impact and appropriate mitigation cannot be determined without an actual design. It is assumed that if the entrance, when it is designed, meets CalTrans standards and specifications, it will be a safe access and egress and there will be no significant impact.

SOILS AND HYDROLOGY
Impact
There is a potential for short-term and long-term impacts to soils (erosion and compaction), drainage patterns (sedimentation), and water quality (turbidity).

Mitigation
The Department proposes to carry out a continuous program of resource monitoring to guide or direct resource management, development, visitor use, and operation. Where impacts or conditions attain a threshold, the Department will determine the action necessary to reduce or avoid the impacts.

RESPONSIBILITY: Santa Cruz District staff
MONITORING/REPORTING: Continuous resource monitoring program.

Findings
The impact significance cannot be determined at this level of planning. The lack of project specific detail precludes quantitative analysis.

GEOLOGY
Impact
There is a potential impact to tafoni.

Mitigation
No climbing will be permitted in the area classified as a natural preserve. The Department will prepare a climbing management plan that will include measures to prevent damage to tafoni from climbing activities outside of the San Lorenzo Headwaters Natural Preserve.

The Department proposes to carry out a continuous program of resource monitoring to guide or direct resource management, development, visitor use, and operation. Where impacts or conditions attain a threshold, the Department will determine the action necessary to reduce or avoid the impacts.

RESPONSIBILITY: Santa Cruz District staff
MONITORING/REPORTING: Preparation and implementation of a climbing management plan

Findings
There remains a potential of vandalism or inadvertent damage to tafoni features. Restrictions on climbing will reduce climbing impacts relative to the existing conditions or threats. There remains a potential for significant impact.

ESTHETICS
Impacts
There is a potential for significant visual impacts as a result of new development in a natural-appearing landscape.

Mitigation
Careful siting, design, and selection of materials can mitigate visual impacts.
1. Parking will be developed and screened by landscaping to help break up surfaces of potential glare and views from the walk-in campsites, highway, and adjacent private properties.
2. Landscaping with native plant species will be provided at the campground perimeter and throughout the walk-in campsites to screen views from parking areas and nearby trails, if needed.
3. Low profile lighting at the restroom building will be at a minimum level necessary for security and safety. Light fixtures that minimize glare will be required and directed downward to minimize light pollution of the dark skies.

   RESPONSIBILITY: Department project manager
   MONITORING/REPORTING: Project review required as part of the second tier CEQA process.

Findings
If mitigation guidelines are followed, there should be no significant impact.

WILDLIFE
Impact
The camping facilities may degrade sensitive plant or animal populations or their habitat.

Mitigation
The Department proposes to carry out a continuous program of resource monitoring to guide or direct resource management, development, visitor use, and operation. Where impacts or conditions attain a threshold, the Department will determine the action necessary to reduce or avoid the impacts.

Site-specific searches for sensitive species of plants and animals will be conducted in areas proposed for development or for other activities. Research and data gathering will be conducted on sensitive species that may use the State Park and the areas proposed or impacted by development. If it is determined that development will significantly impact these species and no mitigation is possible, development will not proceed or be removed.

   RESPONSIBILITY: Santa Cruz District staff
   MONITORING/REPORTING:

Findings
The significance of the impact following mitigation cannot be determined at this level of planning. If mitigation guidelines are followed, impacts should not be significant.