



NOTICE OF PREPARATION

of the Big Basin Redwoods State Park General Plan Supplemental Draft EIR for the Reimagining Big Basin Redwoods State Park Facilities Management Plan and General Plan Amendments

Date: June 16, 2025

To: State Clearinghouse, Responsible and Trustee Agencies, and Interested Individuals and Organizations

Subject: Notice of Preparation of a Supplemental Environmental Impact Report to the 2013 Big Basin Redwoods State Park General Plan Environmental Impact Report (State Clearinghouse No. 2001112104) for the Reimagining Big Basin Redwoods State Park Facilities Management Plan and General Plan Amendments

Lead Agency: California Department of Parks and Recreation
PO Box 942896
Sacramento, CA 94296-0001
Contact: Will Fournier

NOTICE IS HEREBY GIVEN that the California Department of Parks and Recreation (the Department), as the lead agency, is preparing a Supplemental Environmental Impact Report (EIR) to the 2013 Big Basin Redwoods State Park General Plan EIR (State Clearinghouse No. 2001112104) (2013 General Plan EIR) for the proposed Reimagining Big Basin Redwoods State Park Facilities Management Plan and General Plan amendments (proposed project). The Department has prepared this Notice of Preparation (NOP) pursuant to Section 15082 of the California Environmental Quality Act (CEQA) Guidelines. This NOP informs agencies and the public that an EIR is being prepared to address potential impacts resulting from approval and implementation of the Reimagining Big Basin Redwoods State Park Facilities Management Plan and General Plan amendments. Publication of this NOP provides an opportunity for public comments on the potential environmental impacts to be addressed in the Supplemental EIR. Additional information about the proposed project is available at the project's website: <https://reimaginingbigbasin.org/facilities-management-plan/>. The 2013 General Plan and EIR are available online at the following link: https://www.parks.ca.gov/?page_id=21486.

As mandated by State law, your response must be sent at the earliest possible date, but no later than the close of the 30-day NOP review period at **5:00 p.m. on Friday, July 18, 2025**. If you submit comments on the scope of the Supplemental EIR, you will automatically be added to the distribution list for future notices about the proposed project. Please include ***"Big Basin Redwoods State Park General Plan Supplemental EIR"*** as the subject and submit comments via the mailing address listed above or email Reimagining.BigBasin@parks.ca.gov. Please note that all submitted correspondence and comments become part of the public record.

SCOPING MEETING

State Parks will hold a **virtual** scoping meeting at **6:00 p.m. on Thursday, July 10, 2025**, to provide additional information about the Big Basin Redwoods State Park Facilities Management Plan, General



Plan amendments, and Supplemental EIR process and give interested parties an opportunity to comment on the scope and potential environmental effects of the project to be analyzed in the Supplemental EIR. The meeting can be attended remotely via the Zoom platform at the following link:
<https://us06web.zoom.us/j/86539841770?pwd=W1rHl93J2zpiuUuTzGxL7sExZaphk0.1>

Meeting ID: 865 3984 1770

Passcode: 631900

PROJECT LOCATION

Big Basin Redwoods State Park is in the western, coastal portion of the Santa Cruz Mountains between State Route (SR) 1 and SR 9, which both run north to south. The majority of the park is in Santa Cruz County and a small northern portion is in San Mateo County, as shown in Figure 1, *Regional Vicinity*. The park is surrounded by other parks and open space with communities along SR 9. Big Basin Redwoods State Park encompasses approximately 18,200 acres; however, the proposed project focuses specifically on areas along SR 236 and Sky Meadow Road encompassing approximately 5,500 acres. This area in the eastern part of the park is referred to as the Focus Area and is the location of the proposed project (see Figure 2, *Focus Area*).

PROJECT DESCRIPTION

The proposed project includes amendments to the Big Basin Redwoods State Park General Plan and the adoption of the Reimagining Big Basin Redwoods State Park Facilities Management Plan. The proposed General Plan amendments include text changes to provide clarity in consistency of the 2013 General Plan with the facilities envisioned in the proposed Facilities Management Plan and would expand the park boundary to include parcels that the Department is in the process of acquiring to include in the Big Basin Redwoods State Park. The proposed Facilities Management Plan is a planning document designed to guide the stewardship, management, and use of existing and future facilities consistent with the 2013 General Plan. It would provide guidance and direction for implementing the goals and objectives of the 2013 General Plan EIR, the 2022 Reimagining Big Basin Vision Summary, and the 2023 Big Basin Redwoods State Park Cornerstone Document. Additionally, the proposed project would guide the rebuilding of facilities lost in the 2020 CZU Lightning Complex fire that burned 97 percent of the park and most of its facilities.

The proposed project includes proposed facilities and improvement guidance for 19 identified sites in the five proposed zones in the Focus Area. The sites either hosted pre-fire facilities or have otherwise been identified as suitable facility locations based on sensitive habitat avoidance, access considerations, and slope stability. Facilities included in the proposed project include visitor-serving facilities such as picnic areas, amphitheaters, restrooms, interpretation areas, information desks, a café, and camp stores; overnight facilities like camp sites and cabins; tribal facilities like cultural interpretation sites and centers, outdoor workspaces, and lodging; transportation-related facilities like parking lots, electric vehicle chargers, and shuttle infrastructure; utilities infrastructure like water distribution and storage, wastewater collection and treatment, stormwater, electrical and solar facilities, and



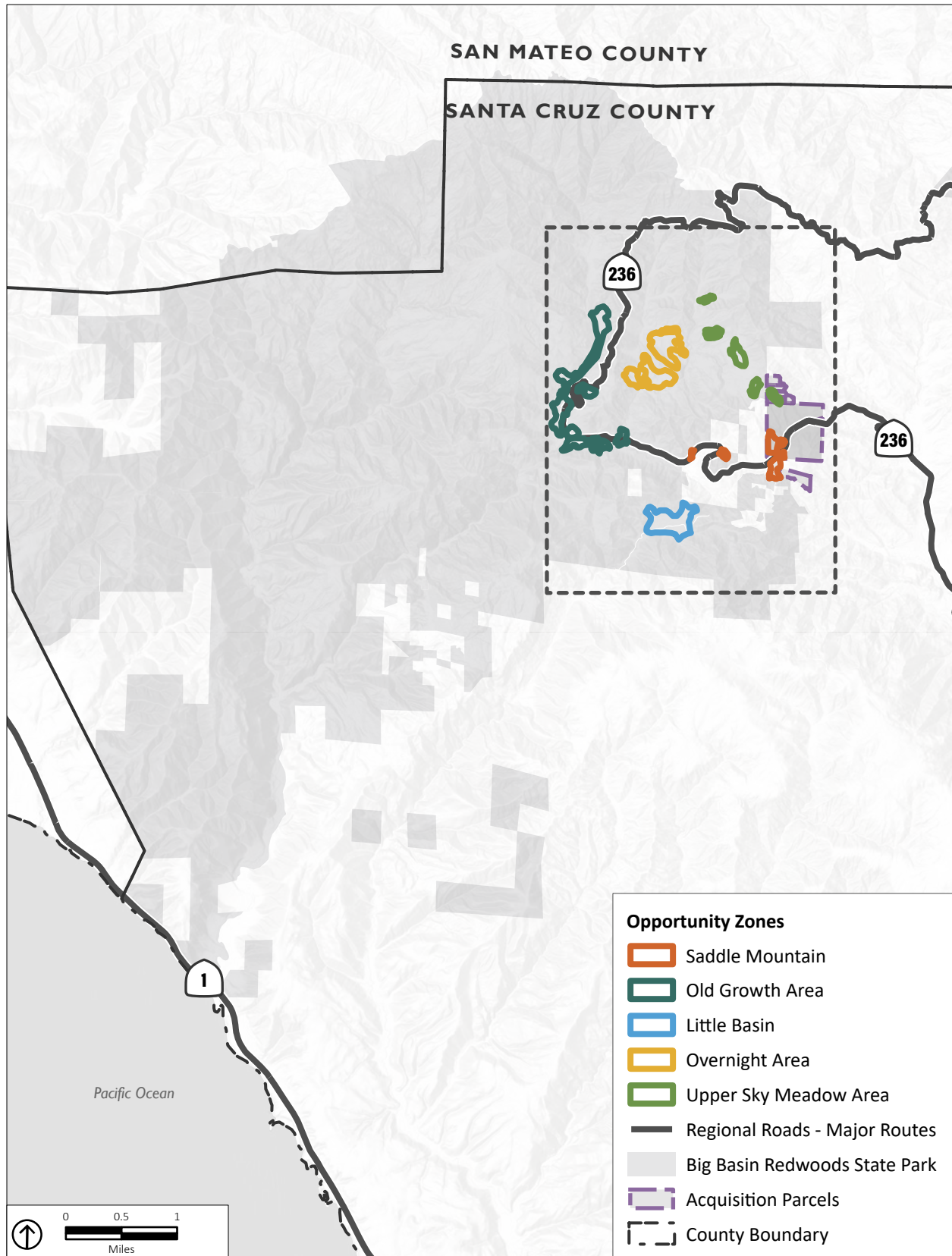
telecommunications; administrative facilities like offices, maintenance shops, and storage; and staff residences. All these facilities would be consistent with the 2013 General Plan and proposed General Plan amendments. Focus Area-wide proposed project components include road and circulation improvements, the introduction of a shuttle program throughout the Focus Area, utility upgrades and replacement, habitat restoration, and an improved emergency response and evacuation plan.

POTENTIAL ENVIRONMENTAL EFFECTS

The Supplemental EIR will determine whether implementation of the proposed project may result in environmental impacts that are new or more severe than those identified in the 2013 General Plan EIR and will use the same significance criteria as used in the 2013 General Plan EIR. CEQA requires that an EIR evaluate alternatives to a project that could reasonably attain the project objectives while reducing any significant impact of the project, as well as considering the “No Project” Alternative (i.e., what could happen if the project were not approved). Attached is an Initial Study comparing the potential environmental effects of the proposed project with those identified in the 2013 General Plan EIR. Based on the analysis completed as part of the attached Initial Study, **biological resources** is the only resource area that will be addressed in the Supplemental EIR.

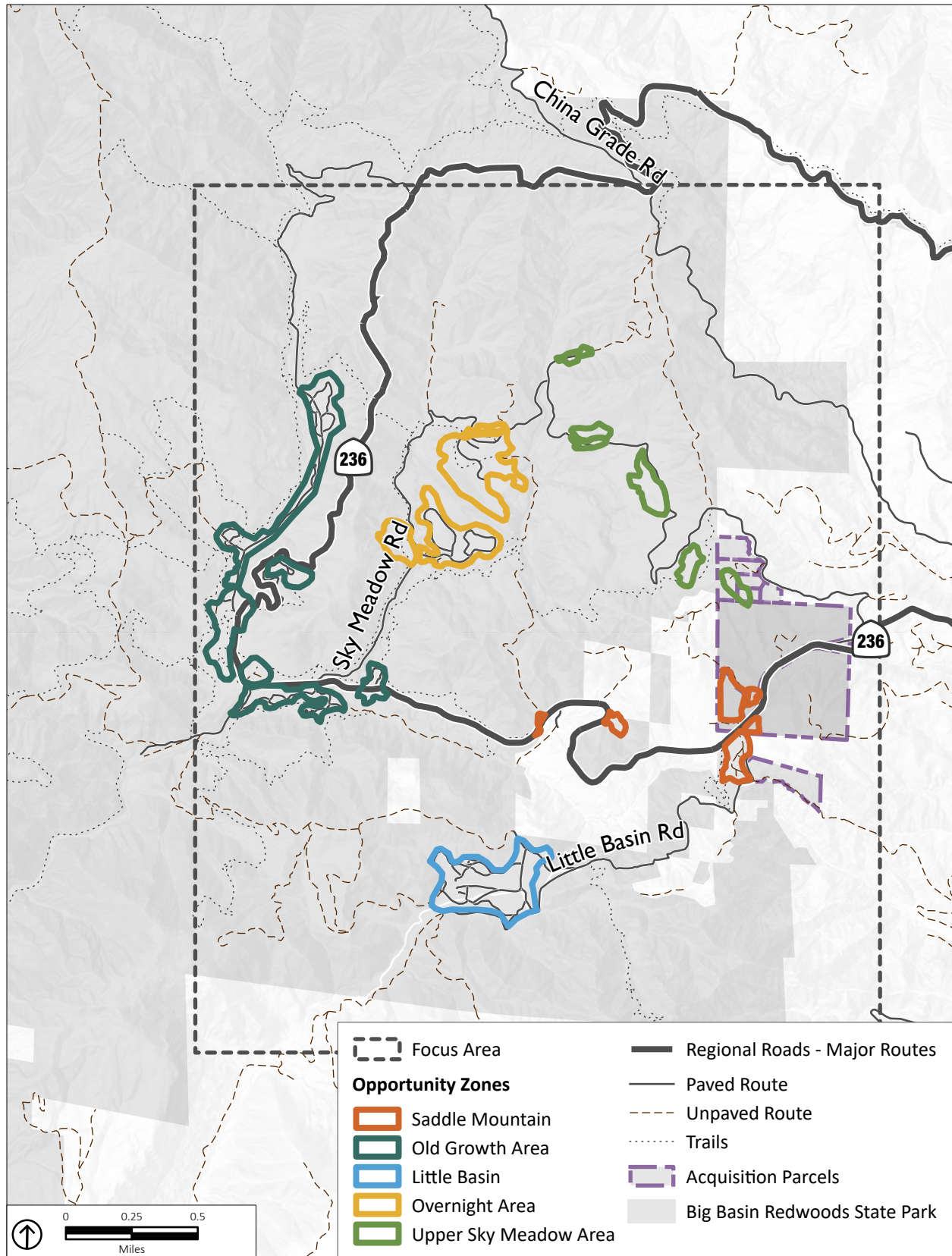
ATTACHMENTS:

- Figure 1: Regional Vicinity
- Figure 2: Focus Area
- Initial Study, Available at the following locations:
 - <https://ceganet.lci.ca.gov/Project/2001112104>
 - Santa Cruz District Headquarters
Henry Cowell Redwoods State Park
303 N Big Trees Road
Felton, CA 95018
 - Boulder Creek Library
13390 W Park Avenue
Boulder Creek, CA 95006



Source: California State Parks, 2025; PlaceWorks, 2025

Figure 1. Regional Vicinity



Source: California State Parks, 2025; PlaceWorks, 2025

Figure 2. Focus Area

June 2025 | Initial Study

REIMAGINING BIG BASIN REDWOODS STATE PARK FACILITIES MANAGEMENT PLAN AND GENERAL PLAN AMENDMENTS

for the California Department
of Parks and Recreation

Prepared for:

**California Department of
Parks and Recreation**

Contact: Will Fourt, Senior Park and Recreation Specialist
Santa Cruz District
303 N Big Trees Road
Felton, CA 95018
831.335.6318

Prepared by:

PlaceWorks

2040 Bancroft Way, Suite 400
Berkeley, California 94704
510.848.3815
www.placeworks.com

This page is intentionally left blank.

INITIAL STUDY

Project: Reimagining Big Basin Redwoods State Park Facilities Management Plan and General Plan Amendments

Lead Agency: California State Parks

Availability of documents: The Initial Study is available for review at:

Santa Cruz District Headquarters
Henry Cowell Redwoods State Park
303 N Big Trees Road
Felton, CA 95018

Boulder Creek Library
13390 W Park Avenue
Boulder Creek, CA 95006

Project Description:

The proposed project includes amendments to the Big Basin Redwoods State Park General Plan and the adoption of the Reimagining Big Basin Redwoods State Park Facilities Management Plan (BBFMP), including:

- Guiding the rebuilding of facilities lost in the 2020 CZU Lightning Complex fire that burned 97 percent of the park and most of its facilities.
- Guiding the stewardship, management, and use of existing and future park facilities according to the proposed BBFMP.
- Amending General Plan text to provide clarity in consistency of the 2013 Big Basin Redwoods State Park General Plan with the facilities envisioned in the proposed BBFMP.
- Expanding the park boundary to include parcels that the Department is in the process of acquiring to include in Big Basin Redwoods State Park.

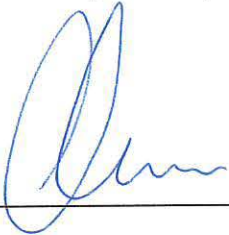
INITIAL STUDY FOR THE REIMAGINING BIG BASIN REDWOODS STATE PARK FACILITIES
MANAGEMENT PLAN AND GENERAL PLAN AMENDMENTS
CALIFORNIA DEPARTMENT OF PARKS AND RECREATION

INITIAL STUDY

A copy of the Initial Study is attached. Questions or comments regarding this Initial Study may be addressed to:

Will Fourn
Santa Cruz District
California State Parks
303 N Big Trees Road
Felton, CA 95018
EMAIL: reimagining.bigbasin@parks.ca.gov

Pursuant to Section 21082.1 of the California Environmental Quality Act, the California Department of Parks and Recreation (Department or State Parks) has independently reviewed and analyzed the Initial Study for the proposed project and finds that these documents reflect the independent judgment of the Department.



Chris Spohrer
District Superintendent

6-16-2025

Date



Linda Hitchcock
Environmental Coordinator

6-16-2025

Date

TABLE OF CONTENTS

1.	INTRODUCTION	1-1
1.1	Introduction and Regulatory Guidance.....	1-1
1.2	Lead Agency	1-4
1.3	Purpose and Document Organization	1-4
1.4	Summary of Findings	1-5
2.	PROJECT DESCRIPTION	2-1
2.1	Project Site Location and Characteristics	2-1
2.2	Planning Background	2-11
2.3	Project Components	2-13
2.4	Project Objectives	2-25
2.5	Related Projects	2-28
2.6	Project Requirements	2-28
3.	ENVIRONMENTAL CHECKLIST	3-1
	Environmental Factors Potentially Affected.....	3-3
	Determination	3-3
I.	Aesthetics	3-5
II.	Agriculture and Forestry Resources	3-12
III.	Air Quality	3-17
IV.	Biological Resources.....	3-24
V.	Cultural Resources	3-32
VI.	Geology and Soils	3-41
VII.	Greenhouse Gas Emissions	3-49
VIII.	Hazards and Hazardous Materials.....	3-53
IX.	Hydrology and Water Quality	3-65
X.	Land Use and Planning.....	3-75
XI.	Mineral Resources.....	3-78
XII.	Noise	3-80
XIII.	Parks and Recreation	3-86
XIV.	Population and Housing.....	3-90
XV.	Public Services.....	3-93
XVI.	Transportation.....	3-95
XVII.	Utilities and Service Systems	3-105
XVIII.	Mandatory Findings of Significance	3-114

TABLE OF CONTENTS

LIST OF TABLES

Table 1	Proposed Park Zones and Sites	2-14
Table 2	Shuttle Information	2-21
Table 3	Calculated Construction Noise Levels at Nearby Receptors	3-83

LIST OF FIGURES

Figure 1	Regional and Vicinity Map	2-3
Figure 2	Focus Area Map	2-4
Figure 3	Proposed Park Zones and Sites	2-15
Figure 4	Shuttle Routes	2-22
Figure 5	CAL FIRE Fire Hazard Severity Zones	3-60

APPENDICES

Appendix A: Standard Project Requirements

Appendix B: Noise

Appendix C: VMT Memorandum

SOURCES

In addition to the technical appendices, all documents cited in this report and used in its preparation are hereby incorporated by reference in this Initial Study. Copies of documents referenced herein are available for review at Santa Cruz District Headquarters, Henry Cowell Redwoods State Park, 303 N Big Trees Road, Felton, CA 95018.

1. INTRODUCTION

1.1 INTRODUCTION AND REGULATORY GUIDANCE

This document is an Initial Study for the Reimagining Big Basin Redwoods State Park Facilities Management Plan (BBFMP) and General Plan amendments (herein together referred to as the “proposed project”) for Big Basin Redwoods State Park (BBRSP), prepared by the California Department of Parks and Recreation (Department) to determine if the proposed project may have a significant effect on the environment. This Initial Study was prepared pursuant to the California Environmental Quality Act (CEQA) (California Public Resources Code [PRC] Sections 21000 et seq.) and CEQA Guidelines (California Code of Regulations Sections 15000 et seq.). The BBFMP builds on the 2013 Big Basin Redwoods State Park General Plan (2013 General Plan) and Environmental Impact Report (EIR),¹ the 2022 Reimagining Big Basin Vision Summary,² and the 2023 Big Basin Redwoods State Park Cornerstone Document.³ The proposed BBFMP would implement a management plan for facilities in the BBRSP to provide guidance and direction for implementing the goals and objectives of the three documents mentioned above.

Pursuant to CEQA Guidelines Section 15051, the Department is the lead agency for the proposed project. Pursuant to Section 15063, *Initial Study*, of the CEQA Guidelines,⁴ an Initial Study can be used to focus an environmental impact report (EIR) on the effects determined to be significant. As described in the Notice of Preparation (NOP), the Department is preparing a Supplemental EIR to the 2013 Big Basin Redwoods State Park General Plan Environmental Impact Report (State Clearinghouse No. 2001112104) (2013 General Plan EIR), which covered the entirety of BBRSP; however, the proposed project focuses specifically on areas along Highway 236 and Sky Meadow Road, including acquisition parcels. This area in the eastern portion of the park is referred to as the Focus Area and is the location of the proposed project, as shown in Figure 2 in the Notice of Preparation (NOP). This Initial Study documents which potential effects of the proposed project are covered by the 2013 General Plan EIR pursuant to

¹ The Big Basin Redwoods State Park General Plan and Environmental Impact Report was completed in 2013. It is the foundational planning document for long-term planning at the BBRSP.

² The Reimagining Big Basin Visioning Process was conducted in 2021-2022 and brought together insights from the public, stakeholders, and Tribal representatives together in a high-level vision and set of guiding principles to inform planning decisions for rebuilding of facilities at the park.

³ The Big Basin Redwoods State Park Cornerstone Document was completed in 2023 and incorporates insights from the Reimagining Big Basin Vision Summary and the effects of the 2020 CZU fire that substantiate relevant revisions and updates to the Park’s General Plan.

⁴ The CEQA Guidelines are found in California Code of Regulations, Title, 14, Section 15000 et seq.

1. INTRODUCTION

CEQA Guidelines Section 15168(c), which states that subsequent activities in a program, “must be examined in the light of the program EIR to determine whether an additional environmental document must be prepared.”

Pursuant to CEQA Section 21166 and CEQA Guidelines Section 15162, when an EIR has been certified or a negative declaration adopted for a project, no subsequent EIR or negative declaration shall be prepared for the project unless the lead agency determines that one or more of the following conditions are met:

- Substantial project changes are proposed that will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- Substantial changes would occur with respect to the circumstances under which the project is undertaken that require major revisions to the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- New information of substantial importance that was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified or the negative declaration was adopted shows any of the following:
 - The project will have one or more significant effects not discussed in the previous EIR or negative declaration.
 - Significant effects previously examined will be substantially more severe than identified in the previous EIR.
 - Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponent declines to adopt the mitigation measures or alternatives.
 - Mitigation measures or alternatives that are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponent declines to adopt the mitigation measures or alternatives.

Where none of the conditions specified in CEQA Guidelines Section 151625 are present, the lead agency must determine whether to prepare a subsequent EIR or whether no further CEQA documentation is required (CEQA Guidelines Section 15162[b]). A Supplemental EIR, rather than a Subsequent EIR, is appropriate where only minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation, and the

⁵ See also Section 15163 of the CEQA Guidelines, which applies the requirements of Section 15162 to Supplemental EIRs.

1. INTRODUCTION

Supplemental EIR need contain only the information necessary to make the previous EIR adequate for the project as revised (CEQA Guidelines Section 15163).

This Initial Study summarizes the conclusions of the 2013 General Plan EIR and discusses whether the conditions described in CEQA Guidelines Section 15162 would occur. This Initial Study identifies the significance criteria and environmental topics for which the proposed project would not create any of the conditions described in CEQA Guidelines Section 15162; all other criteria and topics will be addressed in the Supplemental EIR for the proposed project. Because the proposed project is being compared to the 2013 General Plan EIR, the 2013 CEQA Guidelines Appendix G, *Environmental Checklist*, questions are used to guide the following analysis.

Due to the unique circumstances at BBRSP, the environmental analysis for the proposed project uses a split baseline. When evaluating impacts associated with site occupancy and visitor levels, a historical, pre-fire baseline is used. When evaluating impacts to site conditions, current, post-fire conditions are used as the baseline. Use of a historical baseline and more than one baseline is permissible under Section 15125(a)(1) of the CEQA Guidelines, which states:

“Generally, the lead agency should describe physical environmental conditions as they exist at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, from both a local and regional perspective. Where existing conditions change or fluctuate over time, and where necessary to provide the most accurate picture practically possible of the project’s impacts, a lead agency may define existing conditions by referencing historic conditions, or conditions expected when the project becomes operational, or both, that are supported with substantial evidence. In addition, a lead agency may also use baselines consisting of both existing conditions and projected future conditions that are supported by reliable projections based on substantial evidence in the record.”

1. INTRODUCTION

1.2 LEAD AGENCY

The lead agency is the public agency with primary approval authority over the proposed project. In accordance with CEQA Guidelines Section 15051(b)(1), “the lead agency will normally be an agency with general governmental powers, such as a city or county, rather than an agency with a single or limited purpose.” The lead agency for the proposed project is the California Department of Parks and Recreation (Department or State Parks). The contact person for the lead agency regarding specific project information is:

Will Fourn
Santa Cruz District
California State Parks
303 N Big Trees Road
Felton, CA 95018
EMAIL: reimagining.bigBasin@parks.ca.gov
(831) 335-6318

1.3 PURPOSE AND DOCUMENT ORGANIZATION

The purpose of this document is to evaluate the potential environmental effects of the proposed project. This Initial Study summarizes the conclusions of the 2013 General Plan EIR and discusses whether the conditions described in CEQA Guidelines Section 15162 would occur. This Initial Study identifies the significance criteria and environmental topics for which the proposed project would not create any of the conditions described in CEQA Guidelines Section 15162; all other criteria and topics will be addressed in the Supplemental EIR for the proposed project.

This document is organized as follows:

- **Chapter 1 - Introduction.** This chapter provides an introduction to the project and describes the purpose and organization of this document.
- **Chapter 2 - Project Description.** This chapter describes the reasons for the project, scope of the project, and project objectives.
- **Chapter 3 - Environmental Checklist.** This chapter identifies the significance of potential environmental impacts as compared to the 2013 General Plan EIR, explains the environmental setting for each environmental issue, and evaluates if the potential impacts identified in the CEQA Environmental (Initial Study) Checklist warrant review in the Supplemental EIR.

1.4 SUMMARY OF FINDINGS

Chapter 3, *Environmental Checklist*, of this document contains the Environmental (Initial Study) Checklist that identifies the potential environmental impacts (by environmental issue) and a brief discussion of each impact resulting from implementation of the proposed project. The sections in Chapter 3, *Environmental Checklist*, indicate the baseline conditions considered for each environmental topic.

When compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR for the following issues: aesthetics, agricultural resources, air quality, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation/traffic, and utilities and service systems.

For biological resources, the uncertainty about the marbled murrelet (*Brachyramphus marmoratus*), as described in the 2013 General Plan EIR, remains. As such, the Draft Supplemental EIR will further evaluate this significance criterion related to biological resources.

1. INTRODUCTION

This page is intentionally left blank.

2. PROJECT DESCRIPTION

This chapter provides a detailed description of the proposed project, including the location, setting, and characteristics of BBRSP; components of the proposed BBFMP and General Plan amendments; and required permits and approvals. Additional descriptions of the environmental setting discussions are included in the sections of Chapter 3, *Environmental Checklist*, by topic.

2.1 PROJECT SITE LOCATION AND CHARACTERISTICS

PROJECT LOCATION

BBRSP is in the western, coastal portion of the Santa Cruz Mountains between Highways 1 and 9, which both run north to south, with most of the park in Santa Cruz County and a small northern portion in San Mateo County, as shown in Figure 1, *Regional and Vicinity Map*. The park is surrounded by other parks and open space with communities along Highway 9. Pescadero Creek Park and Portola Redwoods State Park are north; Castle Rock State Park and San Lorenzo Headwaters Natural Preserve are northeast; the neighborhoods along Highway 9 are east; Henry Cowell Redwoods State Park is southeast; Swanton is southwest; Año Nuevo State Park and State Marine Conservation Area, Highway 1, and the Pacific coastline is west; and Butano State Park is northwest of BBRSP. Most of the land between BBRSP and the other state parks is undeveloped and privately owned for timber production. Nearby communities include San Lorenzo Park, Riverside Grove, Redwood Grove, Boulder Creek, Brookdale, Ben Lomond, Glen Arbor, and Felton along Highway 9 and Swanton along Highway 1. Highway 236 (Big Basin Way) is an 18-mile C-shaped loop route that connects to Highway 9 and provides access to BBRSP from the east. There is no connecting road through the park for public vehicle access between Highway 1 and Highway 236. BBRSP is approximately 20 miles southwest of the City of San José, approximately 20 miles north of the City of Santa Cruz, and approximately 40 miles south of the City and County of San Francisco.

Most of the park is made up of old-growth and previously logged coast redwood forests mixed with other conifers, oaks, and chaparral. BBRSP encompasses approximately 18,200 acres (28.44 square miles); however, the proposed project focuses specifically on areas along Highway 236 and Sky Meadow Road encompassing approximately 5,500 acres. This area in the eastern portion of the park is referred to as the Focus Area and is the location of the proposed project; this area is mapped in Figure 2, *Focus Area Map*.

The Focus Area includes seven parcels planned for acquisition in the Saddle Mountain area. State Parks currently leases these properties from Sempervirens Fund and is pursuing

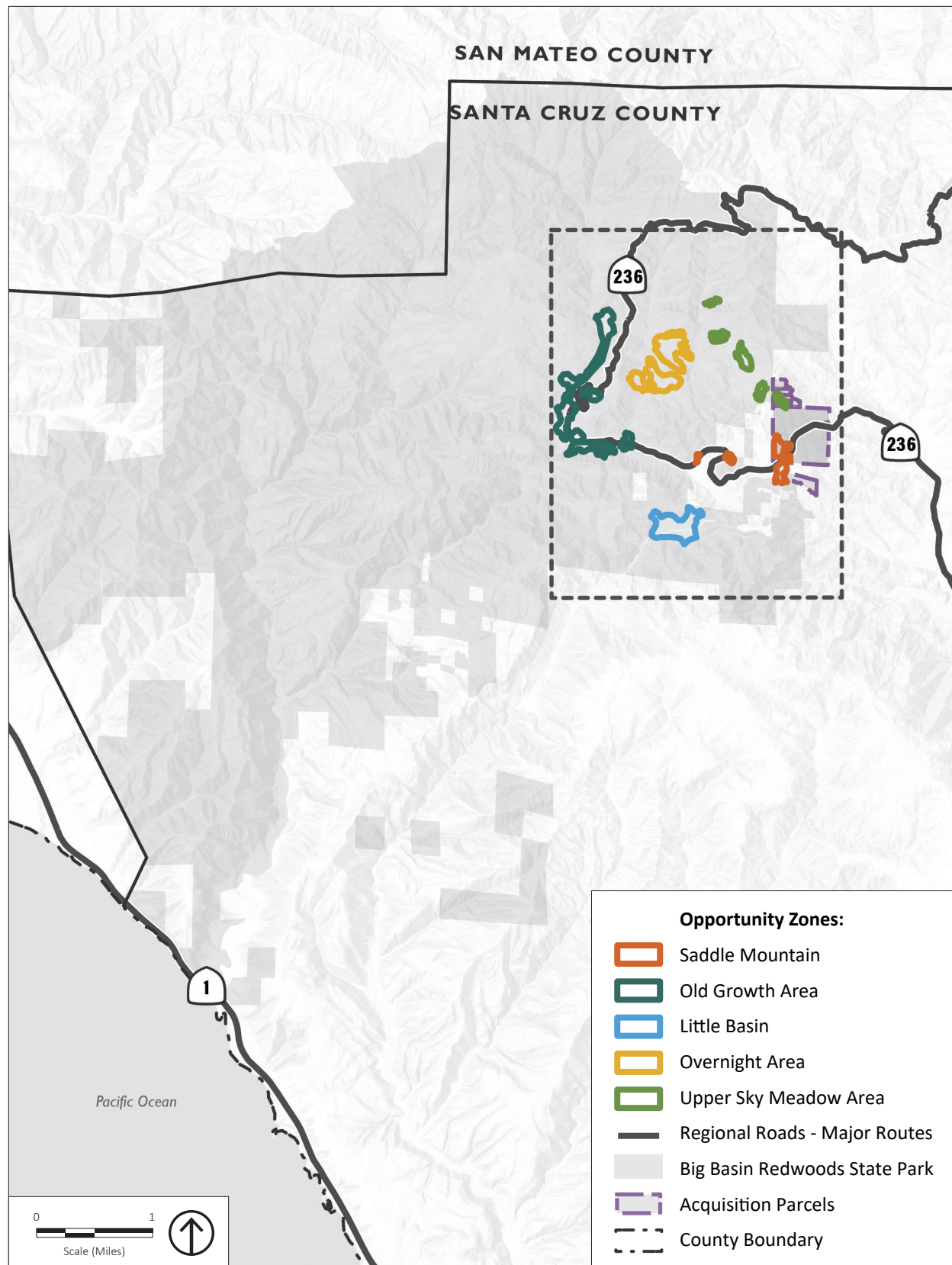
2. PROJECT DESCRIPTION

acquisition of these parcels individually. Consistent with the 2013 General Plan, State Parks will continue to consider acquiring easements or acquisition of additional properties in the Saddle Mountain area, if available from willing sellers, to accommodate facilities development, highway or trail improvements, and/or to ensure long-term compatibility between park-related activities, resource protection, and adjacent land uses (General Plan Guideline Highway 236 – 6). The acquisition of these parcels will undergo separate CEQA evaluation and the proposed project does not include the acquisition of these properties. However, the proposed BBFMP includes recommendations and plans for facilities to be developed and maintained on these properties if and when they are acquired, and the proposed General Plan amendments include the expansion of the park boundary to include these parcels once acquired.

After these parcels are acquired, the park size will be 18,400 acres (28.75 square miles). The acquisition parcels are further described in Section 2.1, *Project Site Location and Characteristics* under *Park Zones*.

The park contains two distinct areas, the uplands and the coastal areas. Elevations within the park range from sea level to over 2,000 feet. Three watersheds—Waddell Creek, East Waddell Creek, and Scott Creek—form the dominant landscape features of the park. Approximately 6,300 acres within BBRSP is designated State wilderness, known as West Waddell Creek State Wilderness. The climate of the Santa Cruz Mountains varies over relatively short distances because of the diverse topography, although the proximity of the Pacific Ocean moderates some climate extremes. The park is at the southern end of the Marine West Coast Climatic Zone and exhibits some characteristics of the Mediterranean Climatic Zone. Summers are dry and winters are wet, with precipitation beginning in October and continuing through April.

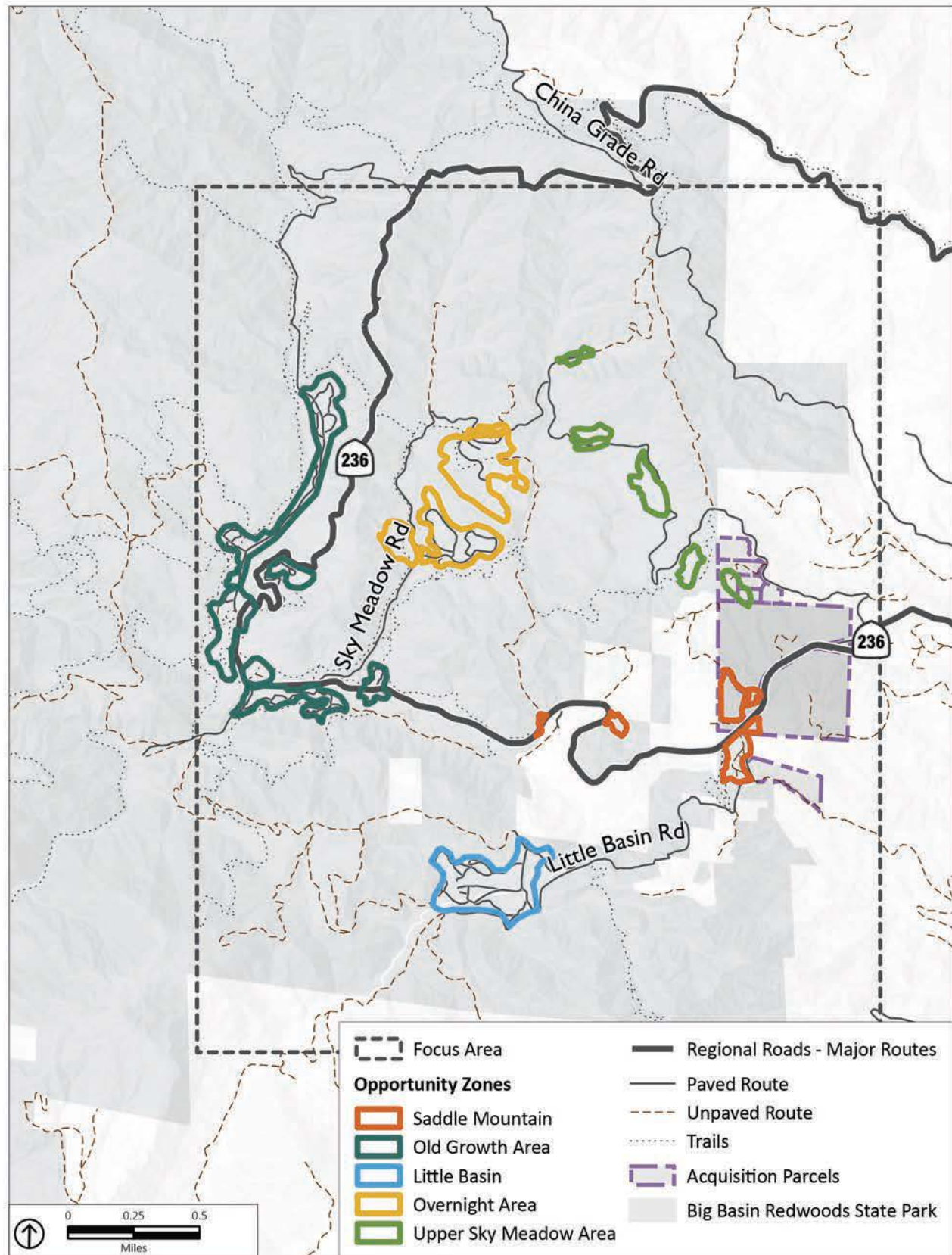
PROJECT DESCRIPTION



Source: California State Parks, 2025; PlaceWorks, 2025.

Figure 1
Regional and Vicinity Map

PROJECT DESCRIPTION



Source: California State Parks, 2025; PlaceWorks, 2025

Figure 2. Focus Area Map

2. PROJECT DESCRIPTION

LAND USE DESIGNATIONS

The majority of the BBRSP is in Santa Cruz County, with a General Plan land use designation of Parks, Recreation, and Open Space (O-R), and a zoning of Parks, Recreation, and Open Space (PR).⁶ The portion of the BBRSP in San Mateo County is in the Timberland Preserve Zone (TPZ).⁷

EXISTING SITE CONDITIONS AND SITE HISTORY

In 2020, the CZU Lightning Complex fire (CZU fire) burned approximately 86,500 acres in Santa Cruz and San Mateo Counties and 97 percent of BBRSP and its facilities. Nearly all historic buildings and structures within BBRSP were destroyed, including the visitor center and campfire center amphitheater, which was built by the Civilian Conservation Corps (CCC) as a part of the 1930s New Deal programs. All overnight facilities, including campground infrastructure (sewer/water) and tent cabins were lost. At least 47 pedestrian bridges, 6 vehicular bridges, and many other trail structures were destroyed. The park was closed to the public after the CZU fire until partially reopening for limited day-use access with temporary visitor facilities in summer 2022.

Prior to the CZU fire, the park received an average of 20,000 visitors a month, offered a variety of recreation, and accommodated both campers and day users. Visitor activity was focused primarily in the Headquarters area, in the eastern part of the park, along Highway 236. Here visitors could view interpretive exhibits, attend naturalist programs or events, and visit the camp store, as well as access trails and campgrounds.⁸

Immediate recovery from the fire focused on stabilizing the area, clearing hazardous dead trees along roads and trails, and removing the burn debris and associated contaminated soils from all damaged facility areas. Many coast redwoods (*Sequoia sempervirens*), including much of the old growth, are still living and sprouting the next iteration of its forest. The wildlife communities supported by the coastal redwood ecosystem are also returning to BBRSP. Thus, the project area is still mostly burned but cleaned up with some new growth and minimal facilities.

⁶ County of Santa Cruz Community Development and Infrastructure, GISWeb, <https://gis.santacruzcounty.us/gisweb/>, accessed January 23, 2025.

⁷ County of San Mateo Planning and Building, "Find My Zoning, Parcel Map, and Other Property Info," Find My Zoning, Parcel Map, and Other Property Info, <http://planning.smcgov.org/find-my-zoning-parcel-map-and-other-property-info>, accessed January 23, 2025.

⁸ California Department of Parks and Recreation. May 2013. *Big Basin Redwoods State Park Final General Plan and Environmental Impact Report*.

2. PROJECT DESCRIPTION

Due to the unique circumstances at BBRSP, the environmental analysis in this EIR uses a split baseline wherein a pre-fire baseline is used for the evaluation of recreational and visitor impacts and current, post-fire conditions are used as the baseline for the evaluation of impacts to site conditions.

The following sections detail the key use areas of BBRSP prior to the CZU fire and describe the facilities that survived the CZU fire.

PARK ZONES

Saddle Mountain

Saddle Mountain is a 17.48-acre property on Highway 236 approximately four miles southeast of the Headquarters area. This area included a former motel and restaurant used for environmental education camps. Facilities included a 2,937-square-foot dining hall/kitchen main building, 12 cabins, a swimming pool with two bath houses, a large open grassy meadow, a campfire center, a small amphitheater, a community garden, a group picnic area, an archery range, trails, parking areas, a 1,577-square-foot manager's residence, a 3,240-square-foot single-story staff residence building, an office trailer, a 693-square-foot maintenance garage, and utilities infrastructure.

The 2020 CZU fire destroyed the residence, trailer, garage, and seven of the cabins. The remaining structures remain and are being used for interim operations and staff housing. After the fire, an interim fenced maintenance yard and vehicle storage area were constructed and used to operate the park, as well as three site host hookups for temporary mobile staff housing. The former dining hall/kitchen building is used as an interim operations building with staff offices and a training space.

A temporary shuttle parking area and entry kiosk have been constructed at Saddle Mountain. On summer weekends, a pilot shuttle program brings visitors who park at the overflow parking area at Saddle Mountain to the Main Day Use area.

The Saddle Mountain Area also includes the acquisition parcels, including the Norabella site, Potter property, and the Gatehouse and Upper Blooms sites. Norabella is immediately adjacent to Saddle Mountain and is a 153-acre property on both sides of Highway 236. Old Big Basin Road is a private road that goes through the Norabella site on the north side of Highway 236 and goes to several private residences that have access only by Old Big Basin Road through the Norabella site. Norabella has second-growth redwood and mixed-oak woodland areas and did not have any structures prior to the CZU fire.

Upper Blooms is an area along Highway 236 west of Saddle Mountain, which has never had park facilities or public access. A livestock corral was located at this site but has not been used since it has been part of the BBRSP. This area has never been open to the public.

2. PROJECT DESCRIPTION

The Gatehouse was a former residence and garage on Highway 236 at the original entrance to the park boundary. The residence and surrounding infrastructure were lost in the CZU fire.

Old Growth Area

The BBFMP refers to the Old Growth Area, which includes the former Park Headquarters (referred to as the Main Day-use Area in the BBFMP), as described in the 2013 General Plan. The Headquarters area was in the eastern portion of the park in an area accessed by Highway 236. This area was part of the original 3,800-acre park acquisition and, due to relatively flat terrain, ease of access, and location within old-growth redwoods, it contained the majority of recreational facilities in the park. This area has been the focus of the park's recreation since its inception and includes the Headquarters Building, park store, Nature Museum, and picnic areas. Activities in the Headquarters area included picnicking, camping, hiking, horseback riding, biking, auto touring, study of the park's natural and cultural resources, staff housing and administrative uses, and interpretive and maintenance facilities. Day-use parking lots were situated near individual and clustered picnic sites. A limited number of parking areas were also available for group or oversized vehicle parking, or a few horse trailers.

Near the group campgrounds, described further in Section 2.1, *Project Site Location and Characteristics* under, *Overnight Areas*, was an approximately 600-seat campfire center in the Headquarters Area that was originally constructed in 1911 and reconfigured by the CCC in 1936. The center consisted of wooden benches constructed from large redwood logs situated in an amphitheater configuration facing a covered stage and stone fire pit.

Before the CZU fire, BBRSP had 13 campgrounds (including Little Basin), containing a total of 233 campsites. Campground infrastructure varied with each campground and ranged from shower facilities and laundry facilities to pit toilets with no running water. With the exception of campground host sites, there were no utility hook-ups in the park. The following campgrounds were found in the Old Growth Area:

- Blooms Creek Campground with 52 campsites directly off Highway 236
- Sempervirens Campground with 32 campsites off Highway 236 from the south
- Jay, Trail Camps with 6 campsites and staff housing located off Highway 236 from the south
- Sequoia Group Camp with 2 campsites northwest of the Headquarters building

The Old Growth Area also contained the North Escape Road picnic areas and day-use parking along North Escape Road before the fire. Picnic areas included restrooms, parking, and stone barbecues and included sites along North Escape Road and Gazos Road.

The Old Growth Area also includes the Redwood Loop Trail and campfire center. The Redwood Loop Trail was damaged in the fire but reopened with interim trail access in 2022. The campfire center was lost in the fire but some of the log benches remain, and the area has been open to the public since July 2022.

2. PROJECT DESCRIPTION

After the CZU fire, a temporary kiosk and visitor center have been placed in the Main Day-Use area to allow visitors to access a small part of the park as it reopens after the fire. Parking has been limited to the front parking areas inside the kiosk with about 75 parking spaces available. A parking reservation system has been implemented, and visitors can get a guaranteed parking space by making a reservation online before arriving at the park. When the parking areas are full, visitors are not able to access the park without a reservation and vehicles are often turned away on weekends.

Little Basin

Little Basin is a 535-acre property that contained a 40-acre central meadow area, a 150-acre developed campground area with several group-oriented recreation facilities, and 345 acres of scenic woodlands and coast redwoods. The Little Basin campground included tent sites, cabins, and a group camping area that accommodated 50 campers. Each campsite was equipped with a charcoal-burning barbecue grill, a table with benches, a food locker, and a wood-burning fire pit. Recreational facilities included a tennis court, basketball court, baseball field, children's play structures, and game room. A central recreational/conference hall, bandstand, large outdoor kitchen, and picnic area/amphitheater provide space for large group gatherings. Centrally located on the property was an operations center that included a two-story, 4,100-square-foot residence, office and workshop, and a five-stall maintenance garage.

All facilities were burned in the CZU fire and there has been no public access to Little Basin since the fire.

Overnight Areas

The areas described as the Overnight Areas in the BBFMP include the Huckleberry, Wastahi, and Lower Sky Meadow Campgrounds and the Lower Sky Meadow residential area.

The following campgrounds were found in the overnight areas prior to the CZU fire:

- Huckleberry Campground with 35 campsites and 37 tent cabins off Sky Meadow Road
- Wastahi Campground with 27 campsites off Sky Meadow Road
- Sky Meadow Group Camps with 2 campsites off Sky Meadow Road

All facilities, except one residential structure at Lower Sky Meadow, were lost in the CZU fire. Since the fire, these areas have been closed to the public.

Upper Sky Meadow Area

The areas described in the Upper Sky Meadow Area in the BBFMP include the Rogers Road site, Upper Sky Meadow, the Lodge Road area, and acquisition parcels that are on Lodge Road near Saddle Mountain.

2. PROJECT DESCRIPTION

The Rogers Road site was the location of the maintenance yard for BBRSP and a staff residence. The area was mostly paved and covered with larger structures used for operations and maintenance activities prior to the fire. All structures were lost in the CZU fire and the area has been closed to the public since the fire.

Upper Sky Meadow was a staff residential area above Rogers Road on Lodge Road. Upper Sky Meadow was the historic site of the CCC camp, and some remnants of the staircases for the camp remain. All structures were lost in the CZU fire and there has been no public access to the site since the fire.

The Lodge Road site is along Lodge Road above Upper Sky Meadow and is a second growth redwood forest area with former road and trail uses. There are no structures or recreational amenities currently at the site.

ROADS AND CIRCULATION

BBRSP contains State highways, County-maintained roads, and State Parks–maintained roads. As described in Section 2.1, *Project Site Location and Characteristics* under *Project Location*, Highway 236 bisects the park and provides the main access from Highway 9, east of the BBRSP. Highway 1 provides access to the western part of BBRSP.

China Grade Road connects the northern and southern routes of Highway 236 and is an additional access route into the eastern portion of BBRSP. China Grade Road is not considered a major access route for park visitors due to the steep terrain and narrow road conditions. Lodge Road, which connects to the southern route of Highway 236, provides additional access to the eastern portion of the park, and, prior to the CZU fire, was primarily used by park staff to access park residences and maintenance facilities. North Escape Road connects to Highway 236 at the former Headquarters area and previously provided access to trails and campsites in the northern part of BBRSP. Gazoz Creek Road, connected to North Escape Road, provided east to west access through the main area of BBRSP.

Visitor circulation in the park prior to the CZU fire revolved primarily around the visitor facilities and old-growth redwood forest in the former Headquarters area and at the beaches and interpretive facilities found at Rancho del Oso. Parking was available in the former Headquarters area, in day-use parking lots, and along North Escape and Gazos Creek Roads. The Santa Cruz Metropolitan Transit District also provided seasonal bus service to the Big Basin Headquarters area from the Metro Transit Center in downtown Santa Cruz.

UTILITIES

Many utilities at BBRSP were constructed in the 1930 to 1950s. However, most of the aboveground facilities were damaged in the CZU fire.

2. PROJECT DESCRIPTION

Prior to the CZU fire, water collection and treatment for the former Headquarters area was served by an on-site system. Water is collected at Sempervirens Reservoir, which was created in 1952 by damming Sempervirens Creek, and piped to a water treatment plant located 1,000 feet downstream. The on-site water system also provided water to Little Basin and Upper Sky Meadow Area. The park's water system was damaged in the fire and improvements—including replacing the treatment plant building, storage, distribution piping, and pump stations—are needed. Saddle Mountain has its own water system supplied by two low-yielding wells on-site and this water system currently serves the site.

A park-wide sanitary sewer collection system was used in BBRSP with a centralized wastewater treatment plant at the southwestern side of the Focus Area. The system consisted of approximately 25,000 linear feet of 6- and 8-inch sanitary sewer segments. A park-wide wastewater system evaluation report was completed in 2001 that recommended a phased upgrade of the wastewater collection system. Thus, some individual segments in the wastewater collection system were rehabilitated on an as-needed basis but no comprehensive upgrade of the entire system has been undertaken since prior to 2001. The sanitary sewer system in the park was damaged in the fire, further necessitating rehabilitation of the system, including replacing the wastewater treatment facility and replacing or repairing most of the existing collection sewer piping, manholes, and lift stations.

BBRSP also includes a series of culverts and roadside ditches to support stormwater drainage. Some of these stormwater features are still functional or were replaced after the fire, and some were damaged in the fire and need to be repaired or replaced.

Pacific Gas and Electric Company (PG&E) provides electricity to the park through a system of overhead and underground utility lines. Most of PG&E's overhead lines were destroyed in the fire. PG&E has been replacing power lines in the Focus Area and they are now primarily underground. Propane tanks provide gas to all facilities requiring heat or heated water. AT&T provided telephone service in the park through overhead lines, which were all lost or damaged in the fire.

VISITATION

BBRSP is open seven days a week. According to the 2013 General Plan, before the CZU fire, visitation including paid day-use and overnight camping averaged about 224,394 visitors per year from 1999 to 2011. The park was closed due to the CZU fire from August 2020 to July 2022. Since July 2022, only a small day-use area has been open to public access and there has been no camping in the park. From June 2023 through May 2024, there were 74,376 visitors to BBRSP.

2. PROJECT DESCRIPTION

2.2 PLANNING BACKGROUND

As previously described, the proposed BBFMP builds on the 2013 General Plan, the 2022 Reimagining Big Basin Vision Summary, and the 2023 Cornerstone Document. Each of these three documents is described below.

2013 BIG BASIN REDWOODS STATE PARK GENERAL PLAN

The 2013 General Plan is the guiding land use document for reconstructing park facilities, to rebuild and update the park, thus the proposed project, including the proposed General Plan amendments described in Section 2.3, *Project Components* under *Proposed General Plan Amendments*, would be consistent with the 2013 General Plan. The facilities outlined in the 2013 General Plan were the existing facilities of the park at the time the General Plan was created and include:

- Headquarters area with the Headquarters Building, park store, Nature Museum, campfire center, and picnic areas
- Rancho del Oso, which includes a nature and history center, beach day-use facilities, a ranger contact station, the Theodore J. Hoover Natural Preserve, and trail facilities
- Twelve campgrounds:
 - Blooms Creek Campground, with 52 campsites directly off Highway 236
 - Sempervirens Campground, with 32 campsites off Highway 236 from the south
 - Huckleberry Campground, with 35 campsites and 37 tent cabins off Sky Meadow Road
 - Wastahi Campground, with 27 campsites off Sky Meadow Road
 - Sky Meadow Group Camps, with 2 campsites off of Sky Meadow Road
 - Sequoia Group Camp, with 2 campsites northwest of the Headquarters building
 - Jay, Lane, Sunset, Twin Redwoods, and Alder Trail Camps, located throughout the park for backpackers
 - Horse Camp, with 6 campsites in the Rancho del Oso area
- Saddle Mountain, a 17-acre area on Highway 236 with multiuse dining hall/kitchen main building, 12 rustic cabins, swimming pool and two bath houses, large open grassy meadow, campfire center, small amphitheater, community garden, group picnic area, archery range, trails, parking areas, manager's residence, staff residence building, office trailer, maintenance garage, and utilities infrastructure
- Little Basin, a 535-acre area located off Highway 236 with Little Basin Campground with cabins and recreational amenities

The 2013 General Plan includes numerous plans with goals to protect vegetation, wildlife, and habitat; meet the park's increasing recreation demand and visitation; improve the park's public access and circulation; and preserve significant historic resources. Among others, these plans include updates to the facilities in the Headquarters Area and Little Basin and increased

2. PROJECT DESCRIPTION

development at Saddle Mountain. The plans outlined in the 2013 General Plan provide a basis for what has been included in the proposed project and described in Section 2.3, *Project Components*.

2022 REIMAGINING BIG BASIN VISION SUMMARY

With the loss of all park facilities, the Reimagining Big Basin Vision Summary process was completed to establish a future vision for the park given the losses in the fire, and to consider and confirm the relevance and consistency of many of the ideas in the 2013 General Plan. Eight guiding principles emerged from the Reimagining Big Basin visioning process. They were refined based on public input and provide a framework for future planning at BBRSP:

- Prioritize forest health
- Provide equitable, diverse, and evocative visitor experiences
- Diversify transportation and access opportunities
- Practice land stewardship
- Include Indigenous perspectives
- Foster landscape connectivity
- Design with reverence and resilience
- Engage the park community and build partnerships

2023 BIG BASIN REDWOODS STATE PARK CORNERSTONE DOCUMENT

The 2023 Cornerstone Document builds on the Reimagining Big Basin Vision Summary to lay out and formalize the post-fire planning steps needed for reestablishing the park that are consistent with the 2013 General Plan. The 2023 Cornerstone Document includes key issues that are addressed by the BBFMP:

- Rebuilding resilient park facilities and trails
- Addressing resource impacts from visitation
- Managing post-fire forest recovery and developing forest management strategy to address future fire
- Creating equitable access and meaningful visitor experience for all
- Addressing historic and archaeological resources

An FMP was listed as a high-priority planning need. The 2023 Cornerstone Document stated that the FMP can recommend alternate uses for an existing facility, location of a new facility, or a critical path for replacement and/or expansion of all park facilities.

2. PROJECT DESCRIPTION

2.3 PROJECT COMPONENTS

The proposed project has been prepared to guide the rebuilding of park facilities after the CZU fire. The BBFMP is a planning document designed to guide the stewardship, management, and use of existing and future facilities. It will also include the development of conceptual design alternatives to evaluate distinctive strategies for site configuration and use. The plan makes management recommendations and proposes facility use considerations for a specific park unit, portion of a park unit, or project. To ensure consistency with the BBRSP General Plan, the proposed project also includes General Plan amendments.

Over the process of creating the BBFMP, three parkwide areas were explored, called “alternatives,” to house most of the new facilities and development. All three alternatives offered a similar level of development and distribution of visitor amenities and operational space that is consistent with anticipated needs and overall project goals. The alternatives reflect analysis of opportunity sites, and their capacity, balanced with an understanding of visitor services and operational needs, as summarized in the Basis of Design, as well as feedback received from the community and multiple project working groups. The preferred alternative, Alternative 2, Many Connected Experiences, was selected to be the basis of the BBFMP.

The proposed project focuses specifically on areas along Highway 236 and Sky Meadow Road that either hosted pre-fire facilities or have otherwise been identified as suitable facility locations based on sensitive habitat avoidance, access, and slope stability.

PROPOSED GENERAL PLAN AMENDMENTS

The proposed General Plan amendments to the 2013 General Plan would incorporate amendments in text to the 2013 General Plan and would add the acquisition parcels to the plan area for the General Plan. The text edits would increase clarity of consistency between the BBFMP and General Plan given the loss of facilities from the CZU fire and the goals to rebuild park facilities in alignment with General Plan recommendations. More specifically, the recommendations for the Lower Sky Meadow and Upper Sky Meadow areas would be clarified for the goals of developing overnight use and camping to replace the camping that was previously at Blooms and Sempervirens Campgrounds. This change in campground location is consistent with the general recommendations in the General Plan of relocating facilities away from the most sensitive old-growth areas, and the proposed General Plan amendments would add clarity by adding specific recommendations for these specific areas, including developing overnight uses and related facilities. The proposed General Plan amendments include the following clarifications or additions to the 2013 General Plan:

- **Lower Sky Meadow:** The recommendations for Lower Sky Meadow and Sky Meadow Group Camp would be updated to reflect the recommendation to develop new overnight camping facilities, including car-camping, cabins, tent cabins, small-group camps, a campfire center,

2. PROJECT DESCRIPTION

shuttle stop, and related facilities in and around this zone that pre-fire had staff housing and two group camps.

- **Upper Sky Meadow Area:** The Rogers Road Site (former Maintenance Yard), Upper Sky Meadow site (former park housing site), and Upper Lodge Road area would be added to the description of Sky Meadow. In addition, recommendations would be added to reflect BBFMP plans to develop group camping at Rogers Road, parking and walk-in camping at the Upper Sky Meadow site, and walk-in camping at Upper Lodge Road area.
- **Saddle Mountain:** A recommendation would be added to develop staff housing and staff operation areas on properties owned by State Parks around Saddle Mountain.
- **Little Basin:** Recommendations would be added to provide a mixed tribal-use area with a cultural center for collaboration with Indigenous groups for stewardship, interpretation, and cultural activities, and to provide staff housing.
- **Park Boundary:** The General Plan amendments reflect the expansion of the BBRSP boundary to include seven parcels planned for acquisition in the Saddle Mountain area.

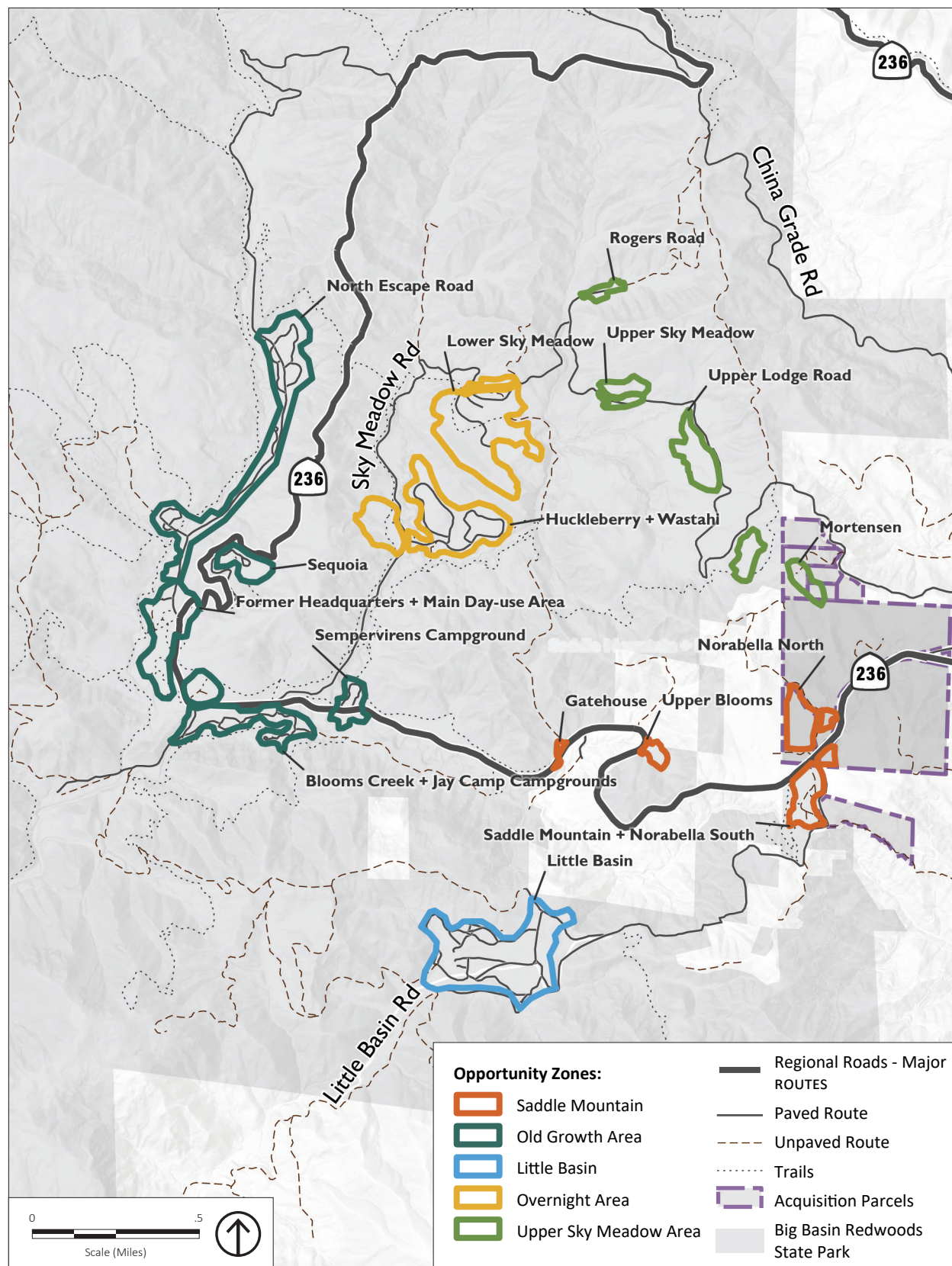
PROPOSED PARK FACILITIES

The BBFMP provides proposed facilities and improvements for 19 identified sites within five proposed zones in the Focus Area, as outlined in Figure 3, *Proposed Park Zones Sites*, and listed in Table 1, *Proposed Park Zones and Sites*.

Table 1 **Proposed Park Zones and Sites**

Zone	Saddle Mountain Gateway	Old-Growth Area	Little Basin	Overnight Area	Upper Sky Meadow Area
Sites	Saddle Mountain Norabella Gatehouse Upper Blooms Potter	Sempervirens Campground Blooms Creek Campground Jay Camp Redwood Loop Trail Main Day-use Area North Escape Road Sequoia Group Camp	None	Wastahi Campground Huckleberry Campground Lower Sky Meadow Campground Sky Meadow Landing	Upper Sky Meadow Rogers Road Upper Lodge Road Mortensen

PROJECT DESCRIPTION



Source: California State Parks, 2025; PlaceWorks, 2025.

Figure 3
Proposed Park Zones and Sites

2. PROJECT DESCRIPTION

SADDLE MOUNTAIN GATEWAY

The Saddle Mountain Gateway would include the following sites: Saddle Mountain, Norabella, Potter, Gatehouse, and Upper Blooms, and would be the center of activity at BBRSP. It would also serve as the key connective site in the Focus Area with frequent shuttle service.

Saddle Mountain would carry the highest concentration of program areas, including the primary visitor center, the primary concessionaire facility, and the primary operations and administrative hub. This area would include a restored meadow to the west and north, a large visitor porch overlooking this meadow, shuttle parking areas in the south, and operations areas to the east separated by topography and redwood trees. The parking area will either be surface parking on a series of terraces or a single-story parking structure, both supporting long-term, shuttle parking. Grading and some tree removal would be required, as well as the demolition of all existing structures and removal of paving. At Saddle Mountain, an area of approximately nine acres would be cleared and graded, including tree removal, though some larger existing trees would be retained in that area. Infrastructure like retaining structures, interior circulation roads, new paved parking areas, new driveway access from Little Basin Road and Highway 236, on-site wastewater treatment systems, water storage facilities, stormwater facilities, fencing, solar canopies over parking, carports and covered parking, signage, equipment and materials storage, landscaping, electric vehicle (EV) chargers, and utility upgrades would also occur at Saddle Mountain. Improvements to Highway 236, such as widening and addition of a left-turn lane into the new Saddle Mountain driveway, would be subject to future review and approval by the California Department of Transportation (Caltrans) through the Encroachment Permit process.

The Norabella site is composed of Norabella North and Norabella South, divided by Highway 236. Norabella North would include a cluster of staff housing with a variety of residential types and a parking area. Norabella South would provide additional staff parking with vehicle storage and EV chargers.

Clearing, grading, and some tree removal would be required at the Norabella site, including Norabella North and South, to construct new housing, driveways, and parking areas. New driveways would be constructed on Old Big Basin Road and Little Basin Road, in addition to interior circulation roads and new paved parking areas. Infrastructure like retaining structures, on-site wastewater treatment systems, water storage facilities, stormwater facilities, fencing, solar canopies over parking, carports and covered parking, signage, equipment and materials storage, landscaping, EV chargers, and utility upgrades would also occur at Norabella.

The Gatehouse site would be along Highway 236, between Saddle Mountain and the Old Growth Area. This site would include a new trail connection, vault toilet, potable water, water system infrastructure (potentially including a pump station), and horse trough, two shuttle/bus stops, and parking stalls. Development of the Gatehouse site would include grading and construction of retaining walls within a similarly sized footprint to previously developed areas.

2. PROJECT DESCRIPTION

The Upper Blooms site would provide overnight accommodation, including a group campsite and spike campsite.

The Potter property is a proposed location for water storage for Saddle Mountain and related uses.

OLD GROWTH AREA

The Old Growth Area would include the following sites: Sempervirens Campground, Blooms Creek Campground, Jay Camp, Redwood Loop Trail, Main Day-use Area, North Escape Road, and Sequoia Campground.

The Main Day-use Area, in the heart of the old-growth redwood forest, would serve as an ecologically sensitive hub for day-use activities. Facilities in the Main Day-use Area would include parking stalls, a shuttle/bus stop, and EV charging stations. There would also be additional visitor facilities, like comfort stations, an information desk, an amphitheater, and interpretation stations. This site would include new trails, boardwalks, fencing, signage, and a group picnic area. This site would also undergo meadow and channel restoration, the removal of pavement, creation of new paved parking in areas previously developed with structures and paving, the creation of a new vehicle entry point, and circulation improvements to accommodate the new shuttle bus. New utilities and stormwater updates are also proposed at this site. Tree removal would include some (approximately 10 to 20) previously planted trees, including in the median between the existing parking area and Highway 236, but would not include removal of any old-growth redwood trees.

North Escape Road is a paved State Park road that parallels Highway 236 and would serve as an access road, facilitating operations, management, and emergency access to the park's northern recreation facilities. East and west parking lots would be available at this site. A small trail camp with water would be approximately 0.75 miles beyond the road's southern access gate. Picnic areas with vault toilets and potable water would also be provided along North Escape Road. Several landscape restoration efforts will take place alongside North Escape Road, including the removal of spur roads and firepits.

Jay Camp is on the northern side of Highway 236, less than half a mile from the Historic Park Headquarters and Visitor Center, and directly adjacent to Blooms Creek Campground on the southern side of Highway 236. Many facilities were lost in the fire at Jay Camp, including the six campsites and amenities, and six staff residences, and at Blooms Creek Campground, including all campground amenities. The proposed project includes significant restoration efforts primarily aimed at removing road pavement and damaged camp facilities and establishing native redwood forest habitat, as well as installing electrical and water utility infrastructure, including a pump station to support park utility systems. Jay Camp and Blooms Creek Campground would also include two shuttle/bus stops and picnic areas and trails.

2. PROJECT DESCRIPTION

Sempervirens Campground was located East of Sky Meadow Road and split roughly in half by Highway 236. Proposed restoration efforts would include the removal of the former campground and all pavement and former campsites. These efforts would help to restore predevelopment stream flows and floodplains, which would help enhance the overall redwood habitat. Existing trails at the site would be maintained, and new trail connections would be considered where they are consistent with the values of forest regeneration. Water utility infrastructure would be sited at the Sempervirens Campground area, including a pump station.

Sequoia Campground would retain much of its facilities from its pre-fire design. This includes two group campsites, each with the capacity to hold 50 people. The proposed project includes maintaining existing gravel parking lots with 40 spaces. Minor changes would include replacing combo toilets with vault toilets.

LITTLE BASIN

The Little Basin zone would only include the Little Basin site. Little Basin would be used for large-scale events and group camping. The campground would include parking, car campsites, tent cabins, seven small group sites, and large group sites. The proposed project also includes tribal and cultural facilities at this site, such as a cultural center building with overnight accommodations for stewardship corps doing work in the park and with interpretive exhibition space, outdoor workspace, a sweat lodge and dance corral campfire ring, and an ethnobotanical native plant propagation area. A concessionaire building, kiosk, and park housing would also be constructed at the site. Restoration work in the meadow and wetland areas would also occur, including the removal of the dam, removing some roads and other paved areas, and restoring the former reservoir. There would also be new roads, trails, and bridges constructed at this site.

Access to Little Basin is via Little Basin County Road. The road requires some improvements to be completed in partnership between State Parks and Santa Cruz County. A secondary emergency one-way route along Tanbark Loop and Pine Mountain Road, or a suitable alternative, also needs to be improved. These road improvements are described in Section 2.3, *Project Components under Road and Circulation Improvements*.

OVERNIGHT AREA

The Overnight Area would include the following sites: Lower Sky Meadow and Sky Meadow Landing, Huckleberry, and Wastahi.

Lower Sky Meadow, including Sky Meadow Landing, would be the largest campground in the park, and would include car campsites, walk-in tent cabins, group campsites, and hard-sided cabins with an outdoor interpretive area, Campfire Center, comfort stations, and combo buildings. A new trail would be added to this site as well as meadow expansion and a new stormwater retention area. The proposed project would also include constructing new campground loop roads, which would involve site clearing, tree removal, grading, new drainage features, and new paving, as well as constructing new parking at individual sites to

2. PROJECT DESCRIPTION

accommodate two cars per campsite at tent sites. Parking would include up to three vehicles per cabin site and up to five vehicles at small group sites.

The Huckleberry site would include rehabilitating the existing pre-fire Huckleberry Campground with walk-in campsites, car campsites, and 12 recreational vehicle (RV) campsites. The existing dump station would remain. A new trail is also proposed to be added to this site.

Wastahi would include overnight trail parking and a comfort station with potable water. Infrastructure from the former campground would be removed at this site and the lower portion of the existing paved parking area would be removed.

UPPER SKY MEADOW AREA

The Upper Sky Meadow Area would include the following sites: Upper Sky Meadow, Upper Lodge Road, Rogers Road, and Mortensen and surrounding acquisition parcels. The Upper Sky Meadow Site would include picnic areas and walk-in campsites served by one combination building and parking. Meadow restoration and restoration of the former CCC steps would also occur at this site.

The proposed project includes the construction of a new trail at Upper Lodge Road. There would be walk-/bike-in campsites, each with a tent pad, picnic table, and fire ring.

Rogers Road is a relatively remote and flat site that would provide Event Meadow and Group Camp space. This would include a group campsite and event cabins with an event ramada and parking lots. Some clearing and grading in previously developed areas and removal of existing pavement would occur to develop these facilities. Channel restoration would also occur at this site. Utilities would be brought to the site, including new wastewater and water lines.

The BBFMP does not propose specific facilities at the Mortensen, Heyl, and Rose acquisition parcels, but there are properties could be potential alternative sites for future staff housing as well as for utilities and trail connections to Lodge Road.

PROPOSED FOCUS AREA-WIDE PROJECT COMPONENTS

In addition to the facility improvements described in Section 2.3, *Project Components* under *Proposed Park Facilities*, the proposed project includes Focus Area-wide projects included in the BBFMP. These are project components that will occur on multiple sites.

ROAD AND CIRCULATION IMPROVEMENTS

Road improvements for life safety and emergency response would be required on Sky Meadow, Lodge, Little Basin Road, and portions of Pine Mountain and Tanbark Loop fire roads or a suitable alternative route. Widening of 1.9 miles of Sky Meadow Road between Huckleberry and Upper Sky Meadow to 20 feet is proposed in locations where it would not require retaining walls over 5 to 10 feet in retained height, or removal or paving close to large old-growth trees.

2. PROJECT DESCRIPTION

In locations where widening is not feasible, paved turnouts would be added where possible. These improvements to Sky Meadow Road would include some site clearing, non-old-growth tree removals, grading additional paving and construction of retaining walls.

Lodge Road improvements for the 1.2 miles between Upper Sky Meadow and the existing park boundary would include closure to vehicles except for emergency access, maintaining the existing road for a minimum of 12 feet in width, and re-paving the existing paved road and addition of some paved turnouts for improved emergency access. These improvements would require some grading and retaining structures, addition of drainage features and culverts, and non-old-growth tree and stump removal (approximately 20 trees and stumps).

Improvements for Little Basin Road, the 2.1-mile County Road, would include working with Santa Cruz County to widen to 20 feet in areas where only minimal grading or retaining is required and adding approximately 20 paved turnouts in other locations where widening is not feasible and where turnouts do not require retaining walls or removal of trees. These improvements would require minimal grading and retaining structures, addition of drainage features and culverts, removal of some non-old-growth trees and stumps, and paving.

Pending future study, Pine Mountain Road between Hihn Hammond Road and Tanbark Loop Road, and Tanbark Loop Road between Pine Mountain Road and Little Basin, would be improved as a one-way emergency evacuation route. Improvements to these two fire roads would include minor realignments to segments of road that are over 20 percent grade where possible, and where not possible, paving segments of road that are over 20 percent grade. Specific environmental review of these improvements would be assessed in a future project phase pending further assessment but would include some clearing, grading, tree removal and paving. Improvement of alternative routes for one-way emergency evacuation routes will be considered as alternatives to Tanbark/Pine Mountain Road pending future study.

As described in the individual site descriptions, many road and circulation improvements are proposed in each zone, including new access roads as well as improvements to existing roads for life safety and emergency response. This would require connections to the rest of the circulation system in the Focus Area. The proposed project also proposes various safety enhancements, such as speed limit reductions, advanced warning signs, flashing beacons, trimming back foliage, and potential intersection-control changes. Life safety improvements would include widening access roads to meet State Fire Marshal standards, which would involve additional clearing, tree removal, grading, and paving. Further the proposed project includes improvements for pedestrian and cyclist safety while promoting non-vehicular travel in the park.

2. PROJECT DESCRIPTION

Paved shoulders on Highway 236 are proposed to be enhanced with visual and tactile separation to create a separate space for bicyclists and pedestrians. To slow vehicle speeds and enhance safety for all visitors, traffic-calming strategies like rumble strips, speed humps, and speed tables are proposed to be implemented on park-owned roadways and on Highway 236.

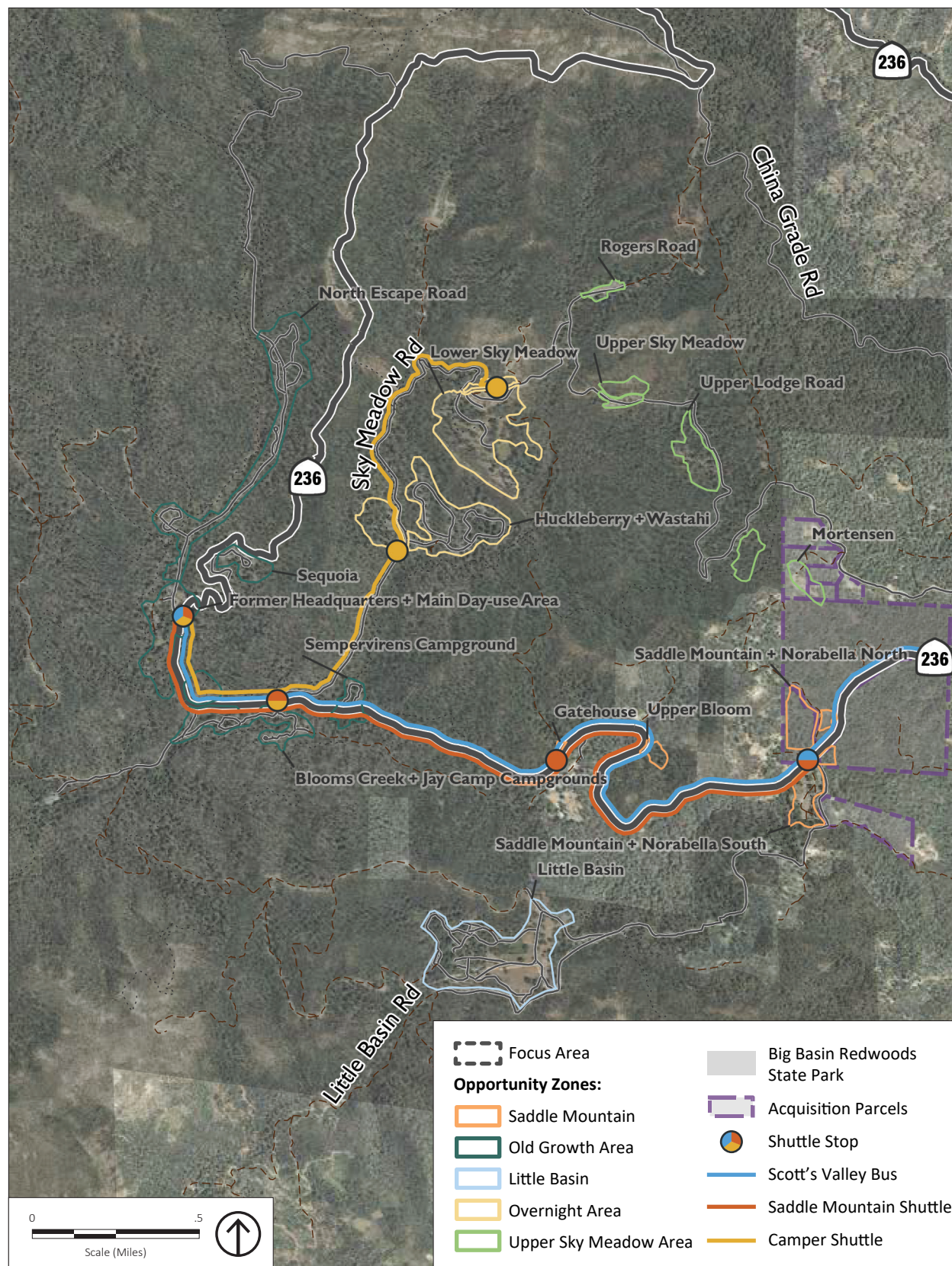
SHUTTLE PROGRAM

To support visitor access to the Main Day-Use Area during periods of high demand, a shuttle program is proposed to reduce vehicle congestion and improve access. This would include two new park shuttles in addition to the Scott's Valley Bus already in operation by SCMetro. The Saddle Mountain Shuttle would serve as the primary internal connection between the Saddle Mountain parking area and the Main Day-Use Area. The Camper Shuttle would provide transportation for overnight visitors staying at campgrounds, as shown on Figure 4, *Shuttle Routes*. Table 2, *Shuttle Information*, shows the potential proposed operating times, shuttle stops, and fleet size and type of each shuttle, but would be based on future visitation and funding availability.

Table 2 Shuttle Information

	Saddle Mountain Shuttle	Camper Shuttle	Scott's Valley Bus
Operating Time	10 hours per day (8 AM–6 PM) on 121 weekend/holiday days year-round.	10 hours per day on 134 days per year, including weekends/holidays April–October and summer weekdays.	Operates during peak periods, aligned with SCMetro schedules (5 trips per day).
Shuttle Stops	Saddle Mountain parking, Gatehouse, Sky Meadow Road, Main Day-Use Area	Lower Sky Meadow, Huckleberry, Sky Meadow Road, Main Day-Use Area.	Scott's Valley Transit Center, Boulder Creek, Saddle Mountain Visitor Center, Main Day-Use Area.
Fleet Size and Type	Two 32-passenger vehicles, plus one spare (electric preferred).	Two 14-passenger vehicles, plus one spare (electric preferred).	Standard transit buses operated by SCMetro.

PROJECT DESCRIPTION



Source: California State Parks, 2025; PlaceWorks, 2025.

Figure 4
Shuttle Routes

2. PROJECT DESCRIPTION

UTILITY UPGRADES

The CZU fire destroyed most of the utility systems in the park. The proposed project includes replacing the necessary utility systems within the Focus Area to meet the estimated water demand, fire water storage, and wastewater generation.

The proposed project includes rehabilitation, reconstruction, and expansion of the park's central domestic and fire water system. Water system improvements would include replacing the water treatment facility building and replacing storage tanks, pumps systems, distribution piping, hydrants, and water service infrastructure throughout the Focus Area. The water system would be expanded to provide water from the central park water system to the entire Focus Area, including new connections to Saddle Mountain and Norabella, Upper Blooms, and Upper Lodge, and re-establishing water service to all pre-fire water service areas except where facilities are being removed. Fire water and domestic water storage would be reconstructed or added where needed for proposed development based on future design of the system and based on fire marshal requirements. Existing wells in the Saddle Mountain area and acquisition parcels may supplement the central park water system.

The proposed project includes replacing the existing wastewater treatment plant and facility that served the park pre-fire. On-site wastewater treatment systems (OWTS) would be installed at Saddle Mountain, Little Basin, and likely Sky Meadow. Norabella would be served by the OWTS at Saddle Mountain. New or rehabilitated sanitary sewer lines would be included between Upper Sky Meadow, Rogers Road, Lower Sky Meadow, Wastahi, Huckleberry, and Main Day-use Area.

The proposed facilities would be connected to BBRSP's existing stormwater drainage system. Bioretention areas, permeable landscaping, and other land restoration improvements, as described in Section 2.3, *Project Components*, under *Proposed Park Facilities*, would be included to support stormwater drainage and minimize runoff.

Energy consumption is expected to increase as a result of the proposed project. It is anticipated that, at full buildout, on-site renewable energy generation would partially offset reliance on grid-connected electrical power supplied by PG&E. Solar utilities would be included at Saddle Mountain, Little Basin, and Sky Meadow Landing. Details about individual sites' restroom facilities and EV chargers are provided in Section 3.2, *Project Components* under *Proposed Park Facilities*.

An improved telecommunications system would also be provided in all proposed zones, including installing new underground telecommunications lines between Saddle Mountain and all park zones.

2. PROJECT DESCRIPTION

RESTORATION EFFORTS

The proposed project includes restoration projects to protect the riparian corridor, promote wildlife habitat connectivity, remove paved roadways, remove old campground infrastructure, and convert roads to trails. The proposed project also includes efforts to restore predevelopment hydrological systems, which includes the restoration further described for each site in Section 3.3.2, *Proposed Park Facilities*, as well as increase in-stream wood in Opal and Blooms Creeks to help retain floodwater, improve groundwater exchange, and stabilize channels.

EMERGENCY RESPONSE AND EVACUATION PLAN

Parks staff respond to emergencies according to an Emergency Response and Evacuation Plan (plan) covering prevention, emergency preparedness and response, and evacuation for BBRSP and the Little Basin sub-unit. The plan is updated as needed and reviewed yearly by the District Superintendent, Public Safety Superintendent, and/or their designee. To implement this plan, the project includes installing an early warning system containing overhead sirens in three locations throughout the park: Sky Meadow, the Eagle repeater site, and Oceanview Summit. If an evacuation were required, users in the Focus Area would be directed to Highway 236 toward Boulder Creek. Shuttle operations in the park would be required to evacuate shuttle riders according to the plan. Evacuation signage on trails and evacuation roadways would be installed according to the plan to assist in emergency evacuations.

PLAN IMPLEMENTATION

While general plans define an overall framework for a park's future resource stewardship, visitor use and services, and interpretation, more focused planning is required to address the details that a general plan cannot. Management plans are thus used to identify more definitive objectives and methods and/or designs for attaining the goals set in a general plan. The degree of specificity at this second level of planning is shaped by the complexity of the issues being addressed, regulatory and legal requirements, and Department standards.

The California Environmental Quality Act (CEQA) allows for the preparation of programmatic environmental impact reports (EIRs) and negative declarations (NDs) when a project includes a series of related actions that can be characterized as one large project. Programmatic analyses are often used for activities that are linked geographically or when an agency wants to evaluate rules or requirements that guide how a program must operate. The programmatic approach works especially well when the program's individual activities have generally similar environmental effects that can be minimized through similar avoidance measures. The benefits of such documents are that they allow a comprehensive examination of a project and promote "tiering" when later activities within the program are undertaken. The use of tiering can expedite environmental review by eliminating repetitive analysis of issues and potential impacts adequately addressed in the program EIR or MND.

2. PROJECT DESCRIPTION

The BBFMP identifies priority projects to restore public access, including day use and overnight experiences, to BBRSP. These priority projects would undergo a subsequent design and construction phase that would be implemented over approximately five to ten years or longer, depending on the availability of funding and other factors. The BBFMP also includes additional projects that would be further developed once priority projects are underway. These additional projects would be implemented over approximately 10 to 15 years or longer, depending on the availability of funding and other factors. All future construction would be required to comply with State building codes, such as the California Building Code (CBC), and California Fire Code (CFC), as well as other State building requirements determined throughout implementation of the proposed project. As the proposed project components are implemented, site preparation would require some leveling to ensure flat surfaces and proper drainage in areas where the trails and proposed structures would be located, as well as trenching for utility infrastructure such as potable water.

2.4 PROJECT OBJECTIVES

The primary purpose for the proposed project is to rebuild park facilities after all facilities were lost in the 2020 CZU fire.

The Department's mission is to provide for the health, inspiration, and education of the people of California by helping to preserve California's extraordinary biological diversity, protecting its most valued natural and cultural resources, and creating opportunities for high-quality outdoor recreation. The Department's mission is stated in the California's Recreation Policy adopted by the California State Park and Recreation Commission on September 23, 2005.

The proposed project would provide a framework for the continued stewardship, management, and adaptive use of the Focus Area within BBRSP to improve resource protection, improve the visitor experience, and foster public appreciation of the Focus Area.

Specific objectives of the BBFMP are as follows and intend to implement the guiding principles identified in the Reimagining Big Basin Vision Summary completed in 2022.

GUIDING PRINCIPLE 1. Prioritize Forest Health

Supporting Objectives

- a) Structures and facilities will be sited and designed to allow forest stewardship projects to occur in priority areas and to increase forest resiliency in a changing climate.
- b) Structures and utilities will be sited and designed to minimize development within old growth redwood forest areas, to minimize fuel contributions from structures, and to minimize the need to remove hazard trees within old growth areas.

2. PROJECT DESCRIPTION

- c) Structures, parking, developed areas and trails will be sited and designed to minimize paving and soil compaction and to allow natural ecological processes to occur.

GUIDING PRINCIPLE 2. Provide Equitable, Diverse, and Evocative Visitor Experiences

Supporting Objectives

- a) Park facilities will strive to support pre-fire visitation for day-use, trail access, and overnight use while managing visitor use for other project goals.
- b) The park will provide diverse camping and overnight experiences, as well as a variety of day-use facilities and will have quality support amenities, programs and activities that support day-use and overnight experiences.
- c) Park facilities will be inviting and inclusive to diverse future California communities and educational and interpretive materials will include a variety of languages and perspectives.

GUIDING PRINCIPLE 3. Diversify Transportation and Access Opportunities

Supporting Objectives

- a) Maximize the efficiency of use, experience quality, and access equity to Big Basin by travel modes that are alternatives to low-occupancy private vehicles.
- b) Maximize park access opportunities for lower income and underrepresented communities, and park visitors without access to a vehicle.
- c) Minimize vehicle congestion getting to the park, and pedestrian congestion and crowding within the park.

GUIDING PRINCIPLE 4. Practice Land Stewardship

Supporting Objectives

- a) Facilities will be sited and designed to allow effective long-term maintenance to create sustainable park recreational access for future generations.
- b) Park facilities will be sited and designed to consider future stewardship activities and to enable active forest management including Indigenous practices in the context of changing climatic conditions.
- c) The park will include adequate facilities needed for active stewardship activities including spike camps for stewardship corps, stewardship training facilities, operation and maintenance facilities and permanent and seasonal staff housing.

2. PROJECT DESCRIPTION

GUIDING PRINCIPLE 5. Include Indigenous Perspectives

Supporting Objectives

- a) Facilities and recreational amenities will be sited and designed with input and consultation with Indigenous leaders and representatives.
- b) The siting and design of facilities will include considerations that ensure that all interpretive and educational materials incorporate an Indigenous perspective.
- c) Park facilities will provide ceremonial space for cultural use by Indigenous groups and individuals.

GUIDING PRINCIPLE 6. Promote Landscape Connectivity

Supporting Objectives

- a) Park facilities will allow future connections to surrounding parks and recreation areas to provide regional recreational opportunities.
- b) Developed park areas will be sited and designed to promote continuous and connected areas of important habitats and to avoid fragmentation.
- c) Planning of facilities will incorporate considerations for a collaborative and regional approach to forest management that engages landowners and land management agencies of nearby properties.

GUIDING PRINCIPLE 7. Design with Reverence and Resilience

Supporting Objectives

- a) Structures and facilities will be sited and constructed to be resilient to hazards that will become more frequent and intense with climate change including severe winter storms, drought, and high-severity fire.
- b) All developed park amenities are aesthetically designed to create experiences that reference the historic character of Big Basin.
- c) Developed park facilities are planned to minimize carbon emissions associated with park visitation and operation and maintenance, are designed with sustainable materials, and incorporate renewable energy production when feasible.

2. PROJECT DESCRIPTION

GUIDING PRINCIPLE 8. Engage the Park Community and Build Partnerships

Supporting Objectives

- a) Park plans reflect public values and feedback, and the priorities expressed by the community and stakeholders during the facilities planning process, particularly reflecting the voices of under-represented communities.
- b) Park plans can be implemented with strong support from partners.
- c) Park facilities can be constructed in phases to provide the envisioned recreational experiences with available funds.

2.5 RELATED PROJECTS

Other management plans may be prepared for BBRSP including a Road and Trail Management Plan, Interpretation Management Plan, and other management plans as described in the 2023 Cornerstone Document and based on future needs. In 2024, a Forest Management Strategy was prepared for BBRSP, Ano Nuevo State Park, and Butano State Park. Management plans and other planning documents that have overlapping project areas would be consistent with each other. Where planned facilities, roads and trails, forest management and interpretation overlap, coordinated plan development and support would be guided by the 2013 General Plan. Future plans would be considered under separate CEQA review.

2.6 PROJECT REQUIREMENTS

Under the CEQA Guidelines, the Department is in a unique role as both the Lead Agency and a Trustee Agency. The Lead Agency is a public agency that has the primary responsibility for carrying out or approving a project and for implementing CEQA. A Trustee Agency is a State agency having jurisdiction by law over natural resources affected by a project that are held in trust for the people of the State of California. The Department takes this distinction with responsibility to ensure that its actions protect both cultural and natural resources on all projects.

However, the Department is also the project proponent. Because of its unique role as Lead Agency, Trustee Agency, as well as the project proponent, the Department's resources professionals take a prominent and influential role during the project conceptualization, design, and planning process consistent with Section 15004(b)(1) of CEQA. Their early involvement during the planning process enables environmental considerations to influence project programming and design. This approach permits the Department under CEQA Section 15065(b)(1), to incorporate project modifications prior to the start of the public review process of the environmental document, to avoid impacts to a point where clearly no significant effect on the environment would occur.

2. PROJECT DESCRIPTION

As part of its effort to avoid impacts, the Department also maintains a list of project requirements that are included in project design to reduce impacts on resources. From this list, Standard Project Requirements (SPRs) are assigned, as appropriate, to all projects. A full list of SPRs is found in Appendix A, *Standard Project Requirements*.

2.7 REQUIRED PERMITS AND APPROVALS

Implementation of the proposed project would require the following permits and/or approvals, as well as any permits or approvals identified as future development of projects are proposed:

- Adoption of the proposed BBFMP
- Adoption of the proposed General Plan Amendments
- Certification of this Supplemental EIR
- Section 404 Permits (for specific projects)
- Section 401 Permits (for specific projects)
- Section 402 Permits (for specific projects)
- Section 1602, Streambed Alternation Agreements (for specific phases)
- Office of State Fire Marshal approval
- Encroachment permits from Caltrans and Santa Cruz County
- Sewage Disposal Permit

2. PROJECT DESCRIPTION

This page is intentionally left blank.

3. ENVIRONMENTAL CHECKLIST

PROJECT INFORMATION

Project Title: Big Basin Redwoods State Park Facilities Management Plan and General Plan Amendments

Lead Agency Name and Address: California Department of Parks and Recreation

Contact Person and Phone Number:

Will Fourt
Senior Park and Recreation Specialist
Santa Cruz District
California Department of Park and Recreation
303 N Big Trees Road
Felton, CA 95018

Project Location:

Big Basin Redwoods State Park
21600 Big Basin Highway
Boulder Creek, CA 95006

Project Sponsor's Name and Address:

California Department of Parks and Recreation
Santa Cruz District
303 N Big Trees Road
Felton, CA 95018

General Plan Designation: Parks, Recreation, and Open Space (O-R)

Zoning: Parks, Recreation, and Open Space (PR)

Description of Project:

The proposed project includes amendments to the Big Basin Redwoods State Park General Plan and the adoption of the Reimagining Big Basin Redwoods State Park Facilities Management Plan. The proposed General Plan amendments include text changes to provide clarity in consistency of the 2013 General Plan with the facilities envisioned in the proposed Facilities Management Plan and would expand the park boundary to include parcels that the Department is in the process of acquiring to include in the Big Basin Redwoods State Park. The proposed

3. ENVIRONMENTAL CHECKLIST

Facilities Management Plan is a planning document designed to guide the stewardship, management, and use of existing and future facilities consistent with the 2013 General Plan. It would provide guidance and direction for implementing the goals and objectives of the 2013 General Plan EIR, the 2022 Reimagining Big Basin Vision Summary, and the 2023 Big Basin Redwoods State Park Cornerstone Document. Additionally, the proposed project would guide the rebuilding of facilities lost in the 2020 CZU Lightning Complex fire that burned 97 percent of the park and most of its facilities.

The proposed project includes proposed facilities and improvement guidance for 19 identified sites in the five proposed zones in the Focus Area. The sites either hosted pre-fire facilities or have otherwise been identified as suitable facility locations based on sensitive habitat avoidance, access considerations, and slope stability. Facilities included in the proposed project include visitor-serving facilities such as picnic areas, amphitheaters, restrooms, interpretation areas, information desks, a café, and camp stores; overnight facilities like camp sites and cabins; tribal facilities like cultural interpretation sites and centers, outdoor workspaces, and lodging; transportation-related facilities like parking lots, electric vehicle charges, and shuttle infrastructure; utilities infrastructure like water distribution and storage, wastewater collection and treatment, stormwater, electrical and solar facilities, and telecommunications; administrative facilities like offices, maintenance shops, and storage; and staff residences. All these facilities would be consistent with the 2013 General Plan and proposed General Plan Amendments. Focus Area-wide proposed project components include road and circulation improvements, the introduction of a shuttle program throughout the Focus Area, utility upgrades and replacement, habitat restoration, and an improved emergency response and evacuation plan.

Surrounding Land Uses and Setting:

Refer to Chapter 3 of this document (Section IX, Land Use Planning)

Other Public Agencies Whose Approval Is Required (e.g., Permits, Financing Approval, or Participating Agreement):

Refer to Chapter 2, Section 2.7

Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code Section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

Refer to Chapter 3 of this document (Section V, Cultural Resources)

3. ENVIRONMENTAL CHECKLIST

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact," as indicated by the checklist on the following pages.

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

DETERMINATION

On the basis of this initial evaluation:

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☒ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

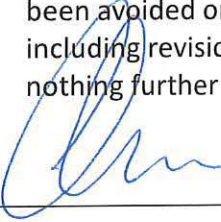
INITIAL STUDY FOR THE REIMAGINING BIG BASIN REDWOODS STATE PARK FACILITIES
MANAGEMENT PLAN AND GENERAL PLAN AMENDMENTS
CALIFORNIA DEPARTMENT OF PARKS AND RECREATION

3. ENVIRONMENTAL CHECKLIST

described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐

I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



Chris Spohrer
District Superintendent

6.16.2025

Date



Linda Hitchcock
Environmental Coordinator

6-16-2025

Date

3. ENVIRONMENTAL CHECKLIST

I. AESTHETICS

Would the Project:	Level of Impact in the 2013 General Plan EIR?	Create a Substantial Change in Project or Circumstances Resulting in New Significant Effects?	Result in New Information Showing New or More Severe Significant Effects?	Result in New Mitigation or Alternative to Reduce Significant Effect Is Declined?	Meet the Conditions of CEQA Guidelines Section 15163?
a) Have a substantial adverse effect on a scenic vista?	LTS	No	No	No	No
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings?	LTS	No	No	No	No
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	LTS	No	No	No	No
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	LTS	No	No	No	No

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation;
SU = significant and unavoidable; N/A = topic not analyzed in the 2013 General Plan EIR

2013 BIG BASIN REDWOODS STATE PARK GENERAL PLAN

The 2013 General Plan contains the following goals and guidelines related to aesthetics:

Aesthetics Goal: Identify and protect positive aesthetic values to preserve the fundamental character of the park for future generations.

AESTHETIC GUIDELINES:

Aesthetics 1: Preserve and enhance positive aesthetic resources and remove or screen elements that have negative aesthetic qualities to preserve the parks scenic and recreation values.

3. ENVIRONMENTAL CHECKLIST

Aesthetics 2: Integrate positive aesthetic features into the design of new park facilities, interpretive programs, and maintenance programs. The design style should be site-specific and contextual – reinforcing the colors, shapes, scale, and materials in the surrounding environment to integrate and complement the park’s natural setting. Preserve and showcase scenic views, use native (or replicated) building materials where appropriate, use muted colors that reflect the natural surroundings, and take advantage of (or screen) ephemeral conditions (e.g., weather, wind, sunlight, etc.), as appropriate. Historic buildings should retain the Park Rustic style that embodies the harmonious blending of native stone and wood. New construction should be compatible with, but clearly differentiated from, the historic Park Rustic resources to avoid a false sense of history.

Aesthetics 3: Develop and implement design standards or guidelines for park facilities and signage to share similarities in style and/or materials, to create a sense of park identity and visual continuity, and to reflect and preserve positive aesthetic values. Evaluate “first impressions” at park entrances and access points and organize, consolidate, screen, or remove unnecessary, repetitive, or unsightly elements

Aesthetics 4: Where appropriate, visually screen parking lots, roads, operations facilities, and storage areas from primary public use areas. Use native vegetation, rocks, elevation change, berms, and other methods that either use or mimic natural elements to minimize negative visual impacts from these facilities.

Aesthetics 5: Limit artificial lighting to avoid brightening the dark night sky. Restrict night lighting to the more developed areas of the park (e.g. buildings and parking lots) and provide lighting fixtures that focus the light downward. Light levels should be as low as possible, consistent with public safety standards. Refer to the Department’s Lightscape Protection Policy (DOM, Chapter 0300, 2004) when evaluating lighting.

Aesthetics 8: Coordinate with local, state, and federal agencies, open space providers and community groups, landowners, and other stakeholders to preserve, protect, and enhance positive aesthetic features and viewsheds. Follow the Local Coastal Program and other applicable standards for aesthetic resources.

Aesthetics 9: Acquire property and conservation easements from willing sources to expand and protect the park’s aesthetic resources.

Saddle Mountain Goal: Establish a “front door” park entrance for primary visitor contact and park orientation on Highway 236 at the southern park boundary.

3. ENVIRONMENTAL CHECKLIST

Saddle Mountain Guidelines:

Saddle Mountain 2: Preserve and maintain the scenic quality of Highway 236 and establish appropriate “first impression” treatments that are compatible with the character of the park and create an attractive and welcoming park entry experience into Big Basin.

Saddle Mountain 5: Preserve the meadow and open space qualities in the planning and design of future park facilities, and establish adequate vegetative screening and buffers between administrative and visitor activity areas, and between park development and adjacent properties.

Sustainability Goal: Incorporate sustainable design principles into the design, development, operations, and maintenance of park facilities and programs.

Sustainability Guidelines:

Sustainability 1: Use sustainable design strategies to minimize impacts to the park’s natural, cultural and aesthetic resources. Choose low-impact building sites, structures, building, and landscape materials, and maintenance and management practices that avoid the use of environmentally-damaging, waste producing, or hazardous materials. Use natural, renewable, indigenous, and recyclable materials, and energy-efficient design.

APPLICABLE STANDARD PROJECT REQUIREMENTS

State Parks requires Standard Project Requirements (SPRs) for all projects. The following SPRs are related to aesthetics. A full list of SPRs is found in Appendix A, *Standard Project Requirements*.

AES-1: Projects will be designed to incorporate appropriate scenic and aesthetic values of BBRSP, including the choices for specific building sites, scope, and scale; building and fencing materials and colors; use of compatible aesthetic treatments on pathways, retaining walls, or other ancillary structures; location of and materials used in parking areas, campsites, and picnic areas; and development of appropriate landscaping. The park’s scenic and aesthetic values will also consider views into the park from neighboring properties.

AES-2: Permanent structures will be equipped with outdoor light shields that concentrate the illumination downward to reduce direct and reflected light pollution. The direct source of the lighting (bulb, lens, filament, tube, etc.) will not be visible off-site and the lighting will be installed as low as possible on poles and/or structures to minimize light pollution of the night sky. The candle power of the illumination at ground level will not exceed what is required by any safety or security regulations of any government agency with regulatory oversight.

3. ENVIRONMENTAL CHECKLIST

BASELINE CONDITIONS

Scenery can be defined as the general appearance of a place and the features of its views or landscapes. It consists of both biophysical elements (landforms, water, and vegetation) and cultural, or human-made, elements. Scenic quality is an important and valuable resource, especially on public lands. Many people value the quality of scenery and have high expectations of scenic quality, especially when visiting California parks. Scenic resources often provide a unique sense of place to an individual park, as well as to specific areas in a park unit. BBRSP has been recognized for its unique scenic qualities and natural beauty.

The visual resources of BBRSP are associated with public views inside the park, especially with regard to old-growth coast redwood trees (*Sequoia sempervirens*), as well as public views from nearby roadways looking toward the park landscape.

BBRSP provides a wide variety of scenic resources throughout the park. The majority of the landscape is characterized by the many ridges running generally southwest from the summit toward the ocean. A variety of vegetation communities occupy these ridges – mixed evergreen forests, oak woodlands, chaparral, and grasslands. In 2020, the CZU fire burned approximately 86,500 acres in Santa Cruz and San Mateo Counties, including 97 percent of BBRSP and its facilities. Impacts from the 2020 CZU fire resulted in fallen trees and burn scars that have changed some of the visual landscapes throughout the park. Though vegetation was impacted by the 2020 CZU fire, most of the old-growth coast redwoods survived and vegetation has been steadily growing back since the fire. BBRSP is still home to the largest continuous stand of ancient coast redwoods south of San Francisco.

Elevations in the park vary from sea level to over 2,000 feet. Vista points and panoramic views are primarily found along areas of higher elevation and open vegetation along the roads and trails in and surrounding the park.

Currently, park visitors can use recreational trails throughout the park. Most of the roads and some of the trails have been partially or fully reopened. Trails and roads lead past redwoods, creeks, and wildlife.

Highway 236 is the gateway into the main entrance and core area of the park. Highway 236 runs through the BBRSP and is an eligible State scenic highway under Caltrans' State Scenic Highway Program. The nearest designated State scenic highways are Highway 1, which borders the Pacific Ocean and is on the western edge of BBRSP in San Mateo County; Highway 35, which runs along the ridge from Highway 9 to Highway 92; and Highway 9, which is designated as a scenic

3. ENVIRONMENTAL CHECKLIST

highway on the east side of Highway 35.⁹ Views from these highways and park roads are where many people experience this landscape. The following discussion uses the existing, post-fire site conditions as the baseline for analysis.

DISCUSSION

a) Would the proposed project have a substantial adverse effect on a scenic vista?

The 2013 General Plan EIR determined that, with implementation of the General Plan guidelines listed in General Plan Chapter 4, *Park Plan*, substantial adverse impacts from General Plan buildout to scenic vistas at BBRSP would not occur, thus environmental impacts related to scenic vistas would be less than significant.

Impacts could occur under the proposed project if a road or trail alignment was altered or facility constructed to the degree that the existing scenic views are no longer accessible. Impacts to scenic vistas would also occur if a conspicuous structure were to be placed in a visually prominent location that is currently part of a scenic view, or if the landscape were to be substantially altered (e.g., removal of large sections of vegetation or geologic features), such that the scenic view would be substantially degraded. None of these potential outcomes would occur as a result of the proposed project. The BBFMP and General Plan are planning documents designed to guide the stewardship, management, and use of existing and future facilities. Proposed facilities under the BBFMP are based on consideration to enhance or not detract from the existing scenic resources of the park. This includes the development of park amenities that are aesthetically designed to create experiences that reference historical character with reverence to the park's natural landscape and history. Further, the BBFMP would adhere to the 2013 General Plan guidelines protecting scenic vistas. Although the 2013 General Plan does not officially designate scenic vistas in the Focus Area, it ensures that scenic views and the natural character of backcountry and wilderness areas are preserved.

Pursuant to General Plan Guideline Aesthetics 4, future development would require the use of screening methods with appropriate native plants, rocks, or elevation changes. These elements would soften the visual effect of parking areas, campground facilities, roads, and trails; buffer intrusive or distracting views and activities outside park boundaries; and enhance scenic views. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR for the proposed project.

⁹ California Department of Transportation, 2019, California State Scenic Highway System Map, <https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aaca>, accessed March 6, 2025.

3. ENVIRONMENTAL CHECKLIST

b) Would the proposed project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings?

The 2013 General Plan EIR determined that, with implementation of the General Plan guidelines listed in General Plan Chapter 4, *Park Plan*, substantial adverse impacts to scenic resources in BBRSP would not occur and thus environmental impacts related to scenic resources would be less than significant.

BBRSP contains a wide variety of scenic resources. However, there are no officially designated scenic vistas or State scenic highways in or adjacent to the Focus Area. The nearest designated State scenic highways are Highway 9, approximately 5 miles east of the Focus Area; Highway 1, approximately seven miles west of the Old Growth Area; and Highway 35, which runs along the ridge from Highway 9 to Highway 92, approximately 9 miles north of the Focus Area.¹⁰ Proposed facilities and improvements under the proposed project would not be visible from any of these State-designated scenic highways.

The entirety of Highway 236, which provides entrance through BBRSP, is an eligible State scenic highway. Vista points and panoramic views in BBRSP are primarily found along areas of higher elevation and open vegetation along the roads and trails in and surrounding the park. Panoramas of the park and surrounding landscape can also be found on Highways 9, 35, 236 and on China Grade Road. Proposed facilities and improvements would be visible from Highway 236, an eligible (but not officially designated) State scenic highway, and the proposed BBFMP would facilitate improvements along Highway 236.

The BBFMP is a planning document designed to guide the stewardship, management, and use of existing and future facilities. This includes the development of park amenities that are designed to reference historical character and fit within the park's natural landscape and history. Proposed facilities under the BBFMP are based on consideration to enhance or not detract from the existing visual character of the park. Further, the BBFMP would adhere to the 2013 General Plan guidelines protecting scenic resources. Improvements facilitated by the BBFMP would be designed to minimize effects on the physical environment and would not obstruct scenic resources. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

¹⁰ California Department of Transportation, 2019, California State Scenic Highway System Map, <https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aaca>, accessed March 6, 2025.

3. ENVIRONMENTAL CHECKLIST

c) Would the proposed project substantially degrade the existing visual character or quality of the site and its surroundings?

The 2013 General Plan EIR determined that with implementation of the General Plan guidelines listed in General Plan Chapter 4, *Park Plan*, the existing visual character or quality of BBRSP would not be substantially degraded and thus environmental impacts related to visual character and quality would be less than significant.

The visual character of the Focus Area varies greatly with the seasons and generally exhibits high scenic and, in many cases, substantial visual features (e.g., large trees, riparian areas, water bodies, etc.) that enhance the visual character of the park's roads and trails. The BBFMP would serve as a management tool that will be used to guide the stewardship, management, and use of existing and future facilities and minimize impacts to the natural and cultural resources. Future development of new facilities, campgrounds, and parking lots would occur under the BBFMP. Implementation of and adherence to the General Plan's guidelines for preserving scenic quality and appropriate and sustainable setting, design, and selection of materials for park projects (Guidelines Aesthetics 1, Aesthetics 2, Saddle Mountain 2, and Sustainability 1), and screening of facilities (Guideline Aesthetics 4), would further minimize potential impacts.

The proposed project focuses specifically on areas along Highway 236, Sky Meadow/Lodge Road, and Little Basin Road that either hosted pre-fire facilities or have otherwise been identified as suitable facility locations based on sensitive habitat avoidance, access, and slope stability. Proposed uses in the BBFMP are based on consideration to enhance or not detract from the existing visual character of the park. Additionally, adherence to General Plan Guideline Aesthetics 2 would ensure that new park facilities constructed as a result of the proposed plan are designed in an appropriate, site-specific style that complements that park's natural setting and preserves and showcases scenic views. They would also be in areas previously disturbed by pre-fire development or otherwise appropriate for new development. Furthermore, future projects under the BBFMP would not require removal or major alteration of existing landscapes or geologic features and the proposed project would not substantially change visual character. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

d) Would the proposed project create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?

The 2013 General Plan EIR determined that artificial lighting from new park development could have an adverse effect on the dark night sky, though with implementation of the General Plan guidelines listed in General Plan Chapter 4, *Park Plan*, light and glare would be limited and thus environmental impacts related to light and glare would be less than significant.

3. ENVIRONMENTAL CHECKLIST

As described in the 2013 General Plan EIR, the facilities proposed under the BBFMP would likely include glass materials and nighttime safety lighting that may increase light and glare in the Focus Area over present levels. General Plan Guideline Aesthetics 5 would ensure that artificial lighting would be limited to developed areas of the park, be shielded or focused downwards, and emit the lowest light levels possible while meeting the park's goals for public safety. Further, SPR AES-3 requires that all outdoor lighting be pointed downward and installed as low as possible on poles and/or structures to minimize light pollution of the night sky. Additionally, adherence to SPR AES-1 would ensure that facilities constructed as a result of the proposed project incorporate appropriate building design and materials, thus reducing the potential for glare. Construction facilitated by the implementation of the BBFMP would likely only occur during daytime hours. Therefore, no temporary impacts from construction lighting and glare would occur. In addition, no substantial adverse impact due to light or glare issues would occur.

Overall, light and glare generated by development under the proposed project would be required to follow applicable SPRs and General Plan guidelines. Thus, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

II. AGRICULTURE AND FORESTRY RESOURCES

Would the Project:	Level of Impact in the 2013 General Plan EIR	Create a Substantial Change in Project or Circumstances Resulting in New Significant Effects?	Result in New Information Showing New or More Severe Significant Effects?	Result in New Mitigation or Alternative to Reduce Significant Effect Is Declined?	Meet the Conditions of CEQA Guidelines Section 15163?
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	NI	No	No	No	No

INITIAL STUDY FOR THE REIMAGINING BIG BASIN REDWOODS STATE PARK FACILITIES
MANAGEMENT PLAN AND GENERAL PLAN AMENDMENTS
CALIFORNIA DEPARTMENT OF PARKS AND RECREATION

3. ENVIRONMENTAL CHECKLIST

Would the Project:	Level of Impact in the 2013 General Plan EIR	Create a Substantial Change in Project or Circumstances Resulting in New Significant Effects?	Result in New Information Showing New or More Severe Significant Effects?	Result in New Mitigation or Alternative to Reduce Significant Effect Is Declined?	Meet the Conditions of CEQA Guidelines Section 15163?
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	NI	No	No	No	No
c) Conflict with existing zoning for, or cause rezoning of, forestland (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	NI	No	No	No	No
d) Result in the loss of forest land or conversion of forest land to non-forest use?	NI	No	No	No	No
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	NI	No	No	No	No

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation;

SU = significant and unavoidable; N/A = topic not analyzed in the 2013 General Plan EIR

3. ENVIRONMENTAL CHECKLIST

2013 BIG BASIN REDWOODS STATE PARK GENERAL PLAN

The 2013 General Plan contains the following goal and guideline related to agricultural and forestry resources:

Vegetation Management Goal: Protect, restore, and maintain the native ecosystems, especially vegetation complexes and the old growth redwood forest habitat, at Big Basin Redwoods SP.

Vegetation Management Guidelines:

Vegetation 2: Identify locations in the park that are heavily impacted from past management practices (e.g., agricultural production, logging, and fire suppression) and implement appropriate vegetation and habitat restoration programs. Components of such restoration programs may include prescribed fire, revegetation with native species, fenced enclosures, facility relocations, and other methods. Reforestation, where appropriate, can also help to positively affect climate change by reducing greenhouse gases through carbon sequestration.

APPLICABLE STANDARD PROJECT REQUIREMENTS

State Parks requires SPRs for all projects. There are no applicable SPRs related to agricultural and forestry resources. A full list of SPRs is found in Appendix A, *Standard Project Requirements*.

BASELINE CONDITIONS

The proposed project area, which includes the upland area of BBRSP, is characterized by mature forest growth, previously logged coast redwood forests, mixed conifers and oaks, chaparral, rugged terrain, and mountain streams. The impact of the 2020 CZU fire is visible in the charred areas of the forest that have been stripped of vegetation (burn scars) and a cleared forest understory; however, fire also creates favorable conditions for coast redwoods by clearing debris on the forest floor, exposing mineral soil, and creating canopy gaps that increase sunlight. Written in the park's purpose "is to protect, restore and perpetuate the outstanding coast redwood forests of the Santa Cruz Mountains and their unique resiliency to fire."

Much of the length of coastline along and adjacent to the park is characterized by broad marine terraces, some of which have long been used for agricultural purposes. Remnants of this agricultural history are still present, with farm operations continuing just outside park boundaries. These areas are outside of the Focus Area.

3. ENVIRONMENTAL CHECKLIST

At this time, no lands in the Focus Area are used or zoned for agricultural purposes, and none of the land is designated under the California Department of Farmland Finder.¹¹ Additionally, because BBRSP is a State park, there are no Williamson Act conservation lands in the park. The following discussion uses the existing, post-fire site conditions as the baseline for analysis.

DISCUSSION

a) Would the proposed project Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

The 2013 General Plan EIR determined that no substantial adverse impacts to agricultural uses or farmland in BBRSP would occur and thus no environmental impacts related to the conversion of farmland to non-agricultural uses would occur.

None of the land in the Focus Area, the area immediately surrounding the Focus Area, or any areas impacted by the proposed project are categorized as any of the Important Farmland categories, as delineated by the California Department of Conservation, under the Farmland Mapping and Monitoring Program.¹² Thus, the proposed project would not lead to any impact to farmland. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

b) Would the proposed project conflict with existing zoning for agricultural use, or a Williamson Act contract?

The 2013 General Plan EIR determined that no substantial adverse impacts to zoning for agricultural uses in the BBRSP would occur and thus no environmental impacts related to agricultural use or Williamson Act contracts would occur.

The proposed project is in an existing State Park, on Department land, and is not in conflict with existing zoning for agricultural uses or any Williamson Act land contracts. The proposed project is part of the State Parks system and, although some parks contain agricultural leases, the Focus Area does not support any agricultural operations or farmland. Local zoning does not apply to State Parks land, which is instead subject to Department policies, regulations, and management. Thus, there cannot be a conflict of zoning on a State Park property and the proposed project

¹¹ California Department of Conservation, 2016, California Department of Farmland Finder, available online at <https://maps.conservation.ca.gov/DLRP/CIFF/>.

¹² California Department of Conservation, California Important Farmland Mapper, 2022, available online at <https://maps.conservation.ca.gov/DLRP/CIFF/>, accessed April 4, 2022.

3. ENVIRONMENTAL CHECKLIST

would not impact existing agricultural land or Williamson Act contracts. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

c) Would the proposed project conflict with existing zoning for, or cause rezoning of, forestland (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

The 2013 General Plan EIR determined that no substantial adverse impacts to timberland in the BBRSP would occur and thus no environmental impacts related to timberland production would occur.

Commercial extraction of timber is not allowed in units of the State Parks system, pursuant to PRC Section 5001.65. Some of the parcels recently acquired or leased by State Parks are zoned for timber production. However, local zoning does not apply to State Parks land. All land in BBRSP is subject to Department policies, regulations, and management. Thus, there cannot be a conflict of zoning on a State Park property for Timberland Production and, upon acquisition, local zoning will not apply to these lands. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

d) Would the proposed project result in the loss of forest land or conversion of forest land to non-forest use?

The 2013 General Plan EIR determined that no substantial adverse impacts to forest land in BBRSP would occur and, thus, no environmental impacts would occur related to loss of forest land or conversion of forest land to non-forest use.

The proposed project would be implementing the goals provided in the 2013 General Plan and evaluated in the 2013 General Plan EIR. BBRSP includes old growth and previously logged coast redwood forests; however, by preserving and managing these forests, the park is helping to protect this land. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

3. ENVIRONMENTAL CHECKLIST

e) Would the proposed project involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

The 2013 General Plan EIR determined that no substantial adverse impacts to agricultural uses, farmland, or forest land in BBRSP would occur and, thus, no environmental impacts related to the conversion of farmland or forest land to nonagricultural or non-forest uses would occur.

No conversion of adjacent agricultural or forest lands to non-agricultural/timber production uses would occur as a result of the proposed project. Although some of the parcels recently acquired or leased by State Parks are zoned for timber production, as described in impact discussion II(c), local zoning will not apply to these lands upon acquisition by State Parks. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

III. AIR QUALITY

Would the Project:	Level of Impact in the 2013 General Plan EIR	Create a Substantial Change in Project or Circumstances Resulting in New Significant Effects?	Result in New Information Showing New or More Severe Significant Effects?	Result in New Mitigation or Alternative to Reduce Significant Effect Is Declined?	Meet the Conditions of CEQA Guidelines Section 15163?
a) Conflict with or obstruct implementation of the applicable air quality plan?	LTS	No	No	No	No
b) Violate any air quality standards or contribute substantially to an existing or projected air quality violation?	LTS	No	No	No	No

3. ENVIRONMENTAL CHECKLIST

Would the Project:	Level of Impact in the 2013 General Plan EIR	Create a Substantial Change in Project or Circumstances Resulting in New Significant Effects?	Result in New Information Showing New or More Severe Significant Effects?	Result in New Mitigation or Alternative to Reduce Significant Effect Is Declined?	Meet the Conditions of CEQA Guidelines Section 15163?
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	LTS	No	No	No	No
d) Expose sensitive receptors to substantial pollutant concentrations?	LTS	No	No	No	No
e) Create objectionable odors affecting a substantial number of people?	LTS	No	No	No	No

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation;

SU = significant and unavoidable; N/A = topic not analyzed in the 2013 General Plan EIR

2013 BIG BASIN REDWOODS STATE PARK GENERAL PLAN

The 2013 General Plan contains the following goals and guidelines related to air quality:

Geology and Hydrology Goal: Minimize human impacts on natural geologic and hydrologic processes and values while protecting human life and property from these natural processes.

Geology and Hydrology Guidelines:

Geology/Hydrology 5: As appropriate, use standard Best Management Practices (BMPs) for erosion, dust, sediment control, and storm water runoff for park projects, and update regularly.

3. ENVIRONMENTAL CHECKLIST

Sustainability Goal: Incorporate sustainable design principles into the design, development, operations, and maintenance of park facilities and programs.

Sustainability Guidelines:

Sustainability 5: Use low- or zero-emission vehicles, when possible, for park operations and maintenance, and a potential shuttle system. Use low- or zero-emission grounds maintenance equipment, when possible, such as electric trimmers, chain saws, and mowers. Substitution of lower-emission and alternative energy-source tools and vehicles will reduce air quality impacts and heat-trapping emissions, and promote energy efficiency.

Vegetation Management Goal: Protect, restore, and maintain the native ecosystems, especially vegetation complexes and the old growth redwood forest habitat, at Big Basin Redwoods SP

Vegetation Guidelines:

Vegetation 2: Identify locations in the park that are heavily impacted from past management practices (e.g., agricultural production, logging, and fire suppression) and implement appropriate vegetation and habitat restoration programs. Components of such restoration programs may include prescribed fire, revegetation with native species, fenced enclosures, facility relocations, and other methods. Reforestation, where appropriate, can also help to positively affect climate change by reducing greenhouse gases through carbon sequestration.

Vegetation 4: Prescribed fire should be used as part of a vegetation management strategy, when appropriate, to achieve natural and cultural landscape management goals. This program, including the Unit Prescribed Fire Plan, will be upgraded periodically to reflect the ongoing accomplishments and necessary refinements, changes in prescribed fire science and technology, state and federal regulations, and be reviewed for consistency with other programs affecting vegetation management strategies and public safety.

APPLICABLE STANDARD PROJECT REQUIREMENTS

State Parks requires SPRs for all projects. The following SPRs are related to air quality. A full list of SPRs is found in Appendix A, *Standard Project Requirements*.

- AQ-1:** During dry, dusty conditions, all active construction areas will be lightly sprayed with water or another dust suppressant to reduce dust without causing runoff.
- AQ-2:** All trucks or light equipment hauling soil, sand, or other earthen materials on public roads to or from the site will be covered or required to maintain at least two feet of freeboard.

3. ENVIRONMENTAL CHECKLIST

- AQ-3:** All gasoline-powered equipment will be maintained according to manufacturer's specifications, and in compliance with all State and federal requirements.
- AQ-4:** During construction, paved streets adjacent to the Park shall either be swept or washed at the end of each day, or as required, to remove excessive accumulations of silt and/or mud that could have resulted from project-related activities.
- AQ-5:** Excavation and grading activities will be suspended when sustained winds exceed 25 miles per hour (mph), instantaneous gusts exceed 35 mph, or when dust occurs from remediation related activities where visible emissions (dust) cannot be controlled by watering or conventional dust abatement controls.

BASELINE CONDITIONS

The California Air Resources Board (CARB) regulates emission sources and oversees the activities of the local Air Pollution Control Districts and Air Quality Management Districts. CARB regulates local air quality by establishing state ambient air quality standards and vehicle emission standards. The Monterey Bay Unified Air Pollution Control District (MBUAPCD) is the local agency that regulates air quality in the North Central Coast Air Basin (NCCAB).

The majority of BBRSP is in the northernmost portion of the NCCAB, which includes Santa Cruz, San Benito, and Monterey Counties. A small portion of the park is in San Mateo County and is included in the southern portion of the San Francisco Bay Area Air Basin (SFBAAB) in the Bay Area Air District (Air District, formerly the Bay Area Air Quality Management District [BAAQMD]).

The main emission sources in the NCCAB are the Moss Landing Power Plant, agricultural activities, and vehicle emissions from Highway 101 traffic. Though separated by the Coast Range of the Santa Cruz Mountains to the south, wind can move air pollution from the SFBAAB to the NCCAB. The NCCAB is a nonattainment area for ozone and coarse particulate matter (PM₁₀) for California air quality standards only. The area attains the National Ambient Air Quality Standards for ozone, PM₁₀ and fine particulate matter (PM_{2.5}). The NCCAB also meets the California standard for PM_{2.5}. The nearest air monitoring site was approximately 11 miles south of the park in Davenport but is no longer in operation. However, prior monitoring data from Davenport is useful for describing conditions in the project area. Two air quality components of concern are ozone and particulate matter. Emission sources at BBRSP include park construction, visitor and employee transportation, and prescribed burns. The following discussion uses pre-fire visitation and conditions as the baseline for analysis.

3. ENVIRONMENTAL CHECKLIST

DISCUSSION

a) Would the proposed project conflict with or obstruct implementation of the applicable air quality plan?

The 2013 General Plan EIR determined that, with implementation of the General Plan's guidelines listed in Chapter 4, *Park Plan*, implementation of the General Plan is not expected to result in significant short- or long-term adverse effects on air quality.

Implementation of the BBFMP would take place over time with the implementation of various projects and plans occurring at different stages from each other. Some projects require only minor construction activity, such as trail construction, road management, or vegetation management using mostly hand tools, and would not result in substantial temporary emissions. Other projects could involve more extensive construction, such as development at Saddle Mountain and other new facility construction. For these projects, the proposed project would include similar SPRs as included in the 2013 General Plan EIR that would limit emissions to similar levels as described in the 2013 General Plan EIR, these include dust-control measures (SPRs AQ-1, AQ-2, AQ-4, and AQ-5) and requirements for gasoline-powered equipment (SPR AQ-3). The air quality impacts from construction due to implementation of the proposed project would also be substantially reduced using dust-control measures and other construction best management practices (as required by Guideline Geology/Hydrology 5). Site-specific dust-control measures would be developed on a per-project basis, consistent with the General Plan guidelines and SPRs described previously. Further, since the preparation of the 2013 General Plan EIR in 2013, construction practices and equipment have become more efficient and therefore current construction projects are likely to create reduced air quality impacts than in past years.

Air quality may also be temporarily impacted by prescribed burning programs or wildfires in the park. Pursuant to General Plan Guideline Vegetation 4, the Department uses prescribed fire as part of a vegetation management strategy. This strategy has already been occurring in the park and would continue after implementation of the proposed project. The Department would continue to identify conditions under which prescribed burning would be allowed to minimize impacts on air quality, as described in the 2013 General Plan EIR.

An increase in park visitation as a result of the proposed project is not expected to occur, when compared to pre-fire visitation levels. Emissions associated with the number of vehicle trips associated with park usage would therefore be similar to pre-fire uses. Thus, operations as a result of the proposed project would not result in a substantial increase in long-term regional reactive organic gas (ROG), nitrogen oxide (NO_x), PM₁₀, or carbon monoxide (CO) emissions associated with increased vehicle trips. Further, the proposed project includes the addition of a shuttle program throughout the park to reduce single-occupancy vehicles and therefore reduce trips to and within the park in comparison to pre-fire conditions. The 2013 General Plan also

3. ENVIRONMENTAL CHECKLIST

recommends the use of low-emission park vehicles, such as maintenance vehicles, to reduce emissions and contribute to better air quality (Guideline Sustainability 5). Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

b) Would the proposed project violate any air quality standards or contribute substantially to an existing or project air quality violation?

The 2013 General Plan EIR determined that, with implementation of the General Plan's guidelines listed in Chapter 4, *Park Plan*, implementation of the General Plan is not expected to result in significant short- or long-term adverse effects on air quality. CARB regulates local air quality by establishing State ambient air quality standards and vehicle emission standards.

Implementation of the BBFMP is not expected to conflict with, obstruct implementation of, or violate air quality standards set by CARB. Though implementation of the proposed project would lead to construction emissions, compliance with the applicable air quality SPRs required for all projects would minimize air quality impacts during construction. Further, since preparation of the 2013 General Plan EIR in 2013, construction practices and equipment have become more efficient and therefore current and future construction projects are likely to create less impacts to air quality than in past years.

Overall, the proposed project would not result in a new source of emissions that would result in a considerable net increase of any criteria pollutant for which the project region is in nonattainment under applicable federal or State ambient air quality standards compared to the projects evaluated under the 2013 General Plan EIR. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

c) Would the proposed project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under applicable federal or State ambient air quality standard?

The 2013 General Plan EIR determined that, with implementation of the General Plan's guidelines listed in Chapter 4, *Park Plan*, implementation of the General Plan is not expected to result in significant short- or long-term adverse effects on air quality. As described previously, the NCCAB is a nonattainment area for ozone and PM₁₀, which applies to California air quality standards only. The area attains the National Ambient Air Quality Standards for ozone, PM₁₀, and PM_{2.5}. The NCCAB also meets the California standard for PM_{2.5}.

3. ENVIRONMENTAL CHECKLIST

The major sources of PM₁₀, as described in the 2013 General Plan EIR, are combustion (e.g., wood smoke, emissions from industry, automobiles, and diesel engines) and dust (e.g., airborne soil, road dust caused by vehicle travel), both of which have the potential to be emitted during subsequent maintenance and construction activities due to implementation of the proposed project. Additionally, ozone is a secondary pollutant formed by chemical reactions in the presence of sunlight between pollutants emitted by cars and other sources that could be involved in the proposed project.

Maintenance and construction activities due to implementation of the proposed project would include temporary usage of construction equipment, material transport, and clearing of vegetation or excavation for new trails and facilities; therefore, emissions of ozone precursors and generation of fugitive dust is anticipated, as described in the 2013 General Plan EIR. Maintenance and construction activities are already occurring in the Focus Area and are focused in areas previously disturbed by pre-fire development or otherwise appropriate for new development.

Compliance with applicable air quality SPRs required for all projects would minimize air quality impacts from construction activities. The proposed project would not result in a new source of emissions not already evaluated in the 2013 General Plan EIR that would result in a considerable net increase of any criteria pollutant for which the project region is in non-attainment under applicable federal or State ambient air quality standards. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

d) Would the proposed project expose sensitive receptors to substantial pollutant concentrations?

The 2013 General Plan EIR determined that, with implementation of the General Plan's guidelines listed in Chapter 4, *Park Plan*, implementation of the General Plan is not expected to result in significant short- or long-term adverse effects on air quality. BBRSP does not contain any sensitive receptors such as schools, hospitals, or hospice care facilities. Furthermore, nearby sensitive receptors within the communities that surround BBRSP are all separated from the park by roadways, freeways, or urban development. Thus, the proposed project would not expose sensitive receptors to substantial pollutant concentrations. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

3. ENVIRONMENTAL CHECKLIST

e) Would the proposed project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

The 2013 General Plan EIR determined that, with implementation of the General Plan's guidelines listed in Chapter 4, *Park Plan*, implementation of the General Plan is not expected to result in significant short- or long-term adverse effects on air quality. Typically, the type of facilities that are considered to have objectionable odors include wastewater treatments plants, compost facilities, landfills, solid waste transfer stations, fiberglass manufacturing facilities, paint/coating operations (e.g., auto body shops), dairy farms, petroleum refineries, asphalt batch plants, chemical manufacturing, and food manufacturing facilities. Future development of new facilities, campgrounds, and parking lots would occur under the BBFMP are not considered to be sources of objectionable odors.

Some of the new development under the proposed project would include pit toilets, which can be a source of odors. These facilities would be out of the main path of travel and are not expected to affect a substantial number of people. The proposed project would also include the installation of fire pits, which could generate odors. Along with pit toilets, fire pits were previously installed in BBRSP (prior to the 2020 CZU fire) and were evaluated in the 2013 General Plan EIR. Thus, the proposed project would not create new objectionable odors for any individuals that were not evaluated in the 2013 General Plan EIR. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

IV. BIOLOGICAL RESOURCES

Would the Project:	Level of Impact in the 2013 General Plan EIR?	Create a Substantial Change in Project or Circumstances Resulting in New Significant Effects?	Result in New Information Showing New or More Severe Significant Effects?	Result in New Mitigation or Alternative to Reduce Significant Effect Is Declined?	Meet the Conditions of CEQA Guidelines Section 15163?
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plan,	SU	Yes	No	No	Yes

INITIAL STUDY FOR THE REIMAGINING BIG BASIN REDWOODS STATE PARK FACILITIES
MANAGEMENT PLAN AND GENERAL PLAN AMENDMENTS
CALIFORNIA DEPARTMENT OF PARKS AND RECREATION

3. ENVIRONMENTAL CHECKLIST

Would the Project:	Level of Impact in the 2013 General Plan EIR?	Create a Substantial Change in Project or Circumstances Resulting in New Significant Effects?	Result in New Information Showing New or More Severe Significant Effects?	Result in New Mitigation or Alternative to Reduce Significant Effect Is Declined?	Meet the Conditions of CEQA Guidelines Section 15163?
policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?					
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	LTS	Yes	No	No	Yes
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	LTS	Yes	No	No	Yes

3. ENVIRONMENTAL CHECKLIST

Would the Project:	Level of Impact in the 2013 General Plan EIR?	Create a Substantial Change in Project or Circumstances Resulting in New Significant Effects?	Result in New Information Showing New or More Severe Significant Effects?	Result in New Mitigation or Alternative to Reduce Significant Effect Is Declined?	Meet the Conditions of CEQA Guidelines Section 15163?
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	LTS	Yes	No	No	Yes
e) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?	NI	No	No	No	No

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation;

SU = significant and unavoidable; N/A = topic not analyzed in the 2013 General Plan EIR

2013 BIG BASIN REDWOODS STATE PARK GENERAL PLAN

The 2013 General Plan contains the following goals and guidelines related to biological resources:

Marbled Murrelet Management and Conservation Goal: Coordinate with the U.S. Fish and Wildlife Service and California Department of Fish and Game toward the long-term recovery and survival of the Santa Cruz Mountains marbled murrelet population. Implement actions to minimize marbled murrelet population decline, protect and restore marbled murrelet breeding habitat, reduce the impacts of human presence on the breeding success of this bird, and contribute to the recovery of the species.

3. ENVIRONMENTAL CHECKLIST

Marbled Murrelet Management and Conservation Guidelines:

Murrelet 1: Consult with DFG and USFWS prior to initiating construction activities that may affect murrelets and/or their nesting habitat.

Regional Habitat Management Goal: Maintain, enhance, or restore the movement of native species through the park and regional ecosystems in order to protect and promote species abundance and diversity.

Regional Habitat Management Guidelines:

Regional Habitat 1: Protect known wildlife habitat linkages to permit movement of wildlife (both aquatic and terrestrial) and to increase species abundance and diversity. Collect baseline information to monitor the health and function of core habitat areas and these linkages. Monitor wildlife as necessary to gauge the effectiveness of linkages and to identify wildlife population trends

Regional Planning Goal: Integrate the planning and management programs at Big Basin Redwoods SP with the planning and management programs of other parks and open space providers in the Santa Cruz Mountains.

Regional Planning Guidelines:

Regional Planning 3: Coordinate and collaborate with universities, colleges and other research organizations on natural and cultural resource studies to increase the knowledge of resources in the park and in the Santa Cruz Mountains region. Seek cooperative agreements with adjacent landowners, neighbors, and local jurisdictions responsible for zoning and land use management to provide for open space buffer areas to protect sensitive park resources and to identify and preserve wildlife habitat linkages.

Special Status Animals Goal: Protect special status wildlife within the park and manage for their perpetuation.

Special Status Animals Guidelines:

Special Animals 1: Protect all special status native wildlife species and their habitats. Include all taxa that are locally important (including endemic species) as well as those protected by federal and/or state law. A comprehensive list of species requiring special management attention should be prepared and regularly updated. Implement specific programs using sound ecological principles and professionally accepted methods to protect and rehabilitate special status animal populations and their habitats.

3. ENVIRONMENTAL CHECKLIST

Special Animals 2: Monitor marbled murrelet, snowy plover, San Francisco garter snake, California red-legged frog, and other special status animal species to identify population trends and to develop management strategies for their protection and perpetuation.

Special Animals 3: Minimize trail building, roadwork, and park facility maintenance activities in or near breeding areas during the breeding seasons for special status species.

Special Animals 4: Minimize disturbance to special status aquatic species, including California red-legged frog and anadromous fish, when scheduling and implementing activities that may result in streambed alteration or disturbance to wetlands or riparian habitat. This includes the sizing and placement of culverts beneath roads and trails throughout the park to facilitate fish passage. Culvert drainage patterns should follow the natural grade of the stream as much as possible to maximize fish passage.

Special Animals 5: Consider the needs of special status aquatic species into the timing and implementation of any activity that would result in streambed alteration or disturbance to wetlands or riparian habitat. Conduct in-stream work consistent with the requirements of CDFG, NOAA Fisheries, and the Federal Clean Water Act. Apply appropriate Best Management Practices (BMPs) to protect water quality.

Wildlife Management Goal: Protect, restore and maintain the wildlife populations at Big Basin Redwoods SP.

Wildlife Management Guidelines:

Wildlife 1: Encourage and support scientific surveys and studies to be conducted in the park to gather more information about the distribution, status, and condition of sensitive natural resources.

Wildlife 2: Cooperate with federal, state, and local agencies and with open space organizations to promote effective and efficient park and regional vegetation, habitat, and wildlife resource management.

Wildlife 3: Prepare and conduct surveys and inventories of natural resources in areas subject to development. Avoid or reduce negative impacts to sensitive resource areas and follow all applicable regulations and guidelines for minimizing adverse impacts from new facilities development.

Wildlife 4: Control and/or eradicate non-native animal species, such as bullfrogs and feral pigs, that have been identified by State Park biologists and/or park managers as creating significant impacts to special status wildlife species such as the federally listed as threatened California red-legged frog. Use methods that are based on sound principles of ecosystem management and that are consistent with the Department's Non-Native Animal Control

3. ENVIRONMENTAL CHECKLIST

Policy (DOM, Chapter 0300, Natural Resources, Section 0311.5.7.1). Priority for control efforts will be given to those species most detrimental to the environment and for which there is a reasonable probability of success.

Wildlife 5: Monitor San Francisco garter snake, California red-legged frog, marbled murrelet, western snowy plover, and other special status animal species to identify animal population trends and to develop management strategies for their protection and perpetuation.

Wildlife 6: Reduce and, where possible, eliminate wildlife access to human food and garbage by using wildlife-proof trash containers and dumpsters throughout the park, increasing the frequency of trash collection, and educating the public about the detrimental effects that human food can have on the ecological balance of the park and surrounding regions. Post signs throughout the park informing people not to feed wildlife and to cover and store food and trash appropriately. Also see listed actions for Marbled Murrelet Management and Conservation.

Wildlife 7: Protect common and special status wildlife and their habitats for the purpose of establishing and maintaining self-sustaining populations in a natural ecological setting and/or as required by laws and regulations. Avoid human-induced disturbance and degradation of natural areas. Protect special habitat elements, such as snags, where possible.

APPLICABLE STANDARD PROJECT REQUIREMENTS

State Parks requires SPRs for all projects. The SPRs related to biological resources will be provided in the Supplemental EIR and are not included in this Initial Study.

BASELINE CONDITIONS

As discussed in the 2013 General Plan, BBRSP exhibits a significant diversity of vegetation types, consisting of at least 15 types. Four of these vegetation types are considered by the California Natural Diversity Database (CNDDB) to be of high inventory priority because of their rarity and imperilment. In addition, the Redwood Forest type is of special significance because it provides habitat for listed wildlife species and because protection of remnant old-growth redwood stands was the primary impetus for the park establishment. The park also provides important habitat for a number of unique wildlife species, 22 special-status plant species, and 52 special-status wildlife species, including the marbled murrelet, and is of great importance to regional wildlife populations. The park contains valuable old-growth and older second-growth redwood habitat. The following discussion uses the existing, post-fire site conditions as the baseline for analysis.

3. ENVIRONMENTAL CHECKLIST

DISCUSSION

- a) Would the proposed project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plan, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?***

The 2013 General Plan EIR identified a significant impact associated with potential impacts to marbled murrelet (*Brachyramphus marmoratus*), a special-status bird species that is State listed as endangered and federally listed as threatened. The 2013 General Plan EIR found this impact to be significant and unavoidable due to the speculative nature of marbled murrelet research; because it is unclear what is causing the decline in its population, the precise activities under the 2013 General Plan EIR that could contribute to the dwindling numbers cannot be identified and therefore cannot be adequately mitigated. Because of the uncertainty about the marbled murrelet, as described in the 2013 General Plan EIR, further evaluation of this topic is warranted. **As such, the Draft Supplemental EIR will further evaluate this significance criterion.**

- b) Would the proposed project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?***

The 2013 General Plan EIR identified a significant impact associated with potential impacts to marbled murrelet. Because of the uncertainty regarding the cause of the marbled murrelet's decline, further evaluation of this topic is warranted. **As such, the Draft Supplemental EIR will further evaluate this significance criterion.**

- c) Would the proposed project have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?***

The 2013 General Plan EIR identified a significant impact associated with potential impacts to marbled murrelet. Because of the uncertainty regarding the marbled murrelet's decline, further evaluation of this topic is warranted. **As such, the Draft Supplemental EIR will further evaluate this significance criterion.**

3. ENVIRONMENTAL CHECKLIST

d) Would the proposed project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

The 2013 General Plan EIR found that a significant, unavoidable impact resulted with respect to the speculative nature of the marbled murrelet research, since it is unclear what is causing the decline in its population. This lack of definitive information leads the Department to make overriding findings for a significant unavoidable impact on the marbled murrelet population.

Because of the uncertainty about the marbled murrelet, as described in the 2013 General Plan EIR, further evaluation of this topic is warranted. **As such, the Draft Supplemental EIR will further evaluate this significance criterion.**

e) Would the proposed project conflict with the provisions of an adopted Habitat Conservation Plan; Natural Community Conservation Plan; or other approved local, regional, or State habitat conservation plan?

The 2013 General Plan EIR did not describe a Habitat Conservation Plan; Natural Community Conservation Plan; or other approved local, regional, or State habitat conservation plan that includes BBRSP. The Zone 6 Marbled Murrelet Landscape Management Plan was created in 2017 that includes BBRSP. The proposed project would adhere to the BMPs described in the plan. Because the location of the proposed project is a focused area in the 2013 General Plan EIR study area, the proposed project would not be included in any other conservation plans; however, the “Reimagining Big Basin” process is planning for future conservation efforts. Further, where appropriate, State and federal resource agencies will be consulted to assist with appropriate resource protection, habitat enhancement, and management techniques under the General Plan, as well as for implementation of the proposed project. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

3. ENVIRONMENTAL CHECKLIST

V. CULTURAL RESOURCES

Would the Project:	Level of Impact in the 2013 General Plan EIR?	Create a Substantial Change in Project or Circumstances Resulting in New Significant Effects?	Result in New Information Showing New or More Severe Significant Effects?	Result in New Mitigation or Alternative to Reduce Significant Effect Is Declined?	Meet the Conditions of CEQA Guidelines Section 15163?
a) Cause a substantial adverse change in the significance of historical resources?	LTS	No	No	No	No
b) Cause a substantial adverse change in the significance of an archaeological resource?	LTS	No	No	No	No
c) Disturb any human remains, including those interred outside of formal cemeteries?	LTS	No	No	No	No

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation;

SU = significant and unavoidable; N/A = topic not analyzed in the 2013 General Plan EIR

2013 BIG BASIN REDWOODS STATE PARK GENERAL PLAN

The 2013 General Plan contains the following goals and guidelines related to cultural resources:

Archaeological Resources Goal: Identify, document and evaluate prehistoric archaeological resources for long-term protection and preservation.

Archaeological Resources Guidelines:

Archaeological 1: Implement the California State Parks Archaeological Site Condition Assessment (ASCAR) program to regularly inspect and record the status of archaeological sites. Conduct resource surveys and update the documentation and site records of the known archaeological sites to amplify or correct information about a resource, or confirm that the existing record remains accurate at the time of a subsequent field examination. This would include testing through limited excavation and/or collection of selected surface cultural materials, GPS mapping of sites, and establishment of resource sensitivity boundaries

3. ENVIRONMENTAL CHECKLIST

Archaeological 2: Prepare cultural resource management plans, as necessary, to further define a framework to identify, acknowledge, assess, and create effective management procedures for cultural sites within the park.

Archaeological 3: Nominate cultural resources, either as sites, districts or cultural landscapes, which may be eligible for listing in the National Register of Historic Places and/or the California Register of Historical Resources, to provide state and national recognition and context for resource management and protection.

Archaeological 4: Continue consultations with Ohlone representatives consistent with the Department's Native American Consultation Policy, and encourage participation in future park projects.

Archaeological 5: Identify, document, catalogue and curate artifacts and collections that have previously been recovered from archaeological sites within the park, according to the Office of Historic Preservation guidelines.

Historic Resources Goal: Protect and preserve important and significant cultural resources, including significant cultural landscapes and those buildings in the park as identified as eligible, or potentially eligible, to the California Register of Historic Resources or the National Register of Historic Places.

Historic Resources Guidelines:

Historic 1: Develop and implement a treatment plan for the historic resources located in the park. Development strategies should include cultural resource treatments, as defined by the Secretary of the Interior's Standards for the Treatment of Historic Properties, for those historic buildings, structures and features that have been identified as significant, combined with the interpretive objectives for the landscape as a whole, including the periods of significance; the integrity of the landscape and its character-defining features; and the existing condition of these individual features.

Historic 2: Complete Historic Structure Reports (HSR) for those existing historic buildings that do not have them, and update existing HSRs as needed. Provide documentation including graphic and physical information about a property's history and existing conditions, recommend appropriate treatments, management actions and goals for preservation or rehabilitation and appropriate adaptive use of the property, and outline the scope of recommended work for current and future resource managers.

Historic 3: Establish compatible uses for historic buildings requiring minimal change to historic fabric and character-defining features. Repair and retain historic fabric, whenever possible, instead of replacing with new materials. If replacement is necessary, use "like-kind" materials, styles, finishes, colors and craftsmanship. Distinctive features, finishes, and

3. ENVIRONMENTAL CHECKLIST

construction techniques or examples of craftsmanship that characterize a historic property should be preserved.

Historic 4: Complete and maintain an inventory of standing buildings and historic structures, roads and trails, historic objects and landscape features, with information including date of construction, significance, and character-defining features. Inventory and archive all historic maps into the Department's archive database.

Historic 5: Include cultural resource surveys in site-specific planning and development, to determine the resource presence, significance, potential impacts, and to provide recommended mitigation, when appropriate.

Historic 6: Document and evaluate historic properties that have changed over time, and determine the appropriate treatment for those property changes that have acquired historic significance in their own right.

Historic 7: Preservation and rehabilitation of historic buildings shall follow the Secretary of the Interior's Standards and Guidelines and the California Historic Building Code.

APPLICABLE STANDARD PROJECT REQUIREMENTS

State Parks requires SPRs for all projects. The following SPRs are related to cultural resources. A full list of SPRs is found in Appendix A, *Standard Project Requirements*.

- CUL-1:** If forest thinning activities are required in a culturally sensitive area, downed timber and other forest debris will be removed by aerial suspension; no portion of logs, slash, or debris will be dragged across the surface.
- CUL-2:** Prior to the start of on-site construction work, the **Cultural Resources Supervisor** will be notified, unless other arrangements are made in advance, a minimum of three weeks to schedule a **Cultural Resource Specialist** to monitor work, as necessary, to ensure that removal and reconstruction of historic fabric will occur in a manner consistent with the Secretary of the Interior's Standards.
- CUL-3:** Before, during, and after construction, a **Cultural Resource Specialist** will photo-document all aspects of the project and will add the photos to the historical records (archives) for the park.
- CUL-4:** Prior to the start of on-site construction work, and to the extent not already completed, a **Cultural Resource Specialist** will map and record all cultural features in the proposed Area of Potential Effects (APE) to a level appropriate to the Secretary of Interior Standards.

3. ENVIRONMENTAL CHECKLIST

- CUL-5:** All historic work will comply with the Secretary of the Interior Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings.
- Historic character will be retained and preserved;
 - Where safe, original materials that still maintain structural integrity will be retained; and
 - Where replacement is required, materials and features will be replaced “in kind.”
 - A **Cultural Resource Specialist** familiar with the project site’s cultural/historic resources will monitor all construction activities. All historical resources uncovered during the project will be recorded in place with a photograph and/or drawing showing any new material or recovered and archived, at the discretion of the monitor.
 - Upon completion of the project, a **Cultural Resource Specialist** will record any modifications to historic buildings or alterations of historic fabric on as-built drawings.
- CUL-6:** Prior to the start of any ground-disturbing activities, a Department-approved archaeologist will complete preconstruction testing to determine specific avoidance areas.
- If necessary, a Department-qualified Cultural Resource Specialist will prepare a research design, including appropriate trenching and/or preconstruction excavations.
 - Based on preconstruction testing, project design and/or implementation will be altered, as necessary, to avoid impacts to archaeological resources or reduce the impacts to a less-than-significant level, as determined in consultation with a Department-qualified archaeologist.
- CUL-7:** If anyone discovers previously undocumented cultural resources during project construction, work within **100 feet** of the find will be temporarily halted until the archaeologist designs and implements appropriate treatments in accordance with the Secretary of the Interior’s Standards and Guidelines for archaeological resource protection.
- The project will be modified to ensure that construction activities will avoid cultural resources upon review and approval of a **Cultural Resource Specialist**.

3. ENVIRONMENTAL CHECKLIST

- If ground-disturbing activities uncover intact cultural features (including, but not limited to, dark soil containing shellfish, bone, flaked stone, groundstone, or deposits of historic ash), when a Department-qualified cultural resources specialist is not on-site, **the contractor** will contact the Department's State Representative immediately and the **contractor** will temporarily halt or divert work in the immediate vicinity of the find. A Department-qualified cultural resources specialist will evaluate the find and determine the appropriate treatment and disposition of the cultural resource.

CUL- 8: In the event that human remains are discovered, work will cease immediately in the area of the find and the project manager/site supervisor will notify the appropriate Department personnel. Any human remains and/or funerary objects will be left in place or returned to the point of discovery and covered with soil. The Department's **Cultural Resources Program Manager** (or authorized representative) will notify the County Coroner, in accordance with Section 7050.5 of the California Health and Safety Code, and the Native American Heritage Commission (or Tribal Representative). The Santa Cuz District Tribal Liaison will be responsible for notifying the appropriate Native American authorities. The local County Coroner will make the determination of whether the human bone is of Native American origin.

- If the Coroner determines the remains represent Native American interment, the Native American Heritage Commission in Sacramento will be consulted to identify the most likely descendants and appropriate disposition of the remains. Work will not resume in the area of the find until proper disposition is complete (PRC Section 5097.98). No human remains or funerary objects will be cleaned, photographed, analyzed, or removed from the site prior to determination.
- If it is determined that the find indicates a sacred or religious site, the site will be avoided to the maximum extent practicable. Formal consultation with the State Historic Preservation Office and review by the Native American Heritage Commission/Tribal Cultural representatives will occur as necessary to define additional site mitigation or future restrictions.

BASELINE CONDITIONS

As discussed in the 2013 General Plan, BBRSP hosts a variety of cultural resources. Prehistoric archaeological resources reflecting the past life patterns of Californian Native Americans indigenous to the region are known to occur in the park. Archaeological sites have been documented throughout BBRSP. There is a potential for previously unknown sites to occur throughout the park and the entire park has recently been systematically surveyed for cultural resources; however, initial site investigations have been completed and cultural resources have been mapped in areas proposed for future facilities development under the BBFMP.

3. ENVIRONMENTAL CHECKLIST

Sites relating to California Native Americans, Spanish explorers, logging, conservation, and park development are dispersed throughout the groves, beaches, and meadows of the park. Cultural resource surveys, National Historic Landmark and National Register of Historic Places (National Register) nominations, and artifacts from these locations have in the past allowed researchers and park managers to identify sensitive areas for protection and preservation.

Before the 2020 CZU fire, the park contained multiple National Register-listed resources associated with multiple eras of the park's development, including the park's initial founding (1910s), the involvement of the Civilian Conservation Corps (1930s), and BBRSP's development during the California-wide expansion of State Parks infrastructure in the post-World War II years (1945-1965). The National Register listings reflecting these different eras included individual resources (Headquarters Administration Building), historic districts (Lower Sky Meadow Residential Area), a draft National Historic Landmark nomination for the entire park, along with a Multi-Properties Submission that recognized numerous property groups relating to one or several historic contexts. In addition to these listed resources, the park contained numerous potentially eligible resources that had not been formally evaluated, but were identified as potentially eligible under the multi-properties document for representing development of California State parks between 1941 and 1955.

Unfortunately, nearly all the buildings and facilities in BBRSP were detrimentally impacted in the 2020 CZU fire. Following the fire, the Lower Sky Meadow district and the Headquarters building were withdrawn from the National Register. The previously unrecorded resources that held the potential to be listed as contributors to these districts are no longer eligible for the National Register because of the loss of these cohesive districts. The extant buildings and features that remain may still hold significance enough for listing on a local register, but do not hold enough individual significance to be listed on the National Register.

It is the policy of the Department to engage in open, respectful, ongoing consultation with appropriate California Native American tribes or groups in the proper management of areas, places, objects, or burials associated with their heritage, sacred sites, and traditional cultural properties or cultural traditions in the State Park System. During the 2013 General Plan EIR process, the Native American Heritage Commission was contacted on November 29, 2007, and a Sacred Lands File search was requested. Native American contact lists for San Mateo and Santa Cruz Counties were also requested. No Sacred Lands were identified by the Native American Heritage Commission. On January 30, 2025, individuals on the Native American Heritage Commission contact list were again contacted by mail and telephone and provided an opportunity to consult on the proposed project. There have been responses from two tribes, Amah Mutsun Tribal Band and Costanoan Rumsen Carmel Tribe, both requesting consultation on the proposed project at the time of this Initial Study. The following discussion uses the existing, post-fire site conditions as the baseline for analysis.

3. ENVIRONMENTAL CHECKLIST

DISCUSSION

a) Would the proposed project cause a substantial adverse change in the significance of a historical resource?

The 2013 General Plan EIR determined that with implementation of the General Plan guidelines listed in General Plan Chapter 4, *Park Plan*, substantial adverse impacts to historical resources in BBRSP would not occur and thus environmental impacts related to historic resources would be less than significant.

As described in the previous “Baseline Conditions” section, nearly all of the historic buildings and facilities in BBRSP burned in the 2020 CZU fire, including the Headquarters Area, considered the historic core. As such, there are no historic resources remaining in the Focus Area that could be impacted by the proposed project. New development under the proposed project would be in areas previously disturbed by pre-fire development or otherwise appropriate for new development. The spatial arrangement of the new facilities would also be compatible with the previously burned historic facilities.

The proposed project will serve as a management tool that will be used to guide the stewardship, management, and use of existing and future facilities and minimize impacts to natural and cultural resources. New development under the proposed project would be in areas previously disturbed by pre-fire development or otherwise appropriate for new development. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

b) Would the proposed project cause a substantial adverse change in the significance of an archaeological resource?

The 2013 General Plan EIR determined that with implementation of the General Plan guidelines listed in General Plan Chapter 4, *Park Plan*, substantial adverse impacts to archaeological resources in BBRSP would not occur and thus environmental impacts related to archaeological resources would be less than significant.

BBRSP contains potentially significant archaeological resources that could be disturbed, destroyed, or degraded by new development and facility improvements proposed in the General Plan and the proposed project. These resources include prehistoric and ethnographic sites, ethnohistoric resources, and other archaeological resources. Though extensive research and inventory of the park’s cultural and tribal cultural resources have occurred over the past several years, it is not considered complete; therefore, the potential exists for the discovery of a previously unknown archaeological resource during facilities construction, rehabilitation, resource management projects, restoration, or maintenance operations.

3. ENVIRONMENTAL CHECKLIST

As described in the 2013 General Plan EIR, areas of high probability for prehistoric archaeological sites will continue to be surveyed and recorded, and criteria of significance developed for each class of resource for sites encountered in the future (Guidelines Archaeological 1, 2, 3, 4, and 5). Additionally, as part of any new development project, the Department would inventory and review areas of potential impact to determine the presence and significance of cultural resources, the potential impact, and recommended mitigation or avoidance measures, if appropriate.

As under the 2013 General Plan EIR, potential impacts caused by implementation of the proposed project may be reduced by project avoidance, site capping, structural stabilization/renovation, project redesign, and data recovery (Guidelines Historic 5 and 6). New facilities developed under the proposed project would be in areas previously disturbed by pre-fire development or otherwise appropriate for new development. Implementation of SPR CUL-6 would require preconstruction testing by an approved archaeologist to determine specific avoidance areas. Further, the proposed project incorporates new tribal coordination beyond that conducted for the 2013 General Plan.

Additionally, the BBFMP outlines Planning Objectives to include Indigenous perspectives. New development under the proposed project would be sited and designed with input and consultation with Indigenous leaders and representatives; the siting and design of facilities would include considerations that ensure that all interpretive and educational materials incorporate an Indigenous perspective, and park facilities would provide ceremonial space for cultural use by Indigenous groups and individuals.

Tribal facilities at Little Basin would house a number of tribal and cultural facilities that would honor the millennia-long connection that Indigenous people have had with the land. Facilities would include a cultural center with interpretive exhibition space, outdoor workspace, a sweat lodge and dance corral campfire ring, and an ethnobotanical native plant propagation area. The proposed project would partner with California Native American Tribes to incorporate more tribal cultural resources and perspectives, therefore lessening the impact evaluated in the 2013 General Plan EIR. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

c) Would the proposed project disturb any human remains, including those interred outside of dedicated cemeteries?

The 2013 General Plan EIR determined that, with implementation of the General Plan guidelines listed in General Plan Chapter 4, *Park Plan*, substantial adverse impacts to archaeological resources in the BBRSP would not occur and thus environmental impacts related to human remains would be less than significant.

3. ENVIRONMENTAL CHECKLIST

There are no known human remains in the Focus Area; however, it is possible that unknown human remains could be discovered during ground disturbance associated with construction activities. If human remains are discovered, California Health and Safety Code Section 7050.5 requires that disturbance of the site be halted. If any human remains are found during any field investigations, grading, or other construction activities, all provisions of California Health and Safety Code Sections 7054 and 7050.5 and PRC Sections 5097.9 through 5097.99, as amended pursuant to Assembly Bill 2641, shall be followed. If human remains are discovered during construction, there shall be no further excavation or disturbance of the site, or any nearby area reasonably suspected to overlie adjacent remains. The Department shall immediately notify the qualified archaeologist, who shall then notify the Santa Cruz County Coroner. The Coroner will make a determination as to whether the remains are Native American. If the remains are believed to be Native American, the Coroner will contact the Native American Heritage Commission within 24 hours. The Native American Heritage Commission will then designate a Most Likely Descendant. The Most Likely Descendant will inspect the remains and make a recommendation on the treatment of the remains and associated artifacts. If one of the following conditions occurs, the landowner or their authorized representative shall work with the Coroner to reinter the Native American human remains and associated grave goods with appropriate dignity in a location not subject to further subsurface disturbance. Compliance with existing laws and adherence to SPR CUL-8 would reduce potential impacts to human remains to a less-than-significant level.

Further, as described in the 2013 General Plan EIR, the proposed project would adhere to the 2013 General Plan-provided guidelines protecting cultural and archaeological resources. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

3. ENVIRONMENTAL CHECKLIST

VI. GEOLOGY AND SOILS

Would the Project:	Level of Impact in the 2013 General Plan EIR?	Create a Substantial Change in Project or Circumstances Resulting in New Significant Effects?	Result in New Information Showing New or More Severe Significant Effects?	Result in New Mitigation or Alternative to Reduce Significant Effect Is Declined?	Meet the Conditions of CEQA Guidelines Section 15163?
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:					
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	LTS	No	No	No	No
ii) Strong seismic ground shaking?	LTS	No	No	No	No
iii) Seismic-related ground failure, including liquefaction?	LTS	No	No	No	No
iv) Landslides?	LTS	No	No	No	No
b) Result in substantial soil erosion or the loss of topsoil?	LTS	No	No	No	No

INITIAL STUDY FOR THE REIMAGINING BIG BASIN REDWOODS STATE PARK FACILITIES
MANAGEMENT PLAN AND GENERAL PLAN AMENDMENTS
CALIFORNIA DEPARTMENT OF PARKS AND RECREATION

3. ENVIRONMENTAL CHECKLIST

Would the Project:	Level of Impact in the 2013 General Plan EIR?	Create a Substantial Change in Project or Circumstances Resulting in New Significant Effects?	Result in New Information Showing New or More Severe Significant Effects?	Result in New Mitigation or Alternative to Reduce Significant Effect Is Declined?	Meet the Conditions of CEQA Guidelines Section 15163?
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	LTS	No	No	No	No
d) Be located on expansive soil, as defined by Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	LTS	No	No	No	No
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	LTS	No	No	No	No
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	LTS	No	No	No	No

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation;
SU = significant and unavoidable; N/A = topic not analyzed in the 2013 General Plan EIR

3. ENVIRONMENTAL CHECKLIST

2013 BIG BASIN REDWOODS STATE PARK GENERAL PLAN

The 2013 General Plan contains the following goals and guidelines related to geology and soils:

Geology and Hydrology Goal: Minimize human impacts on natural geologic and hydrologic processes and values while protecting human life and property from these natural processes.

Geology and Hydrology Guidelines:

Geology/Hydrology 1: Monitor and document the geologic and hydrologic processes affecting the park and its resources.

Geology/Hydrology 2: Determine if, where, and how human development or activities may be exaggerating the natural rates or scales of landslides, stream channel erosion, stream debris clogging, and sedimentation. Identify management actions that can reduce or avoid negative human impacts to slope and stream integrity and to water quality. Management actions could include road and trail rehabilitation or removal from highly erosive areas, stream modifications, debris management, and revegetation.

Geology/Hydrology 3: Understand and comply with the surface and groundwater beneficial uses and water quality objectives set forth in the Water Quality Control Plan for the Central Coast Region (Basin Plan) for the Big Basin Redwoods SP watersheds and take appropriate actions to prevent degradation of surface and groundwater within the park. Examples of appropriate actions include ensuring that park sewage treatment meets water quality standards and planning and implementing new park projects so they do not degrade surface or groundwater quality or affect the water production rates of pre-existing nearby wells.

Geology/Hydrology 4: Cooperate with other landowners and regulatory agencies to address and remediate sediment issues affecting the park.

Geology/Hydrology 5: As appropriate, use standard Best Management Practices (BMPs) for erosion, dust, sediment control, and storm water runoff for park projects, and update regularly.

Geology/Hydrology 7: Include professional biological, geological, and engineering evaluations as appropriate when designing and locating permanent structures, campgrounds, roads, utilities, and trails to avoid or reduce potential damage to people and property from unstable soil, landslides, debris flows, floods, and earthquakes.

Geology/Hydrology 7: Construct new structures in the park in conformance with seismic design criteria in the newest edition of the Uniform Building Code or California Building Code.

3. ENVIRONMENTAL CHECKLIST

Interpretation Goal A: Reinforce the Department's mission and inspire people to use the park safely and preserve its resources.

Interpretation Guidelines:

Interpretation A1: Reinforce the Department's strategic initiatives with park interpretation, including interpretation of what California State Parks has done and what visitors can do to help reduce global warming.

APPLICABLE STANDARD PROJECT REQUIREMENTS

State Parks requires SPRs for all projects. The following SPRs are related to geology and soils. A full list of SPRs is found in Appendix A, *Standard Project Requirements*.

- GEO-1:** After a large earthquake event (i.e., magnitude 5.0 or greater within 50 miles of the project site), **State Parks** will inspect all project structures and features for damage, as soon as possible after the event. Any damaged structures or features will be closed to park visitors, volunteers, residents, contractors, and staff.
- GEO-2:** No track-mounted or heavy-wheeled vehicles will be driven through non-disturbed areas during the rainy season or when soil is saturated to avoid compaction and/or damage to soil structure.
- GEO-3:** **State Parks** will develop rehabilitation plans for the decommissioned roads, paved areas, and trails that includes using brush and trees for bio-mechanical erosion control (bundling slash and keying it into soil, filling damaged sections with soil and duff removed, constructing water bars, and replanting native trees and shrubs).
- GEO-4:** Prior to design and construction of structures and vehicular areas, a soil report will be prepared by a geotechnical engineer and recommendations of the soil engineer will guide structural design to minimize risk of seismic events, landslides, or expansive soils.

BASELINE CONDITIONS

As discussed in the 2013 General Plan, BBRSP is within the boundaries of the Coast Ranges Geomorphic Province and is on the Salinian Block, bounded by the San Gregorio Fault to the west and the San Andreas Fault to the east. The oldest rocks in the project area are Cretaceous age (136-66 million years) quartz diorite, which underlies part of the Pine Mountain area. Geomorphic development of the present BBRSP landscape occurred in the late Pliocene to early Pleistocene era (1-6 million years).

3. ENVIRONMENTAL CHECKLIST

BBRSP is in Soil Region I, Northwestern Coast Ranges. Soil Region I encompasses steep mountain ranges and small valleys of the Coast Ranges from the Santa Cruz Mountains north to the Oregon border. Soils in Region I are primarily derived from sedimentary rocks, alluvium, and granitic rocks. Most soils in BBRSP are moderately deep to very deep. Drainage at BBRSP is quite variable, ranging from somewhat poorly drained to somewhat excessively drained.

Landslides are common in the park; several large landslides have occurred on the northwest side of Pine Mountain and on the north and west sides of Mount McAbee. Many smaller landslides have occurred on the canyon slopes of Waddell Creek and its tributaries. The BBRSP area is in an active seismic zone, between the San Gregorio and San Andreas Fault systems. The Zayante Fault cuts through the east-central portion of BBRSP. Strong seismic shaking can be expected to occur in some areas of BBRSP. Therefore, the possibility of ground rupture exists within BBRSP. Secondary seismic hazards, such as liquefaction and landsliding, may occur during an earthquake. A zone of high potential for liquefaction is identified in the Waddell Creek drainage, which is not in the Focus Area. The liquefaction zone includes the lower reach of Waddell Creek, from the ocean to the intersection of the east and west branches of Waddell Creek. Strong seismic shaking may also trigger movement on any of the many landslides in BBRSP. The following discussion uses the existing, post-fire site conditions as the baseline for analysis.

DISCUSSION

a) Would the proposed project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: (i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault; (ii) Strong seismic ground shaking; (iii) Seismic-related ground failure, including liquefaction; (iv) Landslides, mudslides, or other similar hazards?

Current and future facilities and infrastructure in BBRSP could be subject to potentially hazardous geologic and soil conditions, including seismic events. The 2013 General Plan EIR determined that, with implementation of the General Plan guidelines, as well as compliance with the California Building Standards Code for future development, this impact would be less than significant.

As described in the 2013 General Plan EIR, the park is susceptible to earthquakes, and has the potential for damage from ground shaking, ground surface rupture, liquefaction, lateral spreading, and landslides. General Plan Guideline Geology/Hydrology 7 directs the Department to conduct professional geologic and engineering evaluations to identify potentially hazardous soils or geologic areas prior to any permanent facility development and to avoid or reduce damage to people and property from unstable soil and seismic hazards. The 2013 General Plan also provides guidelines to protect the public from natural hazards, such as using interpretive

3. ENVIRONMENTAL CHECKLIST

media to educate visitors about natural hazards and how to avoid danger (Interpretation Goal A1).

Future development due to implementation of the proposed project would be in areas that contained pre-fire development or are otherwise appropriate for new development. Infrastructure constructed as part of the BBFMP would be designed to withstand and function during multiple emergency scenarios, including earthquakes and landslides. Additionally, the proposed project would be required to adhere to SPR GEO-1, which would ensure that after any earthquake event (i.e., magnitude 5.0 or greater within 50 miles of the project site), structures would be inspected for damage.

Further, as described in the 2013 General Plan EIR, the proposed project would follow the 2013 General Plan guidelines protecting the public from natural hazards. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

b) Would the proposed project result in substantial soil erosion or the loss of topsoil?

Current and future facilities and infrastructure in BBRSP could be subject to potentially hazardous geologic and soil conditions, including erosion. The 2013 General Plan EIR determined that, with implementation of the General Plan guidelines, as well as compliance with the California Building Standards Code for future development, this impact would be less than significant.

The 2013 General Plan EIR describes areas of the park that contain highly erodible soils. Land disturbance, such as grading and trail development, can trigger or accelerate soil erosion. As outlined in the 2013 General Plan EIR, development of the facilities in the BBRSP, as under the proposed project, would decrease permeable areas in the park, potentially leading to greater runoff rates and concentrated flows that have greater potential to erode exposed soils. General Plan Guidelines Geology/Hydrology 3, 4, and 5 direct the Department to follow BMPs to reduce soil erosion and stormwater runoff and to ensure water quality during facility removal, maintenance, or construction. The Department has developed BMPs for road recontouring and rehabilitation, road removal, road-to-trail conversion, and culvert replacement. In addition, the proposed project would also adhere to standard construction BMPs for erosion and sediment control from the California Stormwater Quality Association, where appropriate.

The proposed project includes facility improvements and enhancements that were generally envisioned in the 2013 General Plan. The removal of paved roadways in sensitive ecological areas is a key component of the restoration strategy included in the proposed project. Many roads built prior to modern conservation planning have contributed to soil compaction, habitat fragmentation, and hydrological disruptions. The restoration process would prioritize decompaction of soil, removal of impervious surfaces, and re-establishment of native

3. ENVIRONMENTAL CHECKLIST

vegetation. Additionally, natural drainage features would be restored to ensure proper water flow and reduce erosion risks. Where feasible, select roadways may be converted into trails, providing low-impact access while minimizing environmental disturbance. Thus, implementation of the proposed project could improve the risk of soil erosion or loss of topsoil at BBRSP compared to the 2013 General Plan EIR. Additionally, significant impacts from erosion during routine road and trail maintenance activities would be avoided through implementation of the SPRs GEO-2 through GEO-4.

Further, as described in the 2013 General Plan EIR, the proposed project would adhere to the 2013 General Plan-provided guidelines protecting the public from natural hazards. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

c) Would the proposed project be on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

Current and future facilities and infrastructure in BBRSP could be subject to potentially hazardous geologic and soil conditions, including soil instability. The 2013 General Plan EIR determined that, with implementation of the General Plan guidelines, as well as compliance with the California Building Standards Code for future development, this impact would be less than significant.

As described in impact discussion VI(a), the Focus Area would potentially be subject to landslides. Additionally, climate change is expected to increase the frequency and severity of landslides due to shifting precipitation patterns and increased wildfire activity. Future development due to implementation of the proposed project would be in areas previously disturbed by pre-fire development or otherwise appropriate for new development. Infrastructure constructed as part of the BBFMP would be designed in accordance with the California Building Code and 2013 General Plan guidelines. New facilities as part of the proposed project would avoid placement on steep slopes, historical landslide areas, and locations where soil stability may be compromised by vegetation loss or infrastructure development. Site designs under the proposed project would consider hydrogeomorphic processes, including erosion, water infiltration, and temperature fluctuations affecting soil cohesion. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

3. ENVIRONMENTAL CHECKLIST

d) Would the proposed project be located on expansive soil, as defined by Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

The 2013 General Plan EIR determined that, with implementation of the General Plan guidelines, as well as compliance with the California Building Standards Code for future development, this impact would be less than significant.

The Focus Area may contain expansive soils; however, the proposed project would be required to follow SPR GEO-4, which would ensure a soil report is prepared by a geotechnical engineer prior to project construction and design. Recommendations made in the report would then guide the structural design to minimize risk caused by expansive soils.

Further, as described in the 2013 General Plan EIR, the BBFMP would also adhere to the 2013 General Plan-provided guidelines protecting the public from natural hazards. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

e) Would the proposed project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

The 2013 General Plan EIR determined that, with implementation of the General Plan guidelines, as well as compliance with the California Building Standards Code for future development, this impact would be less than significant.

Currently, and at the time of the 2013 General Plan EIR, BBRSP is served by a sanitary sewer collection system and on-site wastewater treatment plant, as well as some sites that are served by individual State-owned septic systems. The proposed project would continue to be served by State-owned wastewater treatment systems, as evaluated in the 2013 General Plan EIR. Any septic facilities included due to implementation of the proposed project would be required to follow the same regulations and BMPs as listed in the 2013 General Plan EIR. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

f) Would the proposed project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

The 2013 General Plan EIR determined that implementation of the General Plan guidelines would prevent any adverse impact to any features of paleontological and geologic significance in the park.

3. ENVIRONMENTAL CHECKLIST

As described in the 2013 General Plan EIR and 2013 General Plan, there are no known unique paleontological resources in the BBRSP. If unknown paleontological resources are discovered, they would likely be detected during site-specific inventories conducted to detect cultural resources. If unique resources are detected during future surveys due to implementation of the proposed project, or accidentally discovered during construction, adverse impacts to these resources would be avoided during site-specific design methods, as described in the 2013 General Plan EIR. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

VII. GREENHOUSE GAS EMISSIONS

Would the Project:	Level of Impact in the 2013 General Plan EIR?	Create a Substantial Change in Project or Circumstances Resulting in New Significant Effects?	Result in New Information Showing New or More Severe Significant Effects?	Result in New Mitigation or Alternative to Reduce Significant Effect Is Declined?	Meet the Conditions of CEQA Guidelines Section 15163?
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	LTS	No	No	No	No
b) Conflict with an applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	LTS	No	No	No	No

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation;

SU = significant and unavoidable; N/A = topic not analyzed in the 2013 General Plan EIR

2013 BIG BASIN REDWOODS STATE PARK GENERAL PLAN

The 2013 General Plan contains the following goals and guidelines related to greenhouse gas emissions:

Sustainability Goal: Incorporate sustainable design principles into the design, development, operations, and maintenance of park facilities and programs.

3. ENVIRONMENTAL CHECKLIST

Sustainability Guidelines:

Sustainability 5: Use low- or zero-emission vehicles, when possible, for park operations and maintenance, and a potential shuttle system. Use low- or zero-emission grounds maintenance equipment, when possible, such as electric trimmers, chain saws, and mowers. Substitution of lower-emission and alternative energy-source tools and vehicles will reduce air quality impacts and heat-trapping emissions, and promote energy efficiency.

Vegetation Management Goal: Protect, restore and maintain the native ecosystems, especially vegetation complexes and the old growth redwood forest habitat, at Big Basin Redwoods SP

Vegetation Guidelines:

Vegetation 2: Identify locations in the park that are heavily impacted from past management practices (e.g. agricultural production, logging, and fire suppression) and implement appropriate vegetation and habitat restoration programs. Components of such restoration programs may include prescribed fire, revegetation with native species, fenced enclosures, facility relocations, and other methods. Reforestation, where appropriate, can also help to positively affect climate change by reducing greenhouse gases through carbon sequestration.

APPLICABLE STANDARD PROJECT REQUIREMENTS

State Parks requires SPRs for all projects. The following SPR is related to greenhouse gas emissions. A full list of SPRs is found in Appendix A, *Standard Project Requirements*.

GHG-1: All gasoline-powered equipment will be maintained according to manufacturer's specifications, and in compliance with all State and federal requirements.

BASELINE CONDITIONS

Greenhouse gases (GHGs) in the atmosphere are leading to climate change and changing Earth's weather patterns. GHGs include carbon dioxide, methane, nitrous oxide, and sulfur hexafluoride, among others. Human activities are adding large amounts of GHGs to the atmosphere. Combustion of fossil fuels for heat, electricity, and transportation is the main source of these gases. GHG emissions at the park largely come from vehicle trips, energy and water use, wastewater and solid waste generation, motorized activities, and construction and maintenance.

Continued warming is projected to increase global average temperature between 2 and 6 degrees Fahrenheit (°F) over the next 100 years (some projections go as high as 11°F). Rising temperatures could have a variety of impacts, including increasing emissions of GHGs and criteria pollutants associated with energy generation. Higher temperatures also contribute to sea level rise by expanding ocean water, melting mountain glaciers and small ice caps, and

3. ENVIRONMENTAL CHECKLIST

causing portions of Greenland and the Antarctic ice sheets to melt. According to the December 2009 Staff Report to the California State Lands Commission, sea level is projected to rise 16 inches by 2050, and 55 inches by 2100. The California Resources Agency states that sea level rise can cause damage to coastal communities and loss of land. Regional climate studies indicate that California is likely to see average annual temperatures rise by 3°F to 4°F in the next century, with winters 5°F to 6°F warmer and summers 1°F to 2°F warmer. Winter precipitation will increase, particularly in the mountains, and more will fall as rain than snow. Summer stream flow and soil moisture required for plant growth are likely to decrease. Statewide averages and generalizations cannot tell the whole story, for impacts of climate change are likely to vary greatly from one place to another. The following discussion uses pre-fire visitation and conditions as the baseline for analysis.

DISCUSSION

a) Would the proposed project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Based on a program-level environmental assessment, the 2013 General Plan EIR determined that implementation of the General Plan would not result in the generation of substantial short-term construction-related or long-term operation-related emissions of GHGs and development would not be substantial enough to generate significant GHGs.

The proposed project is a planning document stemming from the 2013 General Plan designed to guide the stewardship, management, and use of existing and future facilities and, like the 2013 General Plan, does not provide detailed information to be able to analyze and determine specific GHG generation estimates for individual construction projects. However, a key priority of the proposed project is GHG emissions reduction. The proposed project intends to rebuild park facilities in a way that leads to fewer emissions compared to pre-fire facilities. This goal would be accomplished by the proposed shuttle program, likely using electric vehicles; increased building efficiency and technology when compared to previous on-site facilities; and on-site solar energy production.

Specific future development projects that exceed applicable screening thresholds may require detailed project-specific review to estimate GHG emissions and develop project-specific GHG reduction measures. Future development under the proposed project would include temporary use of construction equipment, transportation of materials, grading and clearing of vegetation, and excavation for new trails, buildings, and parking lots; thus, emissions of ozone precursors and generation of fugitive dust would be anticipated during construction. However, compliance with applicable air quality SPRs would ensure the proposed project would not result in a new source of GHG emissions that was not evaluated in the 2013 General Plan EIR or result, either directly or indirectly, in a significant impact on the environment. Additionally, the proposed project would adhere to SPR GHG-1 requiring that all gasoline-powered equipment be

3. ENVIRONMENTAL CHECKLIST

maintained according to the manufacturer's specifications, and in compliance with all State and federal requirements. Further, the introduction of a shuttle program throughout the Focus Area would decrease the number of visitors coming into and traveling around the park in single-occupancy vehicles, therefore further decreasing the potential GHG emissions generated as part of the proposed project.

As described in the 2013 General Plan EIR, the proposed project would also adhere to the 2013 General Plan Guidelines minimizing GHG emissions. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

b) Would the proposed project conflict with an applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?

Applicable plans adopted for the purpose of reducing GHG emissions include CARB's Scoping Plan. Based on a program-level environmental assessment in the 2013 General Plan EIR, implementation of the 2013 General Plan would not result in the generation of substantial short-term construction-related or long-term operation-related emissions of GHGs and would be consistent with all applicable plans, policies, and regulations for the purpose of reducing GHG emissions.

As outlined in impact discussion VII(a), the proposed project is a planning document designed to guide the stewardship, management, and use of existing and future facilities. Details of specific projects are not yet known; however, conformance with the 2013 General Plan guidelines and applicable SPRs would ensure consistency with CARB's Scoping Plan and all other applicable regulations. Additionally, the proposed project would involve more efficient construction equipment and vehicles than were considered in the 2013 General Plan EIR. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

3. ENVIRONMENTAL CHECKLIST

VIII. HAZARDS AND HAZARDOUS MATERIALS

Would the Project:	Level of Impact in the 2013 General Plan EIR?	Create a Substantial Change in Project or Circumstances Resulting in New Significant Effects?	Result in New Information Showing New or More Severe Significant Effects?	Result in New Mitigation or Alternative to Reduce Significant Effect Is Declined?	Meet the Conditions of CEQA Guidelines Section 15163?
a) Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?	LTS	No	No	No	No
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	LTS	No	No	No	No
c) Emit hazardous emissions or handle hazardous materials, substances or waste within one-quarter mile of an existing or proposed school?	LTS	No	No	No	No
d) Be located on a site which is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment?	LTS	No	No	No	No

INITIAL STUDY FOR THE REIMAGINING BIG BASIN REDWOODS STATE PARK FACILITIES
MANAGEMENT PLAN AND GENERAL PLAN AMENDMENTS
CALIFORNIA DEPARTMENT OF PARKS AND RECREATION

3. ENVIRONMENTAL CHECKLIST

Would the Project:	Level of Impact in the 2013 General Plan EIR?	Create a Substantial Change in Project or Circumstances Resulting in New Significant Effects?	Result in New Information Showing New or More Severe Significant Effects?	Result in New Mitigation or Alternative to Reduce Significant Effect Is Declined?	Meet the Conditions of CEQA Guidelines Section 15163?
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	LTS	No	No	No	
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	LTS	No	No	No	
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	LTS	No	No	No	
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	LTS	No	No	No	

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation;
SU = significant and unavoidable; N/A = topic not analyzed in the 2013 General Plan EIR

3. ENVIRONMENTAL CHECKLIST

2013 BIG BASIN REDWOODS STATE PARK GENERAL PLAN

The 2013 General Plan contains the following goals and guidelines related to hazards and hazardous materials:

Access and Circulation Goal: Coordinate and maintain visitor access and circulation in order to optimize operations efficiency, security, emergency access, and visitor enjoyment of the park, while maintaining the park's character and avoiding resource degradation.

Operations Goal: Develop adequate infrastructure for efficient use of energy, water, and other resources; protect public health and safety; and reduce waste, pollution, and environmental degradation.

Operations Guidelines:

Operations 2: Continue to work with adjoining landowners for efficient park operations and emergency vehicle access.

Operations 3: Provide a well-defined and clearly signed year-around safe park entry for visitors and a variety of recreation and emergency vehicles, especially during peak-use days.

Operations 4: Work with CAL FIRE [California Department of Forestry and Fire Protection] and other agencies to ensure that emergency response vehicles can reach most park locations, given the unit's paved roads, bridges, and unpaved fire roads, and that alternative emergency response measures are explored.

Regional Planning Goal: Integrate the planning and management programs at Big Basin Redwoods SP with the planning and management programs of other parks and open space providers in the Santa Cruz Mountains.

Regional Planning Guidelines:

Regional Planning 1: Coordinate natural, cultural, and aesthetic resource management, operations, staff housing, interpretation, visitor and emergency services, and facility development programs at Big Basin Redwoods SP with other state parks in the area to promote healthy ecosystems, protected cultural and aesthetic resources, high-quality recreational opportunities, and operational efficiencies.

Regional Planning 5: Coordinate and establish mutual support arrangements or agreements with state, county, city, and local organizations to provide effective and efficient public safety programs in the park, and to maintain emergency evacuation routes to allow safe and immediate exit from areas of the park where people visit, work, or reside.

3. ENVIRONMENTAL CHECKLIST

Sustainability Goal: Incorporate sustainable design principles into the design, development, operations, and maintenance of park facilities and programs.

Sustainability Guidelines:

Sustainability 1: Use sustainable design strategies to minimize impacts to the park's natural, cultural and aesthetic resources. Choose low-impact building sites, structures, building, and landscape materials, and maintenance and management practices that avoid the use of environmentally-damaging, waste-producing, or hazardous materials. Use natural, renewable, indigenous, and recyclable materials, and energy-efficient design.

Wildfire Goal: Protect human lives, property, and sensitive natural resources through the prevention and suppression of destructive wildland fires

Wildfire Guidelines:

Wildfire 1: The Department shall coordinate with appropriate agencies, such as CAL FIRE and the county and volunteer fire departments, to complete and update the Wildfire Management Plan for this unit, addressing all aspects of wildfire planning, including prevention, pre-suppression, and suppression.

Wildfire 2: The Department shall follow the fire management policy, including wildfire management (DOM Section 0313.2.1), and guidelines developed through the interagency agreement with CAL FIRE concerning wildland fire protection.

APPLICABLE STANDARD PROJECT REQUIREMENTS

State Parks requires SPRs for all projects. The following SPRs are related to hazards and hazardous materials. A full list of SPRs is found in Appendix A, *Standard Project Requirements*.

HAZ-1: Prior to the start of on-site construction activities, a **contractor** will inspect all equipment for leaks and regularly inspect thereafter until equipment is removed from the project site. All contaminated water, sludge, spill residue, or other hazardous compounds will be contained and disposed of outside the boundaries of the site, at a lawfully permitted or authorized destination.

HAZ-2: Prior to the start of on-site construction activities, a **contractor** will prepare a Spill Prevention and Response Plan (SPRP) as part of the Stormwater Pollution Prevention Plan (SWPPP) for **Department** approval to provide protection to on-site workers, the public, and the environment from accidental leaks or spills of vehicle fluids or other potential contaminants. This plan will include, but not be limited to:

3. ENVIRONMENTAL CHECKLIST

1. A map that delineates construction staging areas, where refueling, lubrication, and maintenance of equipment will occur;
2. A list of items required in a spill kit on-site that will be maintained throughout the life of the project;
3. Procedures for the proper storage, use, and disposal of any solvents or other chemicals used in the restoration process; and
4. Identification of lawfully permitted or authorized disposal destinations outside of the project site.

HAZ-3: The **Contractor** will develop a Materials Management Plan to include protocols and procedures that will protect human health and the environment during remediation and/or maintenance activities that cause disturbances to the native soil and/or mine and mill materials causing the potential exposure to metals and dust resulting from materials disturbances. All work will be performed in accordance with a Site Health and Safety Plan. The Materials Management Plan will include the following (where applicable):

- Requirement that staff will have appropriate training in compliance with Title 29 of the Code of Federal Regulations, Section 1910.120;
- Methods to assess risks prior to starting on-site work;
- Procedures for the management and disposal of waste soils generated during construction activities or other activities that might disturb contaminated soil;
- Monitoring requirements;
- Stormwater controls;
- Record-keeping; and,
- Emergency response plan.

HAZ-4: The **Contractor** will set up decontamination areas for vehicles and equipment at park entry/exit points. The decontamination areas will be designed to completely contain all wash water generated from washing vehicles and equipment. Best management practices (BMPs) will be installed, as necessary, to prevent the dispersal of wash water beyond the boundaries of the decontamination area, including over-spray.

HAZ-5: Prior to the start of construction, the **contractor** will develop a Fire Safety Plan for **Department** approval for the entire construction period. The plan will include the emergency calling procedures for both the California Department of Forestry and Fire Protection (CAL FIRE) and local fire department(s).

3. ENVIRONMENTAL CHECKLIST

- HAZ-6:** All heavy equipment will be required to include spark arrestors or turbo chargers (which eliminate sparks in exhaust) and have fire extinguishers on site.
- HAZ-7:** Department personnel will have a State Park radio at the park, which allows direct contact with CAL FIRE and a centralized dispatch center, to facilitate the rapid dispatch of control crews and equipment in case of a fire.
- HAZ-8:** Prior to the start of on-site construction activities, the **contractor** will clean and repair (other than emergency repairs) all equipment outside the project site boundaries.
- HAZ-9:** Under dry conditions, a filled water truck and/or fire engine crew will be on site during activities with the potential to start a fire.
- HAZ-10:** The **contractor** will designate and/or locate staging and stockpile areas to prevent leakage of oil, hydraulic fluids, etc. into surrounding areas.

BASELINE CONDITIONS

HAZARD MATERIALS AND HAZARDOUS WASTE

The types of materials used and stored at BBRSP that could be hazardous include fluids, such as motor vehicle and mechanical equipment fuels, oils, and other lubricants. The Department maintains storage facilities for these fuels and lubricants in the park unit. There is no evidence of industrial use in the park except for limited use as it relates to logging, commercial fishing, ice production, agriculture, and recreation. A review of the Cortese List through EnviroStor as well as GeoTracker provides documentation that there are no active hazardous materials in the park. The park is not within one-quarter mile of any school. The nearest school to the proposed project is Redwood Elementary, approximately five miles east.

AIRPORTS

No airports are within or adjacent to BBRSP. The Las Trancas Airport, a privately owned airstrip, is approximately 0.7 miles south of Rancho del Oso along Highway 1, approximately 6 miles southwest of the Focus Area. The nearest public use airport is the San José Mineta International Airport, approximately 30 miles east of the Focus Area.

3. ENVIRONMENTAL CHECKLIST

WILDFIRE

Fires are an integral part of the natural world, but historic human alteration of natural fire cycles allowed unnatural plant succession and fire fuel build-up. Wildland fires can have a significant effect on park resources and operations. BBRSP has recently undergone a large wildfire event, the 2020 CZU fire that destroyed much of the park and is a contributing factor to the need for the proposed project. During the 2020 CZU fire, BBRSP staff successfully evacuated 1,600 campers, residents, and staff from the park. As such, the prevention and suppression of destructive wildland fires threatening human lives, property, and sensitive natural resources is of prime importance.

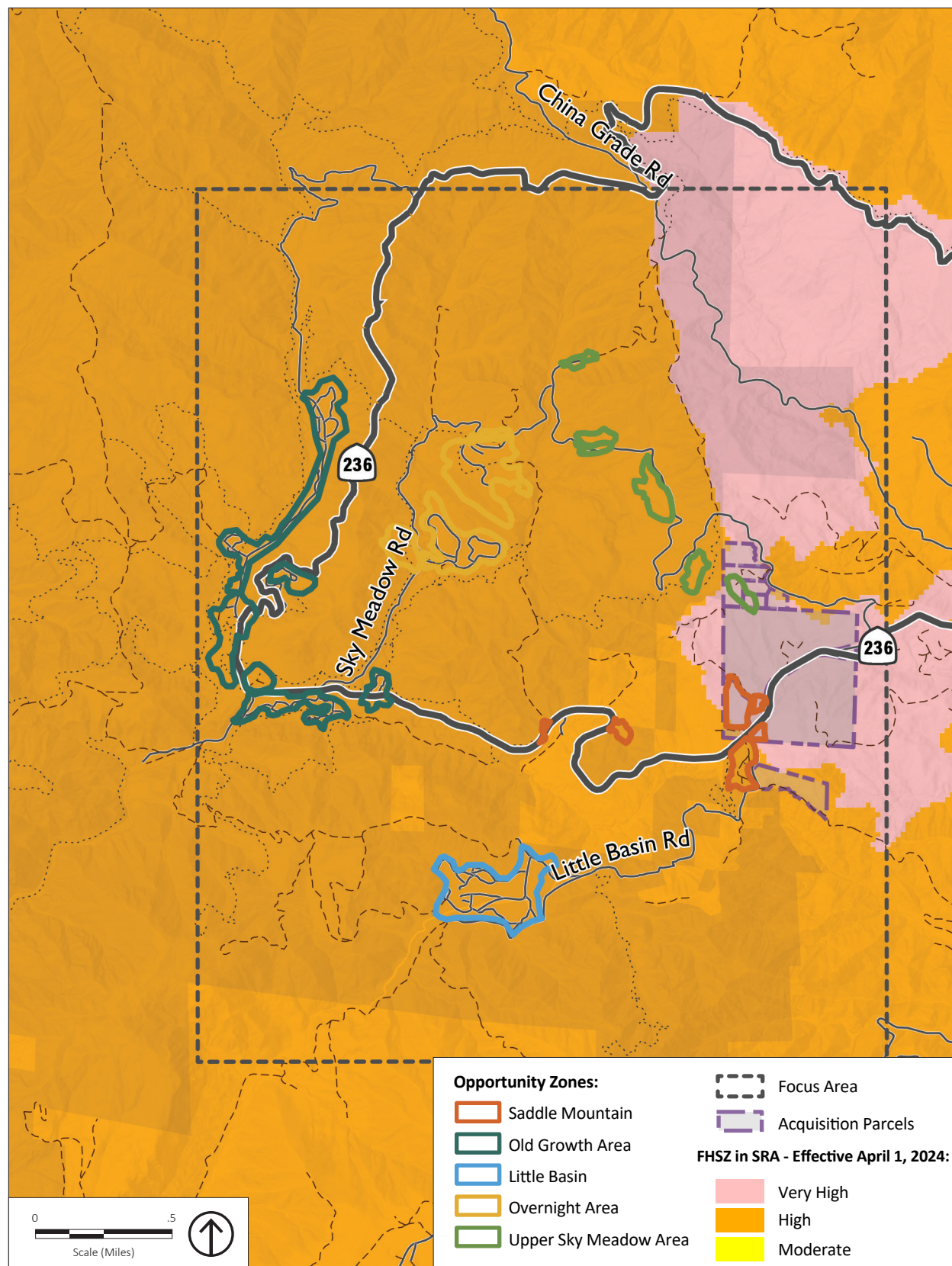
The Department's Operational Manual Chapter 0300, *Natural Resources*, Section 0313.2, describes the Department's policy on fire management, including wildfire management (Section 0313.2.1) and prescribed fire management (Section 0313.2.2). An Interagency Fire Protection Agreement concerning wildland fire protection between the Department and CAL FIRE outlines the primary agency responsibilities, modified fire-suppression techniques, and post-fire rehabilitation. Primary responsibilities of Department personnel concerning life and safety include the protection and evacuation of visitors and park personnel, area closures, law enforcement, protection of park facilities and resources, and initial fire response. The Department has also prepared guidelines for the protection of buildings and structures near wildland vegetation (*Guidelines for the Protection of Structures from Wildland Fire*, March 2009).

Wildland fire protection in California is the responsibility of the local, State, or federal government. In State Responsibility Areas, the State of California has the primary financial responsibility for the prevention and suppression of wildland fires. CAL FIRE provides a basic level of wildland fire prevention and protection services. CAL FIRE assigns areas to a Fire Hazard Severity Zone (FHSZ) based on factors that influence fire likelihood and behavior. FHSZs range from moderate to high to very high.

As shown in Figure IS-5, *CAL FIRE Fire Hazard Severity Zones*, the project site is in a high to very high FHSZ, as mapped by CAL FIRE for the State Responsibility Area.¹³ The following discussion uses the existing, post-fire site conditions as the baseline for analysis.

¹³ California Department of Forestry and Fire Protection, 2023, Fire Hazard Severity Zones, <https://calfire-forestry.maps.arcgis.com/apps/webappviewer/index.html?id=988d431a42b242b29d89597ab693d008>.

PROJECT DESCRIPTION



Source: California State Parks, 2025; Cal Fire, 2025; PlaceWorks, 2025.

Figure 5
Cal Fire Fire Hazard Severity Zones

3. ENVIRONMENTAL CHECKLIST

DISCUSSION

a) Would the proposed project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

The 2013 General Plan EIR determined that implementation of the General Plan would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Typically, the only routine use and transport of hazardous materials are associated with maintenance or construction that requires common hazardous materials such as fuel and lubricants for equipment and vehicles and detergents and solvents for cleaning, as well as pesticides and herbicides for vegetation management, where appropriate. As described in the 2013 General Plan EIR, these hazardous materials are used and stored consistent with United States Environmental Protection Agency and Occupational Safety and Health Administration (OSHA) standards. The proposed project would not substantially change the operations and maintenance of the park and staff would continue to use, transport, store, and dispose of these hazardous materials consistent with OSHA regulations. Additionally, all regulations for hazardous material transport, use, and disposal will be adhered to, following Department policies and procedures (Department Operations Manual, Chapter 0800, *Hazardous Materials*).

Construction activities would adhere to SPRs HAZ-1 through HAZ-4, HAZ-9, and HAZ-11, which require several measures to prevent accidental leaks, spills, or other emissions of hazardous materials into the environment, including frequent leak inspections and maintenance of construction vehicles, spill prevention plans, materials management plans, vehicle wash stations, and suitable staging areas. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

b) Would the proposed project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

The 2013 General Plan EIR determined that implementation of the General Plan would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Ground disturbance as part of construction activities may expose hazardous materials through excavation, especially in previously developed areas. Construction activities may require the use of certain potentially hazardous materials, such as fuels, oils, and solvents for construction equipment. Hazardous materials spills may occur, including into drainages. As described in the 2013 General Plan EIR, if hazardous materials are found in the park, including during

3. ENVIRONMENTAL CHECKLIST

construction and maintenance activities, all regulations for hazardous material transport, use, and disposal will be followed, pursuant to Department policies and procedures (Department Operations Manual, Chapter 0800, *Hazardous Materials*). As under the 2013 General Plan EIR, the proposed project would also be required to implement SPRs HAZ-1 through HAZ-4, HAZ-9 and HAZ-11, as well as 2013 General Plan Guidelines, to minimize potential impacts. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

c) Would the proposed project emit hazardous emissions or handle hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

BBRSP is not near an existing or proposed school, thus the 2013 General Plan EIR determined that implementation of the General Plan would not emit hazardous emissions or handle hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. The proposed project is in the project area evaluated in the 2013 General Plan EIR and is not within one-quarter mile of any schools. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

d) Would the proposed project be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment?

The 2013 General Plan EIR states that BBRSP is not on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as such, this impact would be less than significant.

The proposed project is in the project area evaluated in the 2013 General Plan EIR and an updated search of the Cortese List on GeoTracker and EnviroStor did not reveal the presence of any open or active hazardous material sites in the Focus Area.^{14,15} Additionally, as described in the 2013 General Plan EIR, the proposed project would adhere to the 2013 General Plan Guidelines protecting the public from hazardous materials. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

¹⁴ California Water Boards, State Water Resources Control Board, GeoTracker, 2025, <https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=big+basin>, accessed April 12, 2025.

¹⁵ California Department of Toxic Substance Control, EnviroStor, 2025, <http://envirostor.dtsc.ca.gov/public/map/?myaddress=big+basin>, accessed April 12, 2025.

3. ENVIRONMENTAL CHECKLIST

- e) For a project within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the proposed project result in a safety hazard or excessive noise for people living or working in the project area?***

BBRSP is not within an airport land use plan or near a public airport, thus the 2013 General Plan EIR determined that implementation of the General Plan would not result in a safety hazard or excessive noise for people living or working in the project area. The proposed project is within the project area evaluated in the 2013 General Plan EIR. Further, the nearest public use airport is the San José Mineta International Airport, approximately 30 miles east of the Focus Area. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

- f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?***

BBRSP is not near a private airstrip, thus the 2013 General Plan EIR determined that implementation of the General Plan would not result in a safety hazard or excessive noise for people living or working in the project area. The proposed project is within the project area evaluated in the 2013 General Plan EIR. Further, the Las Trancas Airport, a privately owned airstrip along Highway 1, is located approximately six miles southwest of the Focus Area. Accordingly, the proposed project is outside the vicinity of the private airstrip. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

- g) Would the proposed project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?***

The 2013 General Plan EIR determined that implementation of the General Plan would not physically interfere with an adopted emergency response plan or evacuation plan. The 2013 General Plan EIR outlines the Wildfire Management Plan and General Plan Guidelines to prepare for emergency evacuation.

The proposed project will follow all the General Plan Guidelines to support emergency evacuation and preparedness, as described in the 2013 General Plan EIR and includes an updated Emergency Response and Evacuation Plan. Further, to enhance emergency preparedness and response, the proposed project would include improvements to park roadways to ensure reliable ingress and egress. These improvements would enhance connectivity to main evacuation routes, ensuring staff and visitors can exit safely in an emergency. In addition to road enhancements, an early warning system would be installed throughout the park, providing real-time alerts for staff and visitors. Directional emergency evacuation signage would be integrated into park wayfinding systems, offering clear guidance

3. ENVIRONMENTAL CHECKLIST

during emergency situations. These efforts would be complemented by fire-resistant infrastructure, including backup power generators and fire hydrants with proper water pressure.

The park's life safety approach would be guided by best practices outlined in the Big Basin Emergency Response and Evacuation Plan included as part of the proposed project, ensuring that all critical infrastructure is built with long-term resilience in mind, therefore improving upon what was evaluated in the 2013 General Plan EIR. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

h) Would the proposed project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

The 2013 General Plan EIR found less-than-significant impacts with respect to exposing people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires. However, as seen in 2020, this evaluation did not mean wildland fires were not going to happen at BBRSP. The 2020 CZU fire altered the state of the park and has led to the need for the proposed project.

The 2013 General Plan recommends updating and following the current Wildfire Management Plan that addresses potential wildfire risks and specifies emergency actions for public safety, park structures, and adjacent landowner structures (Guideline Wildfire 1). The Wildfire Management Plan also specifies strategies for pre-suppression measures, such as the creation of defensible space around structures, wildfire education programs, and park fire regulations to which the proposed project would also adhere.

As stated in Guideline Wildfire 2, the Department shall follow the fire management policy, including wildfire management (Department's Operational Management Section 0313.2.1) and guidelines developed through the interagency agreement with CAL FIRE concerning wildland fire protection. The Department is also guided by an Interagency Agreement with CAL FIRE concerning wildland fire protection and has prepared a Wildfire Local Operating Agreement, a regional wildfire plan for BBRSP, and developed guidelines for the protection of structures from wildland fire.

The proposed project is the park plan to guide future rebuilding of recreational, administrative, and operational facilities, and to restore public access at BBRSP after the 2020 CZU fire, which destroyed or damaged nearly all former facilities. Future development under the proposed project would be in areas previously disturbed by pre-fire development or otherwise appropriate for new development. Figure IS-5, *CAL FIRE Fire Hazard Severity Zones*, shows the proposed project in a high to very high FHSZ. Given the park's remote location and history of wildfires, infrastructure at BBRSP must be designed to withstand and function during multiple emergency scenarios, including fire events (both structural and wildland fires). As described in

3. ENVIRONMENTAL CHECKLIST

the 2013 General Plan EIR, the proposed project would follow wildfire management policies. The proposed project would also include the implementation of SPR HAZ-5 prior to any construction, which would develop a Fire Safety Plan.

The proposed project would adhere to the 2013 General Plan Guidelines protecting the public from wildfires, as described in the 2013 General Plan EIR, as well as new and improved wildfire guidance and experience gained from the 2020 CZU fire. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

IX. HYDROLOGY AND WATER QUALITY

Would the Project:	Level of Impact in the 2013 General Plan EIR?	Create a Substantial Change in Project or Circumstances Resulting in New Significant Effects?	Result in New Information Showing New or More Severe Significant Effects?	Result in New Mitigation or Alternative to Reduce Significant Effect Is Declined?	Meet the Conditions of CEQA Guidelines Section 15163?
a) Violate any water quality standards or waste discharge requirements?	LTS	No	No	No	No
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	LTS	No	No	No	No

INITIAL STUDY FOR THE REIMAGINING BIG BASIN REDWOODS STATE PARK FACILITIES
MANAGEMENT PLAN AND GENERAL PLAN AMENDMENTS
CALIFORNIA DEPARTMENT OF PARKS AND RECREATION

3. ENVIRONMENTAL CHECKLIST

Would the Project:	Level of Impact in the 2013 General Plan EIR?	Create a Substantial Change in Project or Circumstances Resulting in New Significant Effects?	Result in New Information Showing New or More Severe Significant Effects?	Result in New Mitigation or Alternative to Reduce Significant Effect Is Declined?	Meet the Conditions of CEQA Guidelines Section 15163?
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	LTS	No	No	No	No
d) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	LTS	No	No	No	No
e) Otherwise substantially degrade water quality?	LTS	No	No	No	No
f) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	LTS	No	No	No	No
g) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	LTS	No	No	No	No

3. ENVIRONMENTAL CHECKLIST

Would the Project:	Level of Impact in the 2013 General Plan EIR?	Create a Substantial Change in Project or Circumstances Resulting in New Significant Effects?	Result in New Information Showing New or More Severe Significant Effects?	Result in New Mitigation or Alternative to Reduce Significant Effect Is Declined?	Meet the Conditions of CEQA Guidelines Section 15163?
h) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	LTS	No	No	No	No
i) Inundation by seiche, tsunami, or mudflow?	LTS	No	No	No	No

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation;

SU = significant and unavoidable; N/A = topic not analyzed in the 2013 General Plan EIR

2013 BIG BASIN REDWOODS STATE PARK GENERAL PLAN

The 2013 General Plan contains the following goal and guidelines related to hydrology and water quality.

Geology and Hydrology Goal: Minimize human impacts on natural geologic and hydrologic processes and values while protecting human life and property from these natural processes.

Geology and Hydrology Guidelines:

Geology/Hydrology 1: Monitor and document the geologic and hydrologic processes affecting the park and its resources.

Geology/Hydrology 2: Determine if, where, and how human development or activities may be exaggerating the natural rates or scales of landslides, stream channel erosion, stream debris clogging, and sedimentation. Identify management actions that can reduce or avoid negative human impacts to slope and stream integrity and to water quality. Management actions could include road and trail rehabilitation or removal from highly erosive areas, stream modifications, debris management, and revegetation.

Geology/Hydrology 3: Understand and comply with the surface and groundwater beneficial uses and water quality objectives set forth in the Water Quality Control Plan for the Central Coast Region (Basin Plan) for the Big Basin Redwoods SP watersheds and take appropriate

3. ENVIRONMENTAL CHECKLIST

actions to prevent degradation of surface and groundwater within the park. Examples of appropriate actions include ensuring that park sewage treatment meets water quality standards and planning and implementing new park projects so they do not degrade surface or groundwater quality or affect the water production rates of pre-existing nearby wells.

Geology/Hydrology 4: Cooperate with other landowners and regulatory agencies to address and remediate sediment issues affecting the park.

Geology/Hydrology 5: As appropriate, use standard Best Management Practices (BMPs) for erosion, dust, sediment control, and storm water runoff for park projects, and update regularly.

Geology/Hydrology 6: Maintain and manage native riparian vegetation bordering streams and springs, where feasible, to filter sediments and other pollutants from runoff that enter water bodies. Use biotechnical methods, where possible, when it is necessary for embankment stabilization.

Geology/Hydrology 7: Include professional biological, geological, and engineering evaluations as appropriate when designing and locating permanent structures, campgrounds, roads, utilities, and trails to avoid or reduce potential damage to people and property from unstable soil, landslides, debris flows, floods, and earthquakes.

Geology/Hydrology 8: Construct new structures in the park in conformance with seismic design criteria in the newest edition of the Uniform Building Code or California Building Code.

Geology/Hydrology 9: Participate with others, such as resource/regulatory agencies and adjacent landowners, to develop watershed management plans or assessments for major watersheds contained in the park. The watershed planning effort will use current information from existing watershed assessments and studies. These watershed plans will analyze the sediment transport functions in the park's stream systems, evaluate impacts of facilities and park use, and provide a scientific basis for selection, design, implementation and monitoring of future fisheries habitat enhancement and sediment reduction projects. Elements of this plan may include, but not be limited to:

- Inventory and prioritize sediment sources, and analyze the sediment transport functions in the stream systems with respect to their impact on in-stream habitat and on sediment delivery to Waddell Creek, its tributaries, and Waddell Beach.
- Determine if fluvial geomorphic analyses are needed and at what level is required for all streams. Coordinate this analysis with the Regional Water Quality Control Board (RWQCB) monitoring efforts.

3. ENVIRONMENTAL CHECKLIST

- Delineate the 100-year floodplain for West Waddell Creek, and other major creeks and tributaries

APPLICABLE STANDARD PROJECT REQUIREMENTS

State Parks requires SPRs for all projects. The following SPRs are related to hydrology and water quality. A full list of SPRs is found in Appendix A, *Standard Project Requirements*.

- HYD-1:** Prior to the start of construction involving ground-disturbing activities of an area of at least one acre, the **contractor** will prepare and submit a Stormwater Pollution Prevention Plan (SWPPP) for Department approval that identifies temporary best management practices (BMPs) (e.g., tarping of any stockpiled materials or soil; use of silt fences, straw bale barriers, fiber rolls) and permanent (e.g., structural containment, preserving or planting of vegetation) for use in all construction areas to reduce or eliminate the discharge of soil, surface water runoff, and pollutants during all excavation, grading, trenching, repaving, or other ground-disturbing activities. The SWPPP will include BMPs for hazardous waste and contaminated soils management and a Spill Prevention and Control Plan (SPCP), as appropriate.
- HYD-2:** All heavy equipment parking, refueling, and service will be conducted in designated areas outside of the 100-year floodplain to avoid water course contamination.
- HYD-3:** The project will comply with all applicable water quality standards as specified in the Water Quality Control Plan for the Central Coast Basin, also called the Basin Plan.
- HYD-4:** Construction activities will be suspended during heavy precipitation events (i.e., at least a half inch of precipitation in a 24-hour period) or when heavy precipitation events are forecast.
- HYD-5:** If construction activities extend into the rainy season (October 15– April 30), or if an unseasonal storm is anticipated, the **contractor** will properly winterize the site by covering (tarping) any stockpiled materials or soils and by constructing silt fences, straw bale barriers, fiber rolls, or other structures around stockpiles and graded areas.
- HYD-6:** The **Contractor** will install appropriate energy dissipators at water discharge points, as appropriate.

3. ENVIRONMENTAL CHECKLIST

BASELINE CONDITIONS

BBRSP lies almost entirely in the Central Coast Hydrologic Basin. A small section of the northern part of the park lies in the Pescadero Creek watershed in the San Francisco Hydrologic Unit. The park is under the jurisdiction of the Central Coast Regional Water Quality Control Board (CCRWQCB) and is designated as the Big Basin Hydrologic Unit. This hydrological unit covers 226,240 acres. The CCRWQCB has regulatory authority regarding water quality matters at the park. The CCRWQCB falls within the oversight of the State Water Resources Control Board (SWRCB). The mission of the SWRCB is to ensure the highest reasonable quality of waters in the state, while allocating those waters to achieve the optimum balance of beneficial uses. The joint authority of water allocation and water quality protection enables the SWRCB to provide comprehensive protection for California's waters. The mission of the Regional Water Quality Control Boards (RWQCBs) is to develop and enforce water quality objectives and implementation plans that will best protect the beneficial uses of the state's waters, recognizing local differences in climate, topography, geology, and hydrology.

Waddell Creek is the main river system in the park and 13,400 acres of the total 17,000 acres of the Waddell Creek watershed falls within BBRSP. As Waddell Creek flows out of the confined mountainous headwaters onto the lower-elevation coastal terrace, it deposits sediment and transitions to a meandering stream before eventually flowing into the Pacific Ocean at Waddell Beach. Opal Creek is a 4.5-mile-long tributary to Waddell Creek with a 2,300-acre watershed.

Groundwater quality in the vicinity of BBRSP is dependent on the composition of the water-bearing materials. In general, the sedimentary rock units in BBRSP are a poor source of groundwater. Groundwater drains quickly and freely through the fractures, and, therefore, the surface detention capacity is low. It is estimated that in the adjacent Scott Creek watershed, 40 percent of the precipitation leaves the system as surface runoff. The Department of Water Resources does not include this area in its list of groundwater basins, due to insufficient groundwater resources. There are three developed spring sources in BBRSP. A spring near Rancho del Oso provides relatively high-quality water for this subunit. Brown House Spring, upstream and across Waddell Creek from the Rancho del Oso spring, provides water to several residences. Pine Mountain Spring, higher in the Waddell Creek watershed, provided potable water to the Big Basin wastewater treatment plant before the development of Sempervirens Reservoir. Most of the park's utilities were lost in the 2020 CZU fire. There are also suspected springs beneath the Sempervirens Reservoir that appear to feed the reservoir. These spring sources indicate that some of the sandstone rock formations in the park provide adequate high-quality groundwater. The following discussion uses the existing, post-fire site conditions as the baseline for analysis.

3. ENVIRONMENTAL CHECKLIST

DISCUSSION

a) Would the proposed project violate any water quality standards or waste discharge requirements?

The 2013 General Plan EIR determined that, with implementation of the General Plan guidelines listed in Chapter 4, *Park Plan*, hydrology and water quality effects resulting from implementation of the General Plan would be at a less-than-significant level and would not violate any water quality standards or waste discharge requirements. Development and recreation of facilities in general have the potential to cause short- and long-term hydrologic and water quality impacts to the park's creeks and wetlands. General Plan Guideline Geology/Hydrology 3 requires the Department to comply with applicable water quality objectives developed by the CCRWQCB.

Potential impacts to the park's water quality from grading, filling, construction equipment use and storage, and mechanical or chemical control would be minimized by implementing General Plan Guidelines Geology/Hydrology 2, 3, 5, 6, and 7, as described in the 2013 General Plan EIR. Guideline Geology/Hydrology 2 also recommends an assessment of human activities on park geological and hydrological processes, and identification of appropriate management actions that would reduce or avoid negative impacts.

The proposed project would also adhere to SPR HYD-1, which would require a SWPPP and implementation of BMPs during future construction to minimize potential impacts to water quality, as described in the 2013 General Plan EIR. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

b) Would the proposed project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?

The 2013 General Plan EIR determined that, with implementation of the General Plan guidelines listed in Chapter 4, *Park Plan*, hydrology and water quality effects resulting from implementation of the General Plan would be less than significant with respect to groundwater supplies.

The proposed project would not significantly affect groundwater supplies or interfere with groundwater recharge. There would be no change in visitation and, thus, water use when compared to pre-fire levels. Further, General Plan Guideline Geology/Hydrology 3 would require that the proposed project comply with the surface and groundwater beneficial uses and water

3. ENVIRONMENTAL CHECKLIST

quality objectives set forth in the Water Quality Control Plan for the Central Coast Region (Basin Plan) for the Big Basin watersheds and take appropriate actions to prevent degradation of surface and groundwater in the park. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

c) Would the proposed project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?

The 2013 General Plan EIR determined that, with implementation of the General Plan guidelines listed in Chapter 4, *Park Plan*, hydrology and water quality effects resulting from implementation of the General Plan would be less than significant with respect to drainage patterns.

The proposed project does not include the alteration of the course of a stream or river. Further, General Plan Guideline Geology/Hydrology 5 recommends the use of BMPs to control erosion and surface runoff. As part of the process for preparation of site-specific plans, resource management plans, or facility construction, site-specific studies of soil conditions and facility siting will be conducted. All new development resulting from implementation of the proposed project would be evaluated to ensure that they do not contribute to degradation of water quality, substantially alter existing drainage patterns, or result in on- or off-site erosion, siltation, pollution, or flooding (Guidelines Geology/Hydrology 1, 3, and 7). As described in the 2013 General Plan EIR, the proposed project would adhere to the 2013 General Plan Guidelines. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

d) Would the proposed project create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

The 2013 General Plan EIR determined that, with implementation of the General Plan guidelines listed in Chapter 4, *Park Plan*, hydrology and water quality effects resulting from implementation of the General Plan would be less than significant with respect to runoff.

All new development projects resulting from implementation of the proposed project would be evaluated to ensure that they do not contribute to degradation of water quality, substantially alter existing drainage patterns, or result in on- or off-site erosion, siltation, pollution, or flooding (Guidelines Geology/Hydrology 1, 3, and 7). Further, General Plan Guideline Geology/Hydrology 5 recommends the use of BMPs to control erosion and surface runoff.

3. ENVIRONMENTAL CHECKLIST

Projects that generate runoff pollutants are required under the National Pollutant Discharge Elimination System to develop and implement a Water Quality Management Plan that identifies the site design, source control, and treatment-control BMPs. These BMPs would effectively prohibit non-stormwater discharges from entering the storm drain system and reduce the discharge of pollutants into stormwater conveyance systems to the maximum extent possible. The activities included in the proposed project would likely not result in runoff pollutants. Additionally, SPR HYD-3 would require development under the proposed project to comply with all applicable water quality standards, as specified in the CCRWQCB Basin Plan. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

e) Would the proposed project otherwise substantially degrade water quality?

The 2013 General Plan EIR determined that, with implementation of the General Plan guidelines listed in Chapter 4, *Park Plan*, hydrology and water quality effects resulting from implementation of the General Plan would be less than significant.

The potential future development and recreation facilities evaluated in the 2013 General Plan EIR and included in the proposed project have the potential to cause short-term and long-term hydrologic and water quality impacts to the park's creeks and wetlands. However, impacts to the park's water quality from grading, filling, construction equipment use and storage, and mechanical or chemical control would be minimized by implementing General Plan Guidelines Geology/Hydrology 2, 3, 5, 6, and 7. Adhering to the 2013 General Plan Guidelines would reduce any potential impacts to water quality, as described in the 2013 General Plan EIR. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

f) Would the proposed project place housing in a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

The 2013 General Plan EIR determined that, with implementation of the General Plan guidelines listed in Chapter 4, *Park Plan*, hydrology and water quality effects would be less than significant with respect to placing housing in a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map. A portion of the project area evaluated in the 2013 General Plan EIR, adjacent to Highway 1 and along Waddell Creek, may be subject to flooding, so the General Plan included actions to bring structures inland.

3. ENVIRONMENTAL CHECKLIST

The proposed project does not contemplate construction of new housing in a 100-year flood hazard area. The Focus Area is in Zone X, which indicates a moderate to low-risk area for flooding.¹⁶ Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

g) Would the proposed project place within a 100-year flood hazard area structures that would impede or redirect flood flows?

As described in impact discussion IX(f), the 2013 General Plan EIR determined that, with implementation of the General Plan guidelines listed in Chapter 4, *Park Plan*, hydrology and water quality effects would be less than significant with respect to placing structures within a 100-year flood hazard area, although portions of the project area evaluated in the 2013 General Plan EIR may be subject to flooding. However, the proposed project is in Zone X, which indicates a moderate to low risk area for flooding. Additionally, General Plan Guideline/Hydrology 9 ensures that developed structures would not impede or redirect flood flows. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

h) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?

The 2013 General Plan EIR found that a potential source of flooding could be from the failure of the Sempervirens Dam, an earth-fill structure built in 1951. However, implementation of the General Plan guidelines listed in Chapter 4, *Park Plan*, would result in a less-than-significant impact with respect to flooding.

As described in the 2013 General Plan EIR, portions of the Focus Area would be subject to flooding should the Sempervirens Dam ever fail. This flooding would extend downstream from the dam along Sempervirens Creek, reaching the Focus Area within approximately 15 minutes. The inundation area is a narrow zone along Sempervirens Creek and therefore would likely not affect future development under the proposed project. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

¹⁶ Federal Emergency Management Agency, 2023, Flood Map Service Center, <https://msc.fema.gov/portal/search?AddressQuery=big%20basin%20redwood%20state%20park>.

3. ENVIRONMENTAL CHECKLIST

i) *Inundation by seiche, tsunami, or mudflow?*

The 2013 General Plan EIR determined that, with implementation of the General Plan guidelines listed in Chapter 4, *Park Plan*, hydrology and water quality effects resulting from implementation of the General Plan would be less than significant with respect to inundation by seiche, tsunami, or mudflow. As described in the 2013 General Plan EIR, a portion of BBSRP may be affected by seiches or tsunamis due to its location near the coast; however, the proposed project is located inland, and the Focus Area does not contain any large bodies of coastal water nor is it in an area subject to seiche or tsunami. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

X. LAND USE AND PLANNING

Would the Project:	Level of Impact in the 2013 General Plan EIR?	Create a Substantial Change in Project or Circumstances Resulting in New Significant Effects?	Result in New Information Showing New or More Severe Significant Effects?	Result in New Mitigation or Alternative to Reduce Significant Effect Is Declined?	Meet the Conditions of CEQA Guidelines Section 15163?
a) Physically divide an established community?	NI	No	No	No	No
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	NI	No	No	No	No

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation;

SU = significant and unavoidable; N/A = topic not analyzed in the 2013 General Plan EIR

2013 BIG BASIN REDWOODS STATE PARK GENERAL PLAN

The 2013 General Plan contains the following goal and guidelines related to land use and planning:

3. ENVIRONMENTAL CHECKLIST

Regional Planning Goal: Integrate the planning and management programs at Big Basin Redwoods SP with the planning and management programs of other parks and open space providers in the Santa Cruz Mountains.

Regional Planning Guidelines:

Regional Planning 2: Work in partnership with state, regional, and local agencies, private landowners, and other organizations to provide a network of regional open space and a variety of educational and recreational opportunities. Coordinate park planning with local open space planning efforts, such as those of the Midpeninsula Regional Open Space District, the Peninsula Open Space Trust, and other organizations.

Regional Planning 3: Coordinate and collaborate with universities, colleges and other research organizations on natural and cultural resource studies to increase the knowledge of resources in the park and in the Santa Cruz Mountains region. Seek cooperative agreements with adjacent landowners, neighbors, and local jurisdictions responsible for zoning and land use management to provide for open space buffer areas to protect sensitive park resources and to identify and preserve wildlife habitat linkages.

APPLICABLE STANDARD PROJECT REQUIREMENTS

State Parks requires SPRs for all projects. There are no applicable SPRs related to land use and planning. A full list of SPRs is found in Appendix A, *Standard Project Requirements*.

BASELINE CONDITIONS

Land use patterns in the Santa Cruz Mountains have not changed significantly in the recent past. The timber industry, parks and open space, and private homes are the major land uses in the area. BBRSP either shares borders with or is in proximity to Castle Rock, Año Nuevo, Butano, and Portola Redwoods State Parks. Nearby, there are several other recreational and open space lands such as Pescadero Creek County Park and land owned by private nonprofit organizations such as the Sempervirens Fund and the Peninsula Open Space Trust. Private ownership patterns around the park generally consist of several hundred-acre parcels that are subdivided into smaller lots that contain homes and cabins or are undeveloped. Most of the area between the State parks surrounding BBRSP remain undeveloped. A significant amount of land surrounding BBRSP is owned by timber companies and is in timber production. The following discussion uses the existing, post-fire site conditions as the baseline for analysis.

DISCUSSION

a) *Would the proposed project physically divide an established community?*

The 2013 General Plan EIR determined that the General Plan would not physically divide an established community. Therefore, no significant land use and planning impacts would occur

3. ENVIRONMENTAL CHECKLIST

and no further environmental analysis of the effects on land use and planning was necessary in the 2013 General Plan EIR.

The physical division of an established community typically refers to the construction of a physical feature (such as a wall, interstate highway, or railroad tracks) or the removal of a means of access (such as a local road or bridge) that would impair mobility within an existing community or between a community and outlying areas. The proposed project is a planning document designed to guide the stewardship, management, and use of existing and future facilities. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

b) Would the proposed project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The 2013 General Plan EIR determined the General Plan would not conflict with applicable land use plans, habitat conservation plans, or the policies or regulations of any agency with jurisdiction over the project. Therefore, no significant land use and planning impacts would occur and no further environmental analysis of the effects on land use and planning was necessary in the 2013 General Plan EIR.

The proposed project is consistent with all applicable State and local land use plans, policies, and regulations, including the 2013 General Plan with the proposed General Plan Amendments, and would be a guideline document for replacing the structures lost in the 2020 CZU fire and improving development in BBRSP, as planned for in the General Plan. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

3. ENVIRONMENTAL CHECKLIST

XI. MINERAL RESOURCES

Would the Project:	Level of Impact in the 2013 General Plan EIR?	Create a Substantial Change in Project or Circumstances Resulting in New Significant Effects?	Result in New Information Showing New or More Severe Significant Effects?	Result in New Mitigation or Alternative to Reduce Significant Effect Is Declined?	Meet the Conditions of CEQA Guidelines Section 15163?
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	NI	No	No	No	No
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	NI	No	No	No	No

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation;
SU = significant and unavoidable; N/A = topic not analyzed in the 2013 General Plan EIR

2013 BIG BASIN REDWOODS STATE PARK GENERAL PLAN

There are no applicable goals and guidelines related to mineral resources in the 2013 General Plan.

APPLICABLE STANDARD PROJECT REQUIREMENTS

State Parks requires SPRs for all projects; however, there are no applicable SPRs related to mineral resources. A full list of SPRs is found in Appendix A, *Standard Project Requirements*.

BASELINE CONDITIONS

The California Geological Survey classifies the regional significance of mineral resources in accordance with the California Surface Mining and Reclamation Act (SMARA) of 1975 and assists in the designation of lands containing significant aggregate resources. California Geological Survey's Mineral Land Classification (MLC) Project provides objective economic-geologic

3. ENVIRONMENTAL CHECKLIST

expertise to assist in the protection and development of mineral resources through the land use planning process.

BBRSP is in the SMARA Study Area.¹⁷ No minerals are currently mined in BBRSP. PRC Section 5001.65 does not permit commercial extraction of mineral resources on Department property; therefore, all previously existing mining operations have ceased operations. The following discussion uses the existing, post-fire site conditions as the baseline for analysis.

DISCUSSION

a) Would the proposed project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

Because BBRSP does not contain any known mineral resources, the 2013 General Plan EIR determined that the implementation of the General Plan would not result in the loss of availability of known mineral resources that would be of value to the region and residents of the state.

The Focus Area is in an area already evaluated by the 2013 General Plan EIR and therefore would also not include any mineral resource development. Even so, commercial exploitation of resources in units of the State Park System is prohibited (PRC Section 5001.65.) Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts on the availability of mineral resources, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

b) Would the proposed project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

The 2013 General Plan EIR determined that implementation of the General Plan would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local General Plan, Specific Plan, or other land use plan. The BBRSP has not been classified or nominated as a locally important mineral resource recovery site and the proposed project would be in an area evaluated by the 2013 General Plan EIR and therefore would also not include any mineral resources. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

¹⁷ California Geological Survey, 2021, Mineral Land Classification, California Department of Conservation, <https://maps.conservation.ca.gov/cgs/informationwarehouse/mlc/>, accessed April 9, 2025.

3. ENVIRONMENTAL CHECKLIST

XII. NOISE

Would the Project:	Level of Impact in the 2013 General Plan EIR?	Create a Substantial Change in Project or Circumstances Resulting in New Significant Effects?	Result in New Information Showing New or More Severe Significant Effects?	Result in New Mitigation or Alternative to Reduce Significant Effect Is Declined?	Meet the Conditions of CEQA Guidelines Section 15163?
a) Cause exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	LTS	No	No	No	No
b) Cause exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	LTS	No	No	No	No
c) Cause a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	LTS	No	No	No	No
d) Cause a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	LTS	No	No	No	No

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation;
SU = significant and unavoidable; N/A = topic not analyzed in the 2013 General Plan EIR

3. ENVIRONMENTAL CHECKLIST

2013 BIG BASIN REDWOODS STATE PARK GENERAL PLAN

The 2013 General Plan contains the following goal and guidelines related to noise:

Aesthetics Goal: Identify and protect positive aesthetic values to preserve the fundamental character of the park for future generations.

Aesthetics Guidelines:

Aesthetics 6: Minimize vehicle noise in heavily-used areas, through screening, separation of use areas, and other appropriate techniques. Locate park administrative and maintenance functions away from public areas, if feasible, and take appropriate measures to minimize construction and maintenance noise.

Aesthetics 7: Restrict levels of sound from radios and other human-made devices and enforce park noise standards, especially during night and early morning hours. Refer to the Department's Soundscape Protection Policy (DOM, Chapter 0300, 2004) when planning new facilities or evaluating noise standards, and comply with federal and state noise ordinances and standards.

APPLICABLE STANDARD PROJECT REQUIREMENTS

State Parks requires SPRs for all projects. The following SPRs are related to noise. A full list of SPRs is found in Appendix A, *Standard Project Requirements*.

- NOI-1:** Temporary or permanent noise barriers such as berms or walls will be used, as appropriate, to reduce noise levels.
- NOI-2:** Internal combustion engines used for project implementation will be equipped with a muffler of a type recommended by the manufacturer. Equipment and trucks used for project-related activities will use the best-available noise-control techniques (e.g., engine enclosures, acoustically attenuating shields or shrouds, intake silencers, ducts) whenever necessary.
- NOI-3:** The **contractor** will locate stationary noise sources and staging areas as far from potential sensitive noise receptors as possible. If they must be near potential sensitive noise receptors, stationary noise sources will be muffled or shielded, and/or enclosed in temporary sheds.
- NOI-4:** Construction activities will generally be limited to daylight hours Monday through Friday. If work during weekends or holidays is required, no work will occur on those days before 8 a.m. or after 5 p.m.

3. ENVIRONMENTAL CHECKLIST

BASELINE CONDITIONS

The project site is a predominantly wilderness environment with scattered rural residential uses near the Focus Area. The existing noise environment is characterized primarily by traffic noise on Highways 9, 35, and 236. Typical conditions that contribute to the existing ambient noise environment would include noise from parking lot movements, children yelling and playing, dogs barking, birds, wind noise, and typical rural residential activities. No sensitive receptors such as schools, hospitals, or hospice care facilities are within the park boundaries.

Furthermore, nearby sensitive receptors within the communities that surround BBRSP are all separated from the park by vegetation, roadways, and existing development. The nearest receptors include the Taungpulu Kaba Aye Monastery, approximately two miles east of the Focus Area boundary and Redwood Elementary and the residences along Highway 9, approximately five miles east of the Focus Area boundary. The following discussion uses pre-fire visitation and conditions as the baseline for analysis; however, current existing conditions are used to evaluate impacts to sensitive receptors.

DISCUSSION

a) Would the proposed project cause expose people or generate noise at levels in excess of standards established in the local General Plan, Noise Ordinance, or applicable standards of other agencies?

The 2013 General Plan EIR described the primary source of noise as noise related to facility operations, construction activities, and vehicular traffic. With implementation of the General Plan guidelines listed in Chapter 4, *Park Plan*, the 2013 General Plan EIR found a less-than-significant impact with respect to generation of noise exceeding applicable standards.

CONSTRUCTION

Noise generated by on-site construction equipment is based on the type of equipment used, its location relative to sensitive receptors, and the timing and duration of noise-generating activities. Each phase of construction involves different types of equipment and has distinct noise characteristics. Heavy equipment, such as a dozer or a loader, can have maximum, short-duration noise levels of up to 85 A-weighted decibels (dBA) at 50 feet. However, overall noise emissions vary considerably, depending on what specific activity is being performed at any given moment.

Noise attenuation due to distance, the number and type of equipment, and the load and power requirements to accomplish tasks at each construction phase would result in different noise levels from construction activities at a given receptor. Since noise from construction equipment is intermittent and diminishes at a rate of 6 dBA per doubling of distance (conservatively disregarding other attenuation effects from air absorption, ground effects, and shielding effects provided by intervening structures or existing solid walls), the average noise levels at noise-

3. ENVIRONMENTAL CHECKLIST

sensitive receptors could vary considerably, because mobile construction equipment would move around the site with different equipment mixes, loads, and power requirements.

The expected construction equipment mix used for future development under the proposed project can be estimated and categorized by construction activity using the Federal Highway Administration Roadway Construction Noise Model (RCNM). Average noise levels from project-related construction activities are calculated by modeling the three loudest pieces of equipment per activity phase. Equipment for grading and site preparation is modeled at spatially averaged distances (i.e., from the acoustical center of the Focus Area) because the area around the center of construction activities best represents the potential average construction-related noise levels at the various sensitive receptors for mobile equipment. Similarly, construction noise from demolition is modeled from the center of the project site. Building construction and architectural coating are measured from the edge of the proposed buildings to the nearest sensitive receptors. Additionally, paving is measured from the edge of the nearest paving areas to the nearest sensitive receptors. Noise levels at receptors in the vicinity of the project site are summarized in Table 3, *Calculated Construction Noise Levels at Nearby Receptors*.

Table 3 **Calculated Construction Noise Levels at Nearby Receptors**

Construction Activity Phase	Noise Levels in dBA L _{eq}				
	RCNM Reference Noise Level	Receptor at 100 feet	Receptor at 200 feet	Residential Receptor to South	Park Use Receptor to West
Distance in feet	50	100	200	300	400
Demolition	85	79	73	69	67
Site Prep	85	79	73	69	67
Grading	85	79	73	69	67
Building Construction	80	74	68	64	62
Architectural Coating	74	68	62	58	56
Paving	80	74	68	64	62
Finish/Landscaping	80	74	68	64	62
Exceeds FTA's 80 dBA L_{eq} Threshold?		No	No	No	No
Source: FHWA's RCNM software. dBA Leq = Energy-Average (Leq) Sound Levels. See Appendix B, <i>Noise</i> , for construction noise calculations.					

As shown in Table 3, construction noise levels would intermittently range from 56 to 79 dBA Leq at the noise-sensitive receptors at 100 feet to 400 feet, when activities are focused near the center of the Focus Area. Potential construction noise levels would not exceed the 80 dBA Leq threshold at park use receptors when construction activities are 100 feet from a sensitive receptor. Provided construction activities are 100 feet or greater from noise-sensitive receptors,

3. ENVIRONMENTAL CHECKLIST

this would be considered a less-than-significant impact. With implementation of General Plan Policy 6.9.7, Zoning Code requirements, SPRs NOI-1 through NOI-6, and General Plan Guidelines Aesthetics 6 and 7, noise impacts due to future development under the proposed project would be reduced to less-than-significant, as described in the 2013 General Plan EIR.

OPERATION

Operational noise impacts at BBRSP are related to vehicular traffic, facility operations, and visitors. Noise generated from park visitation would not increase over 2013 General Plan levels due to implementation of the proposed project. Further, the introduction of the park's shuttle program is designed to reduce visitor trips and therefore traffic noise in the park. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

b) Would the proposed project cause expose people to or generate excessive groundborne vibration or groundborne noise levels?

The 2013 General Plan EIR described the primary source of noise as noise related to facility operations, construction activities, and vehicular traffic; excessive groundborne vibrations were not expected. With implementation of the General Plan guidelines listed in Chapter 4, *Park Plan*, the 2013 General Plan EIR found a less-than-significant impact with respect to groundborne vibration.

Construction operations due to implementation of the proposed project can generate varying degrees of ground vibration, depending on the construction procedures and equipment. Operation of construction equipment generates vibrations that spread through the ground and diminish with distance from the source. The effect on buildings in the vicinity of the construction site varies depending on soil type, ground strata, and receptor-building construction. The effects from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibrations at moderate levels, to slight structural damage at the highest levels. Vibration from construction activities rarely reaches levels that can damage structures.

Like the project evaluated in the 2013 General Plan EIR, future development under the proposed project is not expected to generate or expose people to excessive groundborne vibration or groundborne noise levels. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

3. ENVIRONMENTAL CHECKLIST

c) Would the proposed project cause a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

The 2013 General Plan EIR described the primary source of noise as noise related to facility operations, construction activities, and vehicular traffic. With implementation of the General Plan guidelines listed in Chapter 4, *Park Plan*, the 2013 General Plan EIR found a less-than-significant impact with respect to permanent ambient noise level increases.

To determine if the proposed project would cause a substantial ambient noise increase from project-related traffic, consideration must be given to the magnitude of the increase and the affected receptors. In general, for community noise, a noise level increase of 3 dBA is considered barely perceptible, while an increase of 5 dBA is considered clearly noticeable. A significant noise impact is determined when noise-sensitive receptors along a roadway segment experience an increase of 3 dBA over existing traffic noise levels.

For general traffic noise, a doubling of traffic volumes (i.e., an increase of 100 percent) would be necessary to cause a perceptible noise increase of 3 dBA or more. Likewise, a 58-percent increase in volumes would be needed to result in an increase of 2 dB and a 26-percent increase in volumes would be needed to result in an increase of 1 dBA. Further, park traffic trips would be dispersed along park access roads Highways 9, 35, and 236. On roads leading to BBRSP, existing traffic volumes range from 560 daily trips (Highway 236) to 8,400 daily trips (Highway 9). As described in Section XVI, *Transportation*, implementation would not increase the expected traffic at BBRSP when compared to pre-fire conditions and, because the proposed project includes the introduction of a shuttle program, traffic is expected to decrease compared to what was evaluated in the 2013 General Plan EIR.

Additionally, adherence to SPRs NOI-1 through NOI-6 and General Plan Guidelines Aesthetics 6 and 7 would ensure noise impacts due to future development under the proposed project do not create a significant increase in ambient noise levels. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

d) Would the proposed project cause a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

As described previously, the 2013 General Plan EIR described the primary source of noise as facility operations, construction activities, and vehicular traffic. With implementation of the General Plan guidelines listed in Chapter 4, *Park Plan*, the 2013 General Plan EIR found a less-than-significant impact with respect to temporary or periodic ambient noise level increases.

3. ENVIRONMENTAL CHECKLIST

As described in impact discussion XII(a), short-term on-site construction equipment source noise could expose people to, or generate noise levels in excess of, applicable standards and thus create a substantial temporary increase in ambient noise levels in the project vicinity; however, implementation of General Plan Policy 6.9.7 and adherence to SPRs NOI-1 through NOI-6 and General Plan Guidelines Aesthetics 6 and 7 would ensure this potential impact remains at a less-than-significant level. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

XIII. PARKS AND RECREATION

Would the Project:	Level of Impact in the 2013 General Plan EIR?	Create a Substantial Change in Project or Circumstances Resulting in New Significant Effects?	Result in New Information Showing New or More Severe Significant Effects?	Result in New Mitigation or Alternative to Reduce Significant Effect Is Declined?	Meet the Conditions of CEQA Guidelines Section 15163?
a) Increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur or be accelerated?	LTS	No	No	No	No
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	LTS	No	No	No	No

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation;

SU = significant and unavoidable; N/A = topic not analyzed in the 2013 General Plan EIR

3. ENVIRONMENTAL CHECKLIST

2013 BIG BASIN REDWOODS STATE PARK GENERAL PLAN

The 2013 General Plan contains the following goal and guidelines related to parks and recreation:

Recreation Goal: Provide a range of high-quality recreational opportunities that allow California's diverse population to visit, enjoy, experience, and appreciate the important natural, cultural, recreational and aesthetic resources of Big Basin Redwoods SP

Recreation Guidelines:

Recreation 1: Provide facilities and programs that enhance the public's enjoyment and appreciation of the park's natural, cultural, recreational, and aesthetic resources. Include facilities that support appropriate activities such as hiking, camping, backpacking, nature, and history study, bicycling, surfing, wind surfing, horseback riding, picnicking, and the enjoyment of solitude, including provisions for concession-developed or operated recreation opportunities.

Recreation 2: Relocate, remove, and/or reorganize facilities to preserve and protect park resources, to better serve visitor recreation needs, and to provide efficient park administrative, public safety, and maintenance functions.

Recreation 3: Where appropriate, provide recreation access and program opportunities that expand the visitor use of the park in the spring, fall, and winter months.

Recreation 4: Create diversified recreation opportunities across the region's state parks to disperse recreation, reduce resource impacts, and provide facilities and recreational opportunities that respond to unique site characteristics. Coordinate with federal, state and county agencies and open space and community-based organizations to plan a regional network of recreation opportunities.

Recreation 5: Provide information and facilities to encourage visitation to nearby state parks and regional open space. Methods to encourage this cross-connection include information describing regional resources and the area's historic connections, location maps and park and open space access information, trail connections, and mass transit opportunities.

Recreation 6: Provide additional day use and overnight accommodations outside the old growth forest, to serve the visitor needs reflected by California's changing demographic trends. Develop group recreation facilities, where appropriate, and make provisions to accommodate a wide range of user groups and for special events during year-round seasonal conditions.

3. ENVIRONMENTAL CHECKLIST

Recreation 7: Evaluate new technologies and recreational activities and incorporate those that would enhance visitor experiences and benefit recreation facilities and programs, such as maximizing the use of the Internet for public outreach and providing wireless Internet access.

Recreation 8: Acquire adjacent properties from willing sellers that would provide recreation opportunities and/or improved connections between Big Basin Redwoods SP and other state and regional parks.

APPLICABLE STANDARD PROJECT REQUIREMENTS

State Parks requires SPRs for all projects; however, there are no applicable SPRs related to parks and recreation. A full list of SPRs is found in Appendix A, Standard *Project Requirements*.

BASELINE CONDITIONS

The park is a popular destination and has provided many recreation opportunities for over 120 years, as California's first official State park created in 1902. Many recreation facilities were built in the Headquarters Area, in the heart of the old-growth redwood habitat, but were destroyed by the 2020 CZU fire.

Over the years, the amount of leisure time and recreation trends have changed, and thus the facility needs at BBRSP have fluctuated. Since the 1980s, California's population has diversified and increased exponentially. As these trends continue, the demand for outdoor recreation will increase even further, both in the numbers of people desiring an outdoor experience and in the types of recreational activities they seek. In 2019, BBRSP received 570,438 visitors, mainly from California, particularly the Bay Area, Central Coast, and Central Valley. The following discussion uses pre-fire visitation and conditions as the baseline for analysis.

DISCUSSION

a) Would the proposed project increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur or be accelerated?

Since BBRSP provides recreational opportunities, the 2013 General Plan EIR found that the General Plan would improve facilities and programs at the park and, with implementation of the General Plan guidelines, would have a less-than-significant impact on recreational facilities. The 2013 General Plan EIR describes population growth and changing demographics having an influence on the Department's efforts to consider new forms of recreation and new technologies to respond to visitor demand and recreation trends (Guidelines Recreation 6 and 7). The environmental impacts associated with the construction of the park facilities under the proposed project are evaluated throughout this Initial Study at the program level. Implementation of the proposed project could result in subsequent projects that have

3. ENVIRONMENTAL CHECKLIST

construction-level impacts as described in Section III, *Air Quality*; Section IV, *Biological Resources*; Section V, *Cultural Resources*; Section VI, *Geology and Soils*; Section VII, *Greenhouse Gas Emissions*; Section VIII, *Hazards and Hazardous Materials*; and Section XII, *Noise*. Any future facilities constructed due to implementation of the proposed project would be subject to the General Plan guidelines and SPRs described throughout this Initial Study to ensure the impacts from the project-level construction would be reduced to a less-than-significant level.

Like the General Plan, the proposed BBFMP recommends the use of an adaptive management process that would help implement the General Plan's vision and desired conditions for natural, cultural, and recreational resources and visitor experiences in the park. The proposed project would serve as a management tool that will be used to guide the stewardship, management, and use of existing and future facilities and minimize impacts to natural and cultural resources. Future development under the BBFMP would be in areas previously disturbed by pre-fire development or otherwise appropriate for new development.

With the proposed General Plan Amendments, the proposed project would be consistent with the 2013 General Plan and would provide an ongoing method to evaluate and avoid or reduce impacts associated with recreational uses, visitor experiences, and park resources. Using the adaptive management process, any potentially significant impacts would be minimized to ensure protection of the park's important resource values and visitor opportunities as expressed in the General Plan. The proposed project promotes the use of regional parks, open space, and public recreation facilities by cooperating with other agencies to encourage regional trail connections and interpretation of the natural, cultural, aesthetic, and recreational resources in the Santa Cruz Mountains region (Guidelines Recreation 4 and Recreation 5). However, this use would not represent an increase in comparison to pre-fire conditions and would not cause or accelerate significant physical deterioration of the other existing facilities.

One of the purposes of the proposed project would be to maximize visitor use and experiences, which is consistent with the General Plan goal of developing new opportunities and facilities for optimizing public enjoyment of the park's natural, cultural, and recreational values, as described in the 2013 General Plan EIR. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

b) Would the proposed project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

The 2013 General Plan EIR determined that, with implementation of the General Plan guidelines, the development of recreation facilities at BBRSP would not result in an adverse physical effect on the environment.

3. ENVIRONMENTAL CHECKLIST

Population growth and changing demographics will influence the Department's efforts to consider new forms of recreation and new technologies to respond to visitor demand and recreation trends (Guidelines Recreation 6 and 7) but also calls for restricting or modifying some types of recreation activities, as necessary, to minimize adverse resource impacts (Guideline Recreation 2). Similarly, the proposed project will serve as a management tool that will be used to guide the stewardship, management, and use of existing and future facilities and minimize impacts to natural and cultural resources. The BBFMP would increase opportunities for interpretation and education and expand facilities and programs that allow more recreational opportunities in the spring and fall (Guideline Recreation 3). However, the proposed project is not anticipated to increase park visitation when compared to pre-fire conditions and thus all impacts caused by the construction or expansion of recreational facilities under the proposed project have been evaluated in the 2013 General Plan EIR. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

XIV. POPULATION AND HOUSING

Would the Project:	Level of Impact in the 2013 General Plan EIR?	Create a Substantial Change in Project or Circumstances Resulting in New Significant Effects?	Result in New Information Showing New or More Severe Significant Effects?	Result in New Mitigation or Alternative to Reduce Significant Effect Is Declined?	Meet the Conditions of CEQA Guidelines Section 15163?
a) Induce substantial unplanned population growth or growth for which inadequate planning has occurred, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	NI	No	No	No	No

3. ENVIRONMENTAL CHECKLIST

Would the Project:	Level of Impact in the 2013 General Plan EIR?	Create a Substantial Change in Project or Circumstances Resulting in New Significant Effects?	Result in New Information Showing New or More Severe Significant Effects?	Result in New Mitigation or Alternative to Reduce Significant Effect Is Declined?	Meet the Conditions of CEQA Guidelines Section 15163?
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	NI	No	No	No	No

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation;
SU = significant and unavoidable; N/A = topic not analyzed in the 2013 General Plan EIR

2013 BIG BASIN REDWOODS STATE PARK GENERAL PLAN

The 2013 General Plan contains the following goal and guideline related to population and housing:

Regional Planning Goal: Integrate the planning and management programs at Big Basin Redwoods SP with the planning and management programs of other parks and open space providers in the Santa Cruz Mountains.

Regional Planning Guidelines:

Regional Planning 6: To expand affordable housing for park employees, coordinate with other parks and agencies in the region to identify and utilize potential shared housing opportunities.

APPLICABLE STANDARD PROJECT REQUIREMENTS

State Parks requires SPRs for all projects; however, there are no applicable SPRs related to population and housing. A full list of SPRs is found in Appendix A, *Standard Project Requirements*.

3. ENVIRONMENTAL CHECKLIST

BASELINE CONDITIONS

BBRSP is a destination for residents throughout California, although most visitors come from the metropolitan areas of northern and central California. Staff at BBRSP and the people involved in the regional tourist-serving industries primarily live in Santa Cruz and San Mateo Counties. Population within the park boundaries is limited and restricted to temporary population (in campgrounds and cabins) and park staff housing. Before the fire, there were approximately 29 park housing units in the park, and currently there are approximately 16 interim staff housing units at Saddle Mountain. The park does not offer business opportunities within its boundaries, beyond basic recreational services offered by the Department through concessions. The following discussion uses pre-fire visitation and conditions as the baseline for analysis.

DISCUSSION

a) Would the proposed project induce substantial unplanned population growth or growth for which inadequate planning has occurred, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

The 2013 General Plan EIR determined that the General Plan does not include proposals for infrastructure that would generate more growth in the immediate vicinity and there would be no impact.

Like the General Plan, the proposed project's only housing component includes minimal staff residences and it would not induce substantial or unplanned population growth. The proposed BBFMP includes 24 staff residence units compared to 12 available before the CZU fire. This increase is minimal and would not constitute substantial population growth. Additionally, General Plan Guideline Regional Planning 6 encourages cooperation with other agencies to identify and provide potential shared affordable employee housing opportunities in addition to the staff housing provided at the park. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

b) Would the proposed project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

The 2013 General Plan EIR determined that the General Plan does not include proposals for infrastructure or programs that would displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. Like the General Plan evaluated in the 2013 General Plan EIR, the proposed project does not have a housing component. It would neither modify nor displace any existing housing and would displace no one, either temporarily or permanently. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the

3. ENVIRONMENTAL CHECKLIST

severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

XV. PUBLIC SERVICES

Would the Project:	Level of Impact in the 2013 General Plan EIR?	Create a Substantial Change in Project or Circumstances Resulting in New Significant Effects?	Result in New Information Showing New or More Severe Significant Effects?	Result in New Mitigation or Alternative to Reduce Significant Effect Is Declined?	Meet the Conditions of CEQA Guidelines Section 15163?
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:					
i) Fire protection?	NI	No	No	No	No
ii) Police protection?	NI	No	No	No	No
iii) Schools?	NI	No	No	No	No
iv) Libraries?	NI	No	No	No	No
v) Other public facilities?	NI	No	No	No	No

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation;

SU = significant and unavoidable; N/A = topic not analyzed in the 2013 General Plan EIR

2013 BIG BASIN REDWOODS STATE PARK GENERAL PLAN

There are no applicable goals or guidelines related to public services in the 2013 General Plan.

APPLICABLE STANDARD PROJECT REQUIREMENTS

State Parks requires SPRs for all projects; however, there are no applicable SPRs related to public services. A full list of SPRs is found in Appendix A, *Standard Project Requirements*.

BASELINE CONDITIONS

FIRE PROTECTION

Fire prevention and protection services are administered by CAL FIRE for State lands outside the area of responsibility of local fire agencies. The nearest fire station is CAL FIRE CZU Station 23, at Jamison Creek approximately three miles southeast of the Focus Area.

3. ENVIRONMENTAL CHECKLIST

POLICE PROTECTION

Law enforcement in the park is handled by the Department, specifically by the California State Parks Peace Officers, which may include rangers.

SCHOOLS

The nearest schools to BBRSP are Redwood Elementary, Boulder Creek Elementary School, and Pescadero Middle School. The nearest school to the proposed project is Redwood Elementary, approximately five miles east.

LIBRARIES

BBRSP has no dedicated or nearby libraries.

PARKS AND OTHER PUBLIC FACILITIES

As part of BBRSP, numerous outdoor recreational opportunities, including trails, are available in and near the Focus Area. Although BBRSP is the largest single park in the region, several other State and County parks are near the Focus Area, including the nearby recreation areas of the Midpeninsula Regional Open Space District, and many other public and private open space ownerships.

The following discussion uses pre-fire visitation and conditions as the baseline for analysis.

DISCUSSION

a) Would the proposed project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, to maintain acceptable service ratios, response times, or other performance objectives for any of the public services: (i) fire protection, (ii) police protection, (iii) schools, (iv) libraries, or (v) other public facilities?

The 2013 General Plan EIR found that new facilities at the park would supplement existing facilities and uses that require the same level of services for public health and safety, so there would be no impact to public services. Future development under the proposed project would be limited to the Focus Area and would not increase park visitation when compared to pre-fire levels. Therefore, the proposed project would not result in new or a substantial increase in magnitude of impacts to public services, compared to the 2013 General Plan EIR and further analysis of this topic is not warranted in the Draft Supplemental EIR.

3. ENVIRONMENTAL CHECKLIST

XVI. TRANSPORTATION

Would the Project:	Level of Impact in the 2013 General Plan EIR?	Create a Substantial Change in Project or Circumstances Resulting in New Significant Effects?	Result in New Information Showing New or More Severe Significant Effects?	Result in New Mitigation or Alternative to Reduce Significant Effect Is Declined?	Meet the Conditions of CEQA Guidelines Section 15163?
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transits?	LTS	No	No	No	No
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	LTS	No	No	No	No

3. ENVIRONMENTAL CHECKLIST

Would the Project:	Level of Impact in the 2013 General Plan EIR?	Create a Substantial Change in Project or Circumstances Resulting in New Significant Effects?	Result in New Information Showing New or More Severe Significant Effects?	Result in New Mitigation or Alternative to Reduce Significant Effect Is Declined?	Meet the Conditions of CEQA Guidelines Section 15163?
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	LTS	No	No	No	No
d) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	LTS	No	No	No	No
e) Result in inadequate emergency access?	LTS	No	No	No	No
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	LTS	No	No	No	No

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation; SU = significant and unavoidable; N/A = topic not analyzed in the 2013 General Plan EIR

2013 BIG BASIN REDWOODS STATE PARK GENERAL PLAN

The 2013 General Plan contains the following goals and guidelines related to transportation:

Access and Circulation Goal: Coordinate and maintain visitor access and circulation in order to optimize operations efficiency, security, emergency access, and visitor enjoyment of the park, while maintaining the park's character and avoiding resource degradation.

3. ENVIRONMENTAL CHECKLIST

Access 1: Establish a park access system that provides clear direction for visitor arrival to and departure from the park. Ensure that primary visitor contact areas are conveniently located so that their administrative functions proceed efficiently for both visitors and park staff. Where appropriate, provide or improve access to less-visited areas of the park. Coordinate with Caltrans and Santa Cruz and San Mateo counties to ensure that road construction and maintenance will result in safe, convenient, and enjoyable driving experiences for motorists as they access and traverse through the park.

Access 2: Work with state and local transportation agencies to support an integrated and efficient multi-modal transportation system that facilitates visitor access to the park. Coordinate with these agencies to provide facilities that encourage and support a variety of park access transportation modes, including pedestrian, bicycle, equestrian, bus, and shuttle, and that include support facilities, such as bus pullouts and transit shelters.

Access 3: Evaluate and upgrade existing signs along park access routes and in entrance areas to direct and orient visitors arriving at or leaving the park. Provide orientation information at park entrances that will permit visitors to easily access a range of available park experiences. Remove, combine, or relocate signs that are confusing, unnecessary, or negatively impact aesthetic resources. Create a parkwide continuity of placement and design for entrance signs to promote a recognizable park identity.

Access 4: During the peak visitor use season, coordinate with regional transit providers or concessionaires to provide transportation alternatives, such as a shuttle system, between park areas and nearby parks and open space preserves, to achieve more efficient use of existing facilities and to reduce park traffic and the size of parking facilities needed to serve visitor activities. Provide connections to park and regional trails, including connections to the California Coastal Trail, from convenient transit stops.

Access 5: Develop a circulation system that separates vehicular from non-vehicular traffic, where feasible, and public use areas from park administration and maintenance functions in order to reduce potential user conflicts and enhance non-vehicular modes of transportation.

Parking Goal: Provide safe and convenient day use and overnight parking, as well as parking for group use and special events, that minimize negative impacts to natural, cultural, aesthetic, and recreation resources and contribute to positive visitor experiences.

Parking 1: Explore alternatives for accommodating special event parking, such as the use of unpaved areas and satellite parking areas. Reconfigure parking availability where necessary to address public safety concerns and improve visitor experiences. Pursue shared parking arrangements with adjoining municipalities and landowners.

Parking 2: Minimize the number of parking facilities near or adjacent to sensitive resource areas in order to reduce or avoid negative resource impacts.

3. ENVIRONMENTAL CHECKLIST

Parking 3: Conduct periodic parking and circulation assessments in response to future parking demands and changing conditions. These assessments shall identify physical and environmental constraints, design capacity and deficiencies, parking and transportation alternatives, and potential parking to accommodate visitor use during peak visitation periods. Monitor the parking situation during peak use periods to determine and record visitor use patterns and take appropriate management actions to mitigate resource impacts and improve parking efficiencies.

Accessibility Goal: Big Basin Redwoods SP recreation facilities shall become universally-accessible and provide high-quality recreational opportunities for all visitors.

Accessibility 1: Provide universal access to the park's programs, facilities, and resources, where feasible, including buildings and their contents, historic structures and landscapes, roads, walkways and trails, and the park's important natural and cultural resources, in accordance with the *Americans with Disabilities Act (1990)* and California State Park's *Accessibility Guidelines*. Provide universal accessibility for employees in work areas and in park residences as they are developed or renovated.

CALTRANS REGULATIONS

Caltrans is responsible for the maintenance and operation of State routes and highways. In BBRSP, Caltrans facilities include Highway 236.

TRAFFIC IMPACT STUDY GUIDELINES

Caltrans released the *VMT-Focused Transportation Impact Study Guide* that recommends use of the Governor's Office of Land Use and Climate Innovation's (LCI's) recommendations for land use projects and plans. For transportation projects, Caltrans has suggested that any increase in vehicle miles traveled (VMT) would constitute a significant impact. This has been referred to as the "Net Zero VMT threshold." Caltrans also released the *Interim Land Development and Intergovernmental Review (LDIGR) Safety Review Practitioners Guidance* to provide guidance about the analysis of safety on the State highway system.

ROADWAY DESIGN STANDARDS

Caltrans sets standards, policies, and strategic plans for the State's roadway system. The Caltrans *Local Assistance Procedures Manual* (LAPM), Chapter 11, describes the various procedures and establishes design standards required to process federal and State-funded local transportation projects. The Caltrans *Highway Design Manual*, prepared by the Division of Design for Project Delivery, establishes uniform policies and procedures to carry out the highway design functions of Caltrans.

3. ENVIRONMENTAL CHECKLIST

LOCAL DEVELOPMENT INTERGOVERNMENTAL REVIEW SAFETY PRACTITIONERS

In December 2020, Caltrans issued Traffic Safety Bulletin 20-02-R1 announcing the release of the *Interim Local Development Intergovernmental Review (LDIGR) Safety Review Practitioners Guidance*. This guidance material provides instructions to Caltrans personnel, lead agencies, developers, and consultants for conducting safety impact analysis for land use projects and plans to facilitate compliance with CEQA. The guidance sets expectations for Caltrans staff and lead agencies about what information and factors to consider in safety impact analysis with a focus on potential safety impacts affecting the California State Highway System (SHS). Integrating safety in the Caltrans land development and intergovernmental review process helps to solidify a culture of safety in California through the Safe System approach.

Caltrans recommends lead agencies use systemic safety plans, specifically Local Roadway Safety Plans (LRSPs), Systemic Safety Analysis Reports (SSARs), and Vision Zero plans, as models for safety analysis of the local transportation network. These plans can help local jurisdictions obtain resources to improve safety in their communities, and they will now be an input to assessing the potential safety impacts of new land use projects and land use plans.

ENCROACHMENT PERMIT GUIDELINES AND TRAFFIC CONTROL PLANS

Construction within rights-of-way of facilities under Caltrans jurisdiction requires a Caltrans Encroachment Permit, which includes a Traffic Control Plan in compliance with the *Manual on Uniform Traffic Control Devices*. Included in these requirements are provisions for coordination with local emergency services, training for flagmen for emergency vehicles traveling through the work zone, temporary lane separators that have sloping sides to facilitate crossover by emergency vehicles, and vehicle storage and staging areas for emergency vehicles. *Manual on Uniform Traffic Control Devices* requirements also provide for construction work during off-peak hours and flaggers.

CONGESTION MANAGEMENT PROGRAMS

City/County Association of Governments (C/CAG) is the Congestion Management Agency for San Mateo County. As such, C/CAG is responsible for administering the State-mandated Congestion Management Program, setting State and federal funding priorities for improvements affecting the San Mateo Congestion Management Program and preparing the Countywide Transportation Plan. There are no facilities in the Focus Area described in the C/CAG-designated Congestion Management Program roadway system; the nearest facilities are Interstate 280 and Highway 35.

Santa Cruz County does not have a Congestion Management Agency or Congestion Management Program.

3. ENVIRONMENTAL CHECKLIST

APPLICABLE STANDARD PROJECT REQUIREMENTS

State Parks requires SPRs for all projects. The following SPRs are related to transportation. A full list of SPRs is found in Appendix A, *Standard Project Requirements*.

- TRANS-1:** Prior to the start of on-site construction activities that would result in 50 or more construction vehicle trips during peak hours (7:00 a.m. to 9:00 a.m. or 4:00 p.m. to 6:00 p.m.) for a period exceeding six months in duration, the **contractor** will prepare a Traffic Impact Study for submittal and approval by agencies with jurisdiction of the applicable roads, including Caltrans, State Parks, and County Department of Public Works. The Traffic Impact Study will include, but not be limited to:
- i. Description of traffic-inducing actions
 - ii. Types of vehicles anticipated
 - iii. Approximate traffic volumes on-/off-site and roadways to be used
 - iv. Existing traffic counts
 - v. Analysis of Project Action traffic volume impacts on intersections and traffic index
 - vi. Any other Traffic Impact Study requirements as outlined in the appropriate jurisdiction's guidance on Traffic Impact Study preparation
- TRANS-2:** Prior to delivery and/or removal of project-related equipment or materials that could impede or block access to driveways, cross-streets, or street parking, the **contractor** will coordinate with the local jurisdictions to develop and implement traffic-control measures.

BASELINE CONDITIONS

Except for Rancho del Oso, accessed from Highway 1 and not in the Focus Area, all facilities at BBRSP are accessed from Highway 236. Highway 236 makes a C shape connecting to Highway 9 on both ends: in the north to Highway 9 at Waterman Gap and in the south to Highway 9 at Boulder Creek. The Main Day-use Area and Headquarters Area were on the western part of Highway 236, approximately eight miles along Highway 9 from the north and nine miles along Highway 9 from the south, centrally located in the Old Growth Area. Highway 236 to the south of the Main Day-use Area is a two-lane road that also provides local resident access. To the north of the Main Day-use Area, Highway 236 is narrow, often without a painted centerline. There have been no substantial changes to the roadways in and around BBRSP since the creation of the 2013 General Plan.

3. ENVIRONMENTAL CHECKLIST

Prior to the 2020 CZU fire, visitor circulation in the park revolved primarily around the visitor facilities in the Main Day-use Area. Parking was available in the Main Day-use Area in day-use parking lots and along North Escape Road and totaled 380 parking spaces. Most campsites and cabins were also near the Main Day-use Area, along Highway 236 and Sky Meadow Road, with 148 vehicle-accessible campsites and 37 cabins. Additional camping was available at trail camps (42 sites), Saddle Mountain (12 cabins), and Little Basin (37 sites and 14 cabins).

Prior to the 2020 CZU fire, there was limited transit service to BBRSP. Since the reopening of the park, Santa Cruz Metro has extended its Bus Route 35 to serve the park on weekends and holidays. The bus provides five trips per day between the Cavallaro Transit Center in Scotts Valley and the Main Day-use Area across from the former Park Headquarters. The park has no formal bicycle facilities, although bicycles are permitted on Highway 236, as well as on smaller paved and unpaved fire roads in and around the park. The following discussion uses pre-fire visitation and conditions as the baseline for analysis.

DISCUSSION

a) Would the proposed project conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and nonmotorized travel and relevant components of the circulation system, including, but not limited to, intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

The 2013 General Plan EIR found that the 2013 General Plan would not conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system. Further, the 2013 General Plan would guide improvements to roads and circulation. As such, impacts on transportation and traffic resulting from implementation of the General Plan were less than significant.

The proposed project implements many of the elements of the General Plan, including improving park access and circulation, implementing a shuttle bus system, establishing a park-and-ride lot at Saddle Mountain, minimizing the number of parking facilities near sensitive resource areas, and promoting accessibility to parking, roads, and facilities. The 2013 General Plan also references the following regional planning documents, but does not cite any transportation policies within them that may interact with the proposed project:

- Santa Cruz County General Plan and Local Coastal Program
- San Mateo County General Plan and Local Coastal Program
- Midpeninsula Regional Open Space District Master Plan and Regional Open Space Study
- Coast Dairies Long-Term Resource Protection and Access Plan

3. ENVIRONMENTAL CHECKLIST

- Santa Cruz County North Coast Beaches Master Plan
- California Coastal National Monument, Resource Management Plan

The 2013 General Plan EIR describes how changes to roads and circulation made as a result of implementation of the General Plan would better accommodate and manage existing and future uses, improving circulation and visitor safety and providing safe and adequate parking.

The 2013 General Plan EIR was completed prior to the 2018 adoption of CEQA Guidelines Section 15064.3 and, therefore, a VMT analysis was not included in the 2013 General Plan EIR. Further, because the 2013 General Plan EIR was adopted prior to that date, no VMT analysis is required in this subsequent review (*Olen Properties Corp. v. City of Newport Beach* (2023) 93 Cal.App.5th 270, 280-281 (*Olen*). Appendix C, *VMT Memorandum*, presents a review of the multi-modal transportation system features and potential changes to roadway volumes. Proposed project features, such as improving park access and circulation, implementing a shuttle bus system, and establishing a park-and-ride lot at Saddle Mountain align with the intent of Section 15064.3 and the 2013 General Plan goals and policies to support an integrated and efficient multi-modal transportation system that facilitates visitor access to the park. The proposed project does not increase the visitation capacity of the park or include changes that would attract more trips or trips from farther away when compared to pre-fire conditions. The construction of new park housing for staff does not induce regional VMT as it reduces staff trips to and from the park. While the proposed project would move facilities in a manner that would shift some driving routes and distances within Big Basin, the changes would be localized and would not substantially change regional VMT or travel patterns. For example, the increase in facilities at Little Basin would not produce additional trips and would result in a negligible increase in trip distance since many visitors would previously have driven to the Main Day-use Area, which is farther from the southern entrance and Saddle Mountain than Little Basin is.

With the proposed General Plan Amendments, the project features described above are consistent with the General Plan, and the proposed project would not conflict with any applicable plan, ordinance, or policy. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

b) Would the proposed project conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

The 2013 General Plan EIR describes how the improvements associated with the 2013 General Plan could result in a minor increase in traffic, but this change would not be substantial enough to exceed level of service standards set forth by a county congestion management agency. As noted previously, there are no roadways or intersections in a countywide congestion

3. ENVIRONMENTAL CHECKLIST

management plan near BBRSP. Further, level of service is no longer used for determining the significance of transportation impacts. Therefore, the proposed project would not create a significant environmental impact, and no additional level of service analysis was conducted for this study. Thus, further analysis of this topic is not warranted in the Draft Supplemental EIR.

c) Would the proposed project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

The 2013 General Plan EIR determined that the changes proposed by the General Plan would not result in a change in existing air traffic patterns and that impacts would be less than significant. The proposed project includes no aviation-related uses. The proposed project makes no substantial changes to roads and facilities in BBRSP that might alter this finding. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

d) Would the proposed project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The 2013 General Plan EIR determined that any improvements to roads and circulation as a result of implementing the General Plan would better accommodate existing and future uses, improving circulation and visitor safety and that any impacts around increasing hazards were less than significant.

Where the proposed project makes minor changes to the roadway system since the 2013 General Plan EIR, it includes project features that reduce the potential for hazardous conditions at new facilities. These features include siting entrance kiosks at Saddle Mountain and Sky Meadow Road to avoid vehicle queues spilling back onto major roadways, adding a left-turn pocket off Highway 236 at Saddle Mountain for northbound traffic, and locating driveways where there are sufficient sight lines for safe visibility. The proposed project also proposes various safety enhancements, such as speed limit reductions, advanced warning signs, flashing beacons, trimming back foliage, and potential intersection control changes.

The BBFMP does not yet include detailed plans for all foreseeable roadway changes. A new vehicle entrance is proposed at the Main Day-use Area along Highway 236. Due to the conceptual nature of the plans in the BBFMP, detailed plans have not yet been prepared. At the time that detailed designs are prepared, this entrance will be designed to meet applicable Caltrans roadway design standards included in the Highway Design Manual and will be subject to Caltrans' review and approval. Where plans have been prepared, the proposed project conforms to the Highway Design Manual and Caltrans has been included throughout the development of the proposed project and has had the opportunity to review proposed changes and make recommendations.

3. ENVIRONMENTAL CHECKLIST

The 2013 General Plan EIR studied the provision of shuttle service in the park and determined that a shuttle would alleviate traffic and parking congestion. The proposed project includes regular shuttle service serving key visitor destinations in the Saddle Mountain, Main Day-use, and camping areas. The roads, driveways, and parking areas served have been designed to accommodate shuttles. The project does not include any changes in use that could result in incompatible use. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

e) Would the proposed project result in inadequate emergency access?

The 2013 General Plan EIR found that project impacts to emergency access were less than significant. There have been no substantial changes in roadways in and around the park since the 2013 General Plan was prepared. The proposed project does not close or remove any roads necessary for emergency access, nor does it result in substantial congestion that could impede emergency access. The proposed project would include roadway improvements, including increasing widths in some areas for life safety for access to Little Basin and Lower and Upper Sky Meadow, as well as road improvements on Sky Meadow Road, Lodge Road, Little Basin Road, and Pine Mountain and Tanbark Loop Roads. These improvements include increasing widths in some areas to provide better emergency vehicle access, including allowing emergency vehicles to pass other vehicles. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

f) Would the proposed project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

The 2013 General Plan EIR describes how changes to roads and circulation made as a result of implementation of the 2013 General Plan would better accommodate and manage existing and future uses, improving circulation and visitor safety and providing safe and adequate parking. As such, impacts on transportation and traffic resulting from implementation of the General Plan were less than significant.

The proposed project builds on the 2013 General Plan, which is the guiding document for transportation improvements at BBRSP. The proposed project implements many of the elements of the General Plan relating to transit, bicycle, or pedestrian facilities, including expanding shuttle access to the park and promoting separation of vehicle traffic from pedestrians and cyclists. The proposed project would also implement traffic-calming strategies to reduce vehicle speeds and enhance safety for all visitors, such as speed limit reductions, advanced warning signs, flashing beacons, and potential intersection-control changes, as described in the 2013 General Plan EIR. The proposed project includes roadway changes that conform to Caltrans' roadway design standards included in the Highway Design Manual. Further,

3. ENVIRONMENTAL CHECKLIST

Caltrans has been included throughout the development of the proposed project and has had the opportunity to review proposed changes and make recommendations regarding the proposed project. The proposed project does not include any plans that would bring Highway 236 out of compliance with the Highway Design Manual. Where proposed changes do not yet have detailed plans, future plans that affect Highway 236 will be designed to conform to the Highway Design Manual and will be subject to Caltrans review and approval. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

XVII. UTILITIES AND SERVICE SYSTEMS

Would the Project:	Level of Impact in the 2013 General Plan EIR?	Create a Substantial Change in Project or Circumstances Resulting in New Significant Effects?	Result in New Information Showing New or More Severe Significant Effects?	Result in New Mitigation or Alternative to Reduce Significant Effect Is Declined?	Meet the Conditions of CEQA Guidelines Section 15163?
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	LTS	No	No	No	No
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	LTS	No	No	No	No
c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	LTS	No	No	No	No

3. ENVIRONMENTAL CHECKLIST

Would the Project:	Level of Impact in the 2013 General Plan EIR?	Create a Substantial Change in Project or Circumstances Resulting in New Significant Effects?	Result in New Information Showing New or More Severe Significant Effects?	Result in New Mitigation or Alternative to Reduce Significant Effect Is Declined?	Meet the Conditions of CEQA Guidelines Section 15163?
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	LTS	No	No	No	No
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	LTS	No	No	No	No
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	LTS	No	No	No	No
g) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	LTS	No	No	No	No

Key: NI = no impact; LTS = less than significant; LTS/M = less than significant with mitigation; SU = significant and unavoidable; N/A = topic not analyzed in the 2013 General Plan EIR

2013 BIG BASIN REDWOODS STATE PARK GENERAL PLAN

The 2013 General Plan contains the following goals and guidelines related to utilities and service systems:

3. ENVIRONMENTAL CHECKLIST

Geology and Hydrology Goal: Minimize human impacts on natural geologic and hydrologic processes and values while protecting human life and property from these natural processes.

Geology and Hydrology Guidelines:

Geology/Hydrology 3: Understand and comply with the surface and groundwater beneficial uses and water quality objectives set forth in the Water Quality Control Plan for the Central Coast Region (Basin Plan) for the Big Basin Redwoods SP watersheds and take appropriate actions to prevent degradation of surface and groundwater within the park. Examples of appropriate actions include ensuring that park sewage treatment meets water quality standards and planning and implementing new park projects so they do not degrade surface or groundwater quality or affect the water production rates of pre-existing nearby wells.

Geology/Hydrology 5: As appropriate, use standard Best Management Practices (BMPs) for erosion, dust, sediment control, and storm water runoff for park projects, and update regularly.

Sustainability Goal: Incorporate sustainable design principles into the design, development, operations, and maintenance of park facilities and programs.

Sustainability Guidelines:

Sustainability 1: Use sustainable design strategies to minimize impacts to the park's natural, cultural and aesthetic resources. Choose low-impact building sites, structures, building, and landscape materials, and maintenance and management practices that avoid the use of environmentally-damaging, waste-producing, or hazardous materials. Use natural, renewable, indigenous, and recyclable materials, and energy-efficient design.

Utilities Goal: Ensure long-term sustainable, environmentally compatible and energy-efficient infrastructure for the park.

Utilities Guidelines:

Utilities 1: Repair and upgrade the current potable water supply and distribution systems to the existing park buildings and key visitor locations. This would include items, such as the repair or replacement of the main water storage tank, water lines, and reservoirs.

Utilities 2: Upgrade the secondary wastewater treatment system and replace or relocate sewer lines, where necessary, to protect creeks and drainages.

Utilities 3: Identify other utility needs and implement utility improvements comprehensively to avoid unnecessary site disturbance and expensive rerouting of utility corridors and junctions over time.

3. ENVIRONMENTAL CHECKLIST

Utilities 4: Locate and map the current utility systems in the park including telephone, electricity and water, so that all staff can recognize and respond to utility problems efficiently.

Utilities 5: Develop an infrastructure plan that reflects long-term facility needs and is compatible with other park management goals and guidelines.

APPLICABLE STANDARD PROJECT REQUIREMENTS

State Parks requires SPRs for all projects. The following SPR is related to utilities and service systems. A full list of SPRs is found in Appendix A, *Standard Project Requirements*.

HYD-1: Prior to the start of construction involving ground-disturbing activities of an area of at least one acre, the **contractor** will prepare and submit a Stormwater Pollution Prevention Plan (SWPPP) for Department approval that identifies temporary best management practices (BMPs) (e.g., tarping of any stockpiled materials or soil; use of silt fences, straw bale barriers, fiber rolls) and permanent (e.g., structural containment, preserving or planting of vegetation) for use in all construction areas to reduce or eliminate the discharge of soil, surface water runoff, and pollutants during all excavation, grading, trenching, repaving, or other ground-disturbing activities. The SWPPP will include BMPs for hazardous waste and contaminated soils management and a Spill Prevention and Control Plan (SPCP), as appropriate.

BASELINE CONDITIONS

Many of the utilities at BBRSP were constructed in the 1930 to 1950s. Utility systems in BBRSP include wet utilities: drinking water; fire water; wastewater; and dry utilities, including electrical, telecommunications, and propane. Most of the park's utilities were lost in the 2020 CZU fire. Nearly all the utility systems described in the 2013 General Plan EIR are no longer in working condition.

Before the fire, the potable water system included water wells and a surface water reservoir as water sources, a centralized water treatment facility, and a water distribution system. The water treatment system consisted of a centralized water treatment plant that treated water received from the Sempervirens Reservoir and included several chlorine dosing systems throughout the distribution network. The water distribution system included several water tanks located throughout the park fed by a mostly underground pipe network with supplemental booster pumps and water quality monitoring stations. The water system connected to the Little Basin, Old Growth Area, Huckleberry Campground, Lower Sky Meadow Campground, Upper Sky Meadow, and Rogers Road areas. Several sites not connected to the existing water system have existing wells; there are two wells at Saddle Mountain Gateway, one well at Potter, and one at Mortensen. Aboveground infrastructure, such as well heads and tanks, were destroyed while underground infrastructure was compromised due to exposure to aboveground contaminants.

3. ENVIRONMENTAL CHECKLIST

Prior to the 2020 CZU fire, the wastewater system was composed of a park-wide sanitary sewer collection system that flowed to the park's centralized wastewater treatment plant at the southwestern boundary of the park and consisted of approximately 25,000 linear feet of 6- and 8-inch sanitary sewer segments. The wastewater collection system historically had issues with root intrusion, rainwater inundation, spills, and proximity to sensitive riparian areas. The wastewater collection system was compromised in the 2020 CZU fire and will ultimately need to be redesigned; currently, the system is being evaluated to determine which mains, laterals, and supporting infrastructure need new alignment, replacement, or further assessment. Three existing on-site wastewater treatment and dispersal systems are at the Upper Sky Meadow, Lower Sky Meadow, and Saddle Mountain Welcome Area sites, and were unaffected by the fire.

Prior to the CZU fire, BBRSP included a series of culverts and roadside ditches to support stormwater drainage; these facilities are mostly still functional. Groundwater seeps and springs are also common in the project area. Culverts along Highway 236 upslope of the Old Growth Area primarily direct flow to Opal Creek, north of the existing parking lot. The following discussion uses the existing, post-fire site conditions as the baseline for analysis of current facilities and infrastructure, and a pre-fire baseline to evaluate demand and capacity.

DISCUSSION

a) Would the proposed project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

The 2013 General Plan EIR determined that, while the exact nature of the infrastructure and service needs would not be determined until the development proposals become available, any adverse effects would be less than significant. Further, any new infrastructure and services would be environmentally compatible with the resources in BBRSP, and any degradation of environmental values would not be substantial.

Since most of the utility systems in place during the creation of the 2013 General Plan EIR have since been lost to fire, the proposed project would include the development of appropriate utility systems to manage and treat expected wastewater. Because the proposed project does not anticipate an increase in visitation from pre-fire conditions, the total wastewater generated under the proposed project is similar to what was evaluated in the 2013 General Plan EIR.

The 2013 General Plan EIR recommended upgrading utility systems at Little Basin and Saddle Mountain. As described in the 2013 General Plan EIR, the Department would comply with the water quality objectives and requirements of the CCRWQCB (Guideline Geology/Hydrology 3) and would use sustainable design strategies to construct and maintain utility and service systems in the park (Guideline Sustainability 1). As described in the 2013 General Plan EIR, construction and operations of the equipment and the development of facilities due to implementation of the proposed project would follow State and federal regulations, as well as

3. ENVIRONMENTAL CHECKLIST

management strategies and actions of the General Plan to minimize impacts. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

b) Would the proposed project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

As described, the 2013 General Plan EIR determined that, while the exact nature of the infrastructure and service needs would not be determined until the development proposals become available, any adverse effects would be less than significant.

Prior to the 2020 CZU fire, BBRSP maintained its own potable water supply and an on-site wastewater treatment facility. The proposed project includes reconstruction of BBRSP's utility systems and infrastructure as necessary to replace systems that were damaged or destroyed in the 2020 CZU fire. Because the proposed project does not anticipate an increase in visitation from pre-fire conditions, the total water demand and wastewater generated under the proposed project would be similar to what was evaluated in the 2013 General Plan EIR.

Before the fire, most zones in the Focus Area were connected to the park's existing water system or received water from existing wells or springs. Implementation of the proposed project would upgrade and reconstruct the water and wastewater infrastructure as necessary to reconnect these areas to BBRSP's existing water and wastewater systems.

The water treatment plant would be rehabilitated and the wastewater treatment plant re-designed and constructed. Other on-site wastewater treatment systems would be designed and installed in areas not connected to the wastewater treatment plant, such as Little Basin, Saddle Mountain, and Norabella. Water distribution from the water treatment plant would be reconstructed and would include new connections to Saddle Mountain and Little Basin. As described in the 2013 General Plan EIR, the Department would comply with the water quality objectives and requirements of the CCRWQCB (Guideline Geology/Hydrology 3) and would use sustainable design strategies to construct and maintain utility and service systems in the park (Guideline Sustainability 1). Further, construction and operation of the equipment and facilities due to implementation of the proposed project would follow State and federal regulations, as well as management strategies and actions of the General Plan, as described in the 2013 General Plan EIR.

The proposed project would require the construction of replacement water and wastewater facilities, though it would be required to follow the same General Plan guidelines as described in the 2013 General Plan EIR. Further, most of the reconstructed facilities would be in similar locations as the previous utility infrastructure, thus minimizing related environmental impacts. Where utility infrastructure is required in new locations, it would be installed in areas with

3. ENVIRONMENTAL CHECKLIST

previous disturbance or otherwise suitable for development, minimizing related environmental impacts. The construction of these necessary infrastructure improvements is included as part of the proposed project and thus all related impacts are evaluated throughout this Initial Study. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

c) Would the proposed project require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

As described previously, the 2013 General Plan EIR determined that, while the exact nature of the infrastructure and service needs would not be determined until the development proposals become available, any adverse effects would be less than significant.

The proposed project would result in the construction of new stormwater drainage facilities and, because current facilities are not in working order, updates to existing facilities. All new stormwater facilities due to implementation of the proposed project would be designed and constructed to not cause significant environmental effects pursuant to General Plan Guideline Sustainability 1. The proposed project describes stormwater strategies that prioritize stormwater treatment before discharge. Where appropriate, the proposed project would incorporate permeable or pervious pavement to reduce stormwater runoff, direct stormwater runoff to vegetated areas, and incorporate retention-based stormwater management. Further, with the proposed General Plan amendments, improvements would be consistent to goals and guidelines outlined in the 2013 General Plan and Santa Cruz County design standards for stormwater management and General Plan guidelines would be followed as described in the 2013 General Plan EIR. Alteration to overall drainage patterns would be minimal, with little if any changes in total stormwater runoff.

Construction activities under the proposed project would be designed to reduce or eliminate surface water runoff pursuant to SPR HYD-1. Natural landscaping is included in the proposed project at multiple sites; this landscaping would increase stormwater retention and be used as an additional stormwater quality enhancement mechanism. The addition of these new permeable areas would help to offset new parking lots and other increases in pavements to minimize the increase in total stormwater runoff. Projects that generate runoff pollutants are required under the National Pollutant Discharge Elimination System to develop and implement a Water Quality Management Plan that identifies the site design, source control, and treatment-control BMPs.

Additionally, separate rainwater collection and reuse is being considered with regards to sustainability and water reuse in the park. This would provide a benefit to the stormwater drainage that was not considered in the 2013 General Plan EIR by collecting stormwater runoff

3. ENVIRONMENTAL CHECKLIST

for reuse. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

d) Would the proposed project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

As described previously, the 2013 General Plan EIR determined that, while the exact nature of the infrastructure and service needs would not be determined until the development proposals become available, any adverse effects would be less than significant.

Implementation of the proposed project is not expected to increase water demand over the levels evaluated in the 2013 General Plan EIR or pre-fire conditions. Water from within the park would be piped to the Saddle Mountain and Norabella sites. Implementation of General Plan Guidelines Utilities 1 through Utilities 4, as described in the 2013 General Plan EIR, would evaluate the current park infrastructure, repair and upgrade the current water supply and distribution system, as necessary, identify utility needs, and develop recommendations for utility upgrades and replacement.

Potable water infrastructure in the park was significantly compromised in the 2020 CZU fire, but once improvements and repairs are completed, the park's water system would adequately supply water for the proposed project. Thus, with the necessary reconstruction, the same sources as before the CZU fire would provide potable water for the proposed project. Further, the visitation and thus water demand would not increase due to the proposed project when compared to pre-fire conditions.

The construction of any new water facilities necessary for the implementation of the BBFMP is included as part of the proposed project and thus the related impacts are evaluated throughout this Initial Study. Further, implementation of the proposed project, including the potential replacement of the park's water source, was evaluated in the 2013 General Plan EIR and adherence to applicable General Plan guidelines would also be required under the proposed project, as described in the 2013 General Plan EIR. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

e) Would the proposed project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

The 2013 General Plan EIR determined that, while the exact nature of the infrastructure and service needs would not be determined until the development proposals become available, any adverse effects would be mitigated to a less-than-significant level. Further, any new

3. ENVIRONMENTAL CHECKLIST

infrastructure and services would be environmentally compatible with the resources in BBRSP, and any degradation of environmental values would not be substantial.

Prior to the 2020 CZU fire, BBRSP was served by a park-wide sanitary sewer collection system owned and operated by State Parks that flowed to the park's centralized wastewater treatment plant at the southwestern part of the Focus Area. A new wastewater treatment plant is proposed in the same location with adequate capacity to serve the proposed project's wastewater generation. Additional OWTS are also proposed at Little Basin, Saddle Mountain, and Sky Meadow. The construction of these additional wastewater facilities is included as part of the proposed project and thus all related impacts are evaluated throughout this Initial Study. As described in the 2013 General Plan EIR, the Department would comply with the water quality objectives and requirements of the CCRWQCB (Guideline Geology/Hydrology 3) and would use sustainable design strategies to construct and maintain utility and service systems in the park (Guideline Sustainability 1). Further, construction and operation of the equipment and facilities due to implementation of the proposed project would follow State and federal regulations, as well as management strategies and actions of the General Plan, as described in the 2013 General Plan EIR. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

f) Would the proposed project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal?

As described previously, the 2013 General Plan EIR determined that, while the exact nature of the infrastructure and service needs would not be determined until the development proposals become available, any adverse effects would be less than significant.

The proposed project would be required to comply with all federal and State statutes and regulations related to solid waste. Implementation of the proposed project would not increase visitation or generate solid waste in excess compared to pre-fire conditions. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

g) Would the proposed project comply with federal, State, and local management and reduction statutes and regulations related to solid waste?

As described previously, the 2013 General Plan EIR determined that, while the exact nature of the infrastructure and service needs would not be determined until the development proposals become available, any adverse effects would be less than significant.

The proposed project would be required to comply with all federal and State statutes and regulations related to solid waste. Further, implementation of the proposed project would not

3. ENVIRONMENTAL CHECKLIST

increase visitation or generate solid waste in excess compared to pre-fire conditions. Therefore, when compared to the 2013 General Plan EIR, the proposed project would not result in new impacts or a substantial increase in the severity of impacts, and further analysis of this topic is not warranted in the Draft Supplemental EIR.

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE

WOULD THE PROJECT:	Create a Substantial Change in Project or Circumstances Resulting in New Significant Effects?	Result In New Information Showing New or More Severe Significant Effects?	Result In New Mitigation or Alternative To Reduce Significant Effect is Declined?	Meet The Conditions of CEQA Guidelines Section 15163?
a) Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal?	Yes	No	No	Yes
b) Have the potential to eliminate important examples of the major periods of California history or prehistory?	No	No	No	No

3. ENVIRONMENTAL CHECKLIST

WOULD THE PROJECT:	Create a Substantial Change in Project or Circumstances Resulting in New Significant Effects?	Result In New Information Showing New or More Severe Significant Effects?	Result In New Mitigation or Alternative To Reduce Significant Effect is Declined?	Meet The Conditions of CEQA Guidelines Section 15163?
c) Have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means the incremental effects of a project are considerable when viewed in connection with the effects of past projects, other current projects, and probable future projects)	Yes	No	No	Yes
d) Have environmental effects that will cause substantial adverse effects on humans, either directly or indirectly?	No	No	No	No

DISCUSSION

a) *Would the proposed project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal?*

As described in Section IV, *Biological Resources*, the proposed project has the potential to negatively impact the marbled murrelet. This topic will be further evaluated in the Supplemental EIR.

b) *Would the proposed project have the potential to eliminate important examples of the major periods of California history or prehistory?*

As described in Section V, *Cultural Resources*, the proposed project does not have the potential to eliminate important examples of the major periods of California history or prehistory. The CZU fire destroyed all of the historic resources in the Focus Area. The proposed project would

3. ENVIRONMENTAL CHECKLIST

serve as a management tool that would be used to guide the stewardship, management, and use of existing and future facilities and minimize impacts on natural and cultural resources. Implementation of the proposed project would include culturally and historically appropriate facilities. Implementation of the proposed project would also support tribal and cultural facilities that would honor the millennia-long connection that Indigenous people have had with the land and provide additional ways for visitors to connect with the history of the land.

c) Would the proposed project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means the incremental effects of a project are considerable when viewed in connection with the effects of past projects, other current projects, and probable future projects)

The proposed project is a planning document designed to guide the stewardship, management, and use of existing and future facilities within BBRSP. The Department would be aware of other cumulative projects occurring at the time of implementation of the proposed project and, through appropriate SPRs, would ensure that impacts from future improvements and facilities under the proposed project do not contribute to cumulative adverse effects. Visitation would not exceed pre-fire conditions due to the proposed project. This would further prevent cumulative impacts when considering the proposed project with other projects in the area. As described throughout this Initial Study, the proposed project would not result in new impacts or a substantial increase in the severity of impacts aside from biological resources which will be evaluated (including in regards to cumulative impacts) further in the Supplemental EIR.

d) Would the proposed project have environmental effects that will cause substantial adverse effects on humans, either directly or indirectly?

As described throughout this Initial Study, the proposed would not result in significant direct or indirect adverse impacts or result in substantial adverse effects on human beings. The proposed project would not result in new or a substantial increase in magnitude of impacts related to most topics, compared to the 2013 General Plan EIR. Impacts on biological resources will be evaluated further in the Supplemental EIR; however, impacts within this topic area would not cause substantial adverse effects on humans, either directly or indirectly.

A P P E N D I X A

S T A N D A R D P R O J E C T R E Q U I R E M E N T S

California Department of Parks and Recreation
Resource Services
STANDARD PROJECT REQUIREMENTS

General

- GEN-1:** Prior to the start of on-site construction work, a DPR representative will consult with the contractor and project manager to identify all resources that must be protected.
- GEN-3:** Prior to the start of on-site construction work, a DPR-qualified Resources Specialist will train construction personnel in Resource identification and protection procedures.

Aesthetics

- AES-1:** Projects will be designed to incorporate appropriate park scenic & aesthetic values including the choices for: specific building sites, scope & scale; building and fencing materials and colors; use of compatible aesthetic treatments on pathways, retaining walls or other ancillary structures; location of and materials used in parking areas, campsites and picnic areas; development of appropriate landscaping. The park scenic and aesthetic values will also consider views into the park from neighboring properties.
- AES-3:** Permanent structures will be equipped with outdoor light shields that concentrate the illumination downward to reduce direct and reflected light pollution. The direct source of the lighting (bulb, lens, filament, tube, etc) will not be visible off site and the lighting will be installed as low as possible on poles and/or structures to minimize light pollution of the night sky. The candle power of the illumination at ground level will not exceed what is required by any safety or security regulations of any government agency with regulatory oversight.

Air Quality

- AQ-1:** During dry, dusty conditions, all active construction areas will be lightly sprayed with water or another dust suppressant to reduce dust without causing runoff.
- AQ-2:** All trucks or light equipment hauling soil, sand, or other loose materials on public roads will be covered or required to maintain at least two feet of freeboard.
- AQ-3:** All gasoline-powered equipment will be maintained according to manufacturer's specifications, and in compliance with all State and federal requirements.
- AQ-4:** During construction, paved streets adjacent to the Park shall either be swept or washed at the end of each day, or as required, to remove excessive accumulations of silt and/or mud that could have resulted from project-related activities.
- AQ-5:** Excavation and grading activities will be suspended when sustained winds exceed 15 miles per hour (mph), instantaneous gusts exceed 25 mph, or when dust occurs from remediation related activities where visible emissions (dust) cannot be controlled by watering or conventional dust abatement controls.

Cultural Resources

Standard Project Requirements

- CUL-1:** If forest thinning activities are required within a culturally sensitive area, downed timber and other forest debris will be removed by aerial suspension; no portion of logs, slash or debris will be dragged across the surface.
- CUL-2:** Prior to the start of on-site construction work, the **Cultural Resources Supervisor** will be notified, unless other arrangements are made in advance, a minimum of three weeks to schedule a **Cultural Resource Specialist** to monitor work, as necessary, to ensure that removal and reconstruction of historic fabric will occur in a manner consistent with the Secretary of the Interior's Standards.
- CUL-3:** Before, during, and after construction, a **Cultural Resource Specialist** will photo-document all aspects of the project and will add the photos to the historical records (archives) for the park.
- CUL-4:** Prior to the start of on-site construction work, and to the extent not already completed, a **Cultural Resource Specialist** will map and record all cultural features within the proposed Area of Potential Effects (APE) to a level appropriate to the Secretary of Interior Standards.
- CUL-5:** All historic work will comply with the Secretary of the Interior Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings.
- Historic character will be retained and preserved;
 - where safe, original materials that still maintain structural integrity will be retained; and
 - where replacement is required, materials and features will be replaced "in kind".
 - A **Cultural Resource Specialist** familiar with the project site's cultural/historic resources will monitor all construction activities. All historical resources uncovered during the project will be recorded in place with a photograph and/or drawing showing any new material or recovered and archived, at the discretion of the monitor.
 - Upon completion of the project, **Cultural Resource Specialist** will record any modifications to historic buildings or alterations of historic fabric on as-built drawings.
- CUL-6:** Prior to the start of any ground-disturbing activities, a DPR-approved archaeologist will complete pre-construction testing to determine specific avoidance areas.
- If necessary, a DPR-qualified Cultural Resource Specialist will prepare a research design, including appropriate trenching and/or pre-construction excavations
 - Based on preconstruction testing, project design and/or implementation will be altered, as necessary, to avoid impacts to archaeological resources or reduce the impacts to a less than significant level, as determined in consultation with a DPR-qualified archaeologist.
- CUL-8:** If **anyone** discovers previously undocumented cultural resources during project construction, work within **100 feet** of the find will be temporarily halted until the archaeologist designs and implements appropriate treatments in accordance with the Secretary of the Interiors Standards and Guidelines for archaeological resource protection.
- The project will be modified to ensure that construction activities will avoid cultural resources upon review and approval of a **Cultural Resource Specialist**.

Standard Project Requirements

- If ground disturbing activities uncover intact cultural features (including but not limited to dark soil containing shellfish, bone, flaked stone, groundstone, or deposits of historic ash), when a DPR Qualified cultural resources specialist is not on-site, **the contractor** will contact the DPR State Representative immediately and **contractor** will temporarily halt or divert work within the immediate vicinity of the find a DPR-qualified cultural resources specialist evaluates the find and determines the appropriate treatment and disposition of the cultural resource.

CUL-9: In the event that human remains are discovered, work will cease immediately in the area of the find and the project manager/site supervisor will notify the appropriate DPR personnel. Any human remains and/or funerary objects will be left in place or returned to the point of discovery and covered with soil. The DPR Cultural Resources Program Manager (or authorized representative) will notify the County Coroner, in accordance with §7050.5 of the California Health and Safety Code, and the Native American Heritage Commission (or Tribal Representative). The Santa Cuz District Tribal Liaison will be responsible for notifying the appropriate Native American authorities. The local County Coroner will make the determination of whether the human bone is of Native American origin.

- If the Coroner determines the remains represent Native American interment, the NAHC in Sacramento will be consulted to identify the most likely descendants and appropriate disposition of the remains. Work will not resume in the area of the find until proper disposition is complete (PRC §5097.98). No human remains or funerary objects will be cleaned, photographed, analyzed, or removed from the site prior to determination.
- If it is determined the find indicates a sacred or religious site, the site will be avoided to the maximum extent practicable. Formal consultation with the State Historic Preservation Office and review by the Native American Heritage Commission/Tribal Cultural representatives will occur as necessary to define additional site mitigation or future restrictions.

Geology and Soils

GEO – 1: After a large earthquake event (i.e., magnitude 5.0 or greater within 50 miles of the project site), **State Parks** will inspect all project structures and features for damage, as soon as is possible after the event. Any damaged structures or features will be closed to park visitors, volunteers, residents, contractors, and staff.

GEO-2: No track-mounted or heavy-wheeled vehicles will be driven through non-disturbed areas during the rainy season or when soils are saturated to avoid compaction and/or damage to soil structure.

GEO-3: State Parks will develop rehabilitation plans for the decommissioned roads, paved areas and trails that includes using brush and trees for bio-mechanical erosion control (bundling slash and keying it into soil, filling damaged sections with soil and duff removed, constructing water bars, and replanting native trees and shrubs).

GEO-4: Prior to design and construction of structures and vehicular areas, a soil report will be prepared by a geotechnical engineer and recommendations of the soil engineer will guide structural design to minimize risk of seismic events, landslides or expansive soils.

Hazards

Standard Project Requirements

- HAZ-1:** Prior to the start of on-site construction activities, **Contractor** will inspect all equipment for leaks and regularly inspect thereafter until equipment is removed from the project site. All contaminated water, sludge, spill residue, or other hazardous compounds will be contained and disposed of outside the boundaries of the site, at a lawfully permitted or authorized destination.
- HAZ-2:** Prior to the start of on-site construction activities, **contractor** will prepare a Spill Prevention and Response Plan (SPRP) as part of the Storm Water Pollution Prevention Plan (SWPPP) for **DPR** approval to provide protection to on-site workers, the public, and the environment from accidental leaks or spills of vehicle fluids or other potential contaminants. This plan will include (but not be limited to);
- a map that delineates construction staging areas, where refueling, lubrication, and maintenance of equipment will occur;
 - a list of items required in a spill kit on-site that will be maintained throughout the life of the project;
 - procedures for the proper storage, use, and disposal of any solvents or other chemicals used in the restoration process;
 - and identification of lawfully permitted or authorized disposal destinations outside of the project site.
- HAZ-3:** **Contractor** will develop a Materials Management Plan to include protocols and procedures that will protect human health and the environment during remediation and/or maintenance activities that cause disturbances to the native soil and/or mine and mill materials causing the potential exposure to metals and dust resulting from materials disturbances. All work will be performed in accordance with a Site Health and Safety Plan. The Materials Management Plan will include the following (where applicable):
- o Requirement that staff will have appropriate training in compliance with 29 CFR, Section 1910.120;
 - o Methods to assess risks prior to starting onsite work;
 - o Procedures for the management and disposal of waste soils generated during construction activities or other activities that might disturb contaminated soil;
 - o Monitoring requirements;
 - o Storm water controls;
 - o Record-keeping; and,
 - o Emergency response plan.
- HAZ-4:** **Contractor** will set up decontamination areas for vehicles and equipment at Park entry/exit points. The decontamination areas will be designed to completely contain all wash water generated from washing vehicles and equipment. Best Management Practices (BMPs) will be installed, as necessary, to prevent the dispersal of wash water beyond the boundaries of the decontamination area, including over-spray.
- HAZ-5:** Prior to the start of construction, **contractor** will develop a Fire Safety Plan for **DPR** approval for the entire construction period. The plan will include the emergency calling procedures for both the California Department of Forestry and Fire Protection (CDF) and local fire department(s).

Standard Project Requirements

- HAZ-6:** All heavy equipment will be required to include spark arrestors or turbo chargers (which eliminate sparks in exhaust) and have fire extinguishers on-site.
- HAZ-7:** DPR personnel will have a State Park radio at the Park, which allows direct contact with CalFire and a centralized dispatch center, to facilitate the rapid dispatch of control crews and equipment in case of a fire.
- HAZ-8:** Prior to the start of on-site construction activities, contractor will clean and repair (other than emergency repairs) all equipment outside the project site boundaries.
- HAZ-9:** Under dry conditions, a filled water truck and/or fire engine crew will be onsite during activities with the potential to start a fire.
- HAZ-10:** Contractor will designate and/or locate staging and stockpile areas to prevent leakage of oil, hydraulic fluids, etc. into surrounding areas.

Hydrology

- HYD-1:** Prior to the start of construction involving ground-disturbing activities of an area of at least one acre, **contractor** will prepare and submit a Storm Water Pollution Prevention Plan (SWPPP) for DPR approval that identifies temporary Best Management Practices (BMPs) (e.g., tarping of any stockpiled materials or soil; use of silt fences, straw bale barriers, fiber rolls, etc.) and permanent (e.g., structural containment, preserving or planting of vegetation) for use in all construction areas to reduce or eliminate the discharge of soil, surface water runoff, and pollutants during all excavation, grading, trenching, repaving, or other ground-disturbing activities. The SWPPP will include BMPs for hazardous waste and contaminated soils management and a Spill Prevention and Control Plan (SPCP), as appropriate.
- HYD-2:** All heavy equipment parking, refueling, and service will be conducted within designated areas outside of the 100-year floodplain to avoid water course contamination.
- HYD-3:** The project will comply with all applicable water quality standards as specified in the Water Quality Control Plan for the Central Coast Basin, also called the Basin Plan.
- HYD-4:** Construction activities will be suspended during heavy precipitation events (i.e., at least 1/2-inch of precipitation in a 24-hour period) or when heavy precipitation events are forecast.
- HYD-5:** If construction activities extend into the rainy season (Oct 15th – April 30th) or if an unseasonal storm is anticipated, contractor will properly winterize the site by covering (tarping) any stockpiled materials or soils and by constructing silt fences, straw bale barriers, fiber rolls, or other structures around stockpiles and graded areas.
- HYD-6:** Contractor will install appropriate energy dissipators at water discharge points, as appropriate.

Noise

- NOI-1:** Temporary or permanent noise barriers such as berms or walls will be used, as appropriate, to reduce noise levels.
- NOI-2:** Internal combustion engines used for project implementation will be equipped with a muffler of a type recommended by the manufacturer. Equipment and trucks used for Project-related activities will utilize the best available noise control techniques (e.g.,

Standard Project Requirements

engine enclosures, acoustically attenuating shields or shrouds, intake silencers, ducts, etc.) whenever necessary.

NOI-3: Contractor will locate stationary noise sources and staging areas as far from potential sensitive noise receptors, as possible. If they must be located near potential sensitive noise receptors, stationary noise sources will be muffled or shielded, and/or enclosed within temporary sheds.

NOI-4: Construction activities will generally be limited to the daylight hours, Monday – Friday. If work during weekends or holidays is required, no work will occur on those days before 8 a.m. or after 5 p.m.

Transportation

TRANS-1: Prior to the start of on-site construction activities that would result in 50 or more construction vehicle trips during peak hours (7:00 a.m. to 9:00 a.m. or 4:00 p.m. to 6:00 p.m.) for a period exceeding 6 months in duration, the contractor will prepare a Traffic Impact Study (TIS) for submittal and approval by agencies with jurisdiction of the applicable roads including Catrans, State Parks and County Department of Public Works. The TIS will include, but will not be limited to:

- i. Description of traffic inducing actions;
- ii. Types of vehicles anticipated;
- iii. Approximate traffic volumes on/ offsite and roadways to be used;
- iv. Existing Traffic Counts;
- v. Analysis of Project Action traffic volume impacts on intersections and traffic index; and
- vi. Any other TIS requirements as outlined in the appropriate jurisdiction's guidance on TIS preparation

TRANS-2: Prior to delivery and/or removal of project-related equipment or materials that could impede or block access to driveways, cross streets, or street parking, Contractor will coordinate with the local jurisdictions to develop and implement traffic control measures.

A P P E N D I X B

N O I S E

NOISE FUNDAMENTALS

Fundamentals of Noise

NOISE

Noise is most often defined as unwanted sound; whether it is loud, unpleasant, unexpected, or otherwise undesirable. Although sound can be easily measured, the perception of noise and the physical response to sound complicate the analysis of its impact on people. People judge the relative magnitude of sound sensation in subjective terms such as “noisiness” or “loudness.”

Noise Descriptors

The following are brief definitions of terminology used in this chapter:

- **Sound.** A disturbance created by a vibrating object, which, when transmitted by pressure waves through a medium such as air, is capable of being detected by a receiving mechanism, such as the human ear or a microphone.
- **Noise.** Sound that is loud, unpleasant, unexpected, or otherwise undesirable.
- **Decibel (dB).** A unitless measure of sound, expressed on a logarithmic scale and with respect to a defined reference sound pressure. The standard reference pressure is 20 micropascals (20 μPa).
- **Vibration Decibel (VdB).** A unitless measure of vibration, expressed on a logarithmic scale and with respect to a defined reference vibration velocity. In the U.S., the standard reference velocity is 1 micro-inch per second (1×10^{-6} in/sec).
- **A-Weighted Decibel (dBA).** An overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear.
- **Equivalent Continuous Noise Level (L_{eq}); also called the Energy-Equivalent Noise Level.** The value of an equivalent, steady sound level which, in a stated time period (often over an hour) and at a stated location, has the same A-weighted sound energy as the time-varying sound. Thus, the L_{eq} metric is a single numerical value that represents the equivalent amount of variable sound energy received by a receptor over the specified duration.
- **Statistical Sound Level (L_n).** The sound level that is exceeded “n” percent of time during a given sample period. For example, the L_{50} level is the statistical indicator of the time-varying noise signal that is exceeded 50 percent of the time (during each sampling period); that is, half of the sampling time, the changing noise levels are above this value and half of the time they are below it. This is called the “median sound level.” The L_{10} level, likewise, is the value that is exceeded 10 percent of the time (i.e., near the maximum) and this is often known as the “intrusive sound level.” The L_{90} is the sound level exceeded 90 percent of the time and is often considered the “effective background level” or “residual noise level.”

- **Maximum Sound Level (L_{\max}).** The highest RMS sound level measured during the measurement period.
- **Root Mean Square Sound Level (RMS).** The square root of the average of the square of the sound pressure over the measurement period.
- **Day-Night Sound Level (L_{dn} or DNL).** The energy-average of the A-weighted sound levels occurring during a 24-hour period, with 10 dB added to the sound levels occurring during the period from 10:00 PM to 7:00 AM.
- **Community Noise Equivalent Level (CNEL).** The energy average of the A-weighted sound levels occurring during a 24-hour period, with 5 dB added from 7:00 PM to 10:00 PM and 10 dB from 10:00 PM to 7:00 AM. NOTE: For general community/environmental noise, CNEL and L_{dn} values rarely differ by more than 1 dB (with the CNEL being only slightly more restrictive – that is, higher than the L_{dn} value). As a matter of practice, L_{dn} and CNEL values are interchangeable and are treated as equivalent in this assessment.
- **Peak Particle Velocity (PPV).** The peak rate of speed at which soil particles move (e.g., inches per second) due to ground vibration.
- **Sensitive Receptor.** Noise- and vibration-sensitive receptors include land uses where quiet environments are necessary for enjoyment and public health and safety. Residences, schools, motels and hotels, libraries, religious institutions, hospitals, and nursing homes are examples.

Characteristics of Sound

When an object vibrates, it radiates part of its energy in the form of a pressure wave. Sound is that pressure wave transmitted through the air. Technically, airborne sound is a rapid fluctuation or oscillation of air pressure above and below atmospheric pressure that creates sound waves.

Sound can be described in terms of amplitude (loudness), frequency (pitch), or duration (time). Loudness or amplitude is measured in dB, frequency or pitch is measured in Hertz [Hz] or cycles per second, and duration or time variations is measured in seconds or minutes.

Amplitude

Unlike linear units such as inches or pounds, decibels are measured on a logarithmic scale. Because of the physical characteristics of noise transmission and perception, the relative loudness of sound does not closely match the actual amounts of sound energy. Table 1 presents the subjective effect of changes in sound pressure levels. Ambient sounds generally range from 30 dBA (very quiet) to 100 dBA (very loud). Changes of 1 to 3 dB are detectable under quiet, controlled conditions, and changes of less than 1 dB are usually not discernible (even under ideal conditions). A 3 dB change in noise levels is considered the minimum change that is detectable with human hearing in outside environments. A change of 5 dB is readily discernible to most people in an exterior environment, and a 10 dB change is perceived as a doubling (or halving) of the sound.

Table 1 Noise Perceptibility

Change in dB	Noise Level
± 3 dB	Barely perceptible increase
± 5 dB	Readily perceptible increase
± 10 dB	Twice or half as loud
± 20 dB	Four times or one-quarter as loud

Source: California Department of Transportation (Caltrans). 2013, September. **Technical Noise Supplement ("TeNS")**.

Frequency

The human ear is not equally sensitive to all frequencies. Sound waves below 16 Hz are not heard at all, but are “felt” more as a vibration. Similarly, though people with extremely sensitive hearing can hear sounds as high as 20,000 Hz, most people cannot hear above 15,000 Hz. In all cases, hearing acuity falls off rapidly above about 10,000 Hz and below about 200 Hz.

When describing sound and its effect on a human population, A-weighted (dBA) sound levels are typically used to approximate the response of the human ear. The A-weighted noise level has been found to correlate well with people’s judgments of the “noisiness” of different sounds and has been used for many years as a measure of community and industrial noise. Although the A-weighted scale and the energy-equivalent metric are commonly used to quantify the range of human response to individual events or general community sound levels, the degree of annoyance or other response also depends on several other perceptibility factors, including:

- Ambient (background) sound level
- General nature of the existing conditions (e.g., quiet rural or busy urban)
- Difference between the magnitude of the sound event level and the ambient condition
- Duration of the sound event
- Number of event occurrences and their repetitiveness
- Time of day that the event occurs

Duration

Time variation in noise exposure is typically expressed in terms of a steady-state energy level equal to the energy content of the time varying period (called L_{eq}), or alternately, as a statistical description of the sound level that is exceeded over some fraction of a given observation period. For example, the L_{50} noise level represents the noise level that is exceeded 50 percent of the time; half the time the noise level exceeds this level and half the time the noise level is less than this level. This level is also representative of the level that is exceeded 30 minutes in an hour. Similarly, the L_2 , L_8 and L_{25} values represent the noise levels that are exceeded 2, 8, and 25 percent of the time or 1, 5, and 15 minutes per hour, respectively. These “n” values are typically used to demonstrate compliance for stationary noise sources with many cities’ noise ordinances. Other values typically noted during a noise survey are the L_{min} and L_{max} . These values represent the minimum and maximum root-mean-square noise levels obtained over the measurement period, respectively.

Because community receptors are more sensitive to unwanted noise intrusion during the evening and at night, state law and many local jurisdictions use an adjusted 24-hour noise descriptor called the Community Noise Equivalent Level (CNEL) or Day-Night Noise Level (L_{dn}). The CNEL descriptor requires that an artificial increment (or “penalty”) of 5 dBA be added to the actual noise level for the hours from 7:00 PM to 10:00

PM and 10 dBA for the hours from 10:00 PM to 7:00 AM. The L_{dn} descriptor uses the same methodology except that there is no artificial increment added to the hours between 7:00 PM and 10:00 PM. Both descriptors give roughly the same 24-hour level, with the CNEL being only slightly more restrictive (i.e., higher). The CNEL or L_{dn} metrics are commonly applied to the assessment of roadway and airport-related noise sources.

Sound Propagation

Sound dissipates exponentially with distance from the noise source. This phenomenon is known as “spreading loss.” For a single-point source, sound levels decrease by approximately 6 dB for each doubling of distance from the source (conservatively neglecting ground attenuation effects, air absorption factors, and barrier shielding). For example, if a backhoe at 50 feet generates 84 dBA, at 100 feet the noise level would be 79 dBA, and at 200 feet it would be 73 dBA. This drop-off rate is appropriate for noise generated by on-site operations from stationary equipment or activity at a project site. If noise is produced by a line source, such as highway traffic, the sound decreases by 3 dB for each doubling of distance over a reflective (“hard site”) surface such as concrete or asphalt. Line source noise in a relatively flat environment with ground-level absorptive vegetation decreases by an additional 1.5 dB for each doubling of distance.

Psychological and Physiological Effects of Noise

Physical damage to human hearing begins at prolonged exposure to noise levels higher than 85 dBA. Exposure to high noise levels affects the entire system, with prolonged noise exposure in excess of 75 dBA increasing body tensions, thereby affecting blood pressure and functions of the heart and the nervous system. Extended periods of noise exposure above 90 dBA results in permanent cell damage, which is the main driver for employee hearing protection regulations in the workplace. For community environments, the ambient or background noise problem is widespread, though generally worse in urban areas than in outlying, less-developed areas. Elevated ambient noise levels can result in noise interference (e.g., speech interruption/masking, sleep disturbance, disturbance of concentration) and cause annoyance. Since most people do not routinely work with decibels or A-weighted sound levels, it is often difficult to appreciate what a given sound pressure level number means. To help relate noise level values to common experience, Table 2 shows typical noise levels from familiar sources.

Table 2 Typical Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
Onset of physical discomfort	120+	
	110	Rock Band (near amplification system)
Jet Flyover at 1,000 feet		
	100	
Gas Lawn Mower at three feet		
	90	
Diesel Truck at 50 feet, at 50 mph		Food Blender at 3 feet
	80	Garbage Disposal at 3 feet
Noisy Urban Area, Daytime		
	70	Vacuum Cleaner at 10 feet
Commercial Area		Normal speech at 3 feet
Heavy Traffic at 300 feet	60	
		Large Business Office
Quiet Urban Daytime	50	Dishwasher Next Room
Quiet Urban Nighttime	40	Theater, Large Conference Room (background)
Quiet Suburban Nighttime		
	30	Library
Quiet Rural Nighttime		Bedroom at Night, Concert Hall (background)
	20	
		Broadcast/Recording Studio
	10	
Lowest Threshold of Human Hearing	0	Lowest Threshold of Human Hearing

Source: California Department of Transportation (Caltrans). 2013, September. **Technical Noise Supplement ("TeNS")**.

Vibration Fundamentals

Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. Vibration is normally associated with activities stemming from operations of railroads or vibration-intensive stationary sources, but can also be associated with construction equipment such as jackhammers, pile drivers, and hydraulic hammers. As with noise, vibration can be described by both its amplitude and frequency. Vibration displacement is the distance that a point on a surface moves away from its original static position; velocity is the instantaneous speed that a point on a surface moves; and acceleration is the rate of change of the speed. Each of these descriptors can be used to correlate vibration to human response, building damage, and acceptable equipment vibration levels. During construction, the operation of construction equipment can cause groundborne vibration. During the operational phase of a project, receptors may be subject to levels of vibration that can cause annoyance due to noise generated from vibration of a structure or items within a structure.

Vibration amplitudes are usually described in terms of either the peak particle velocity (PPV) or the root mean square (RMS) velocity. PPV is the maximum instantaneous peak of the vibration signal and RMS is the

square root of the average of the squared amplitude of the signal. PPV is more appropriate for evaluating potential building damage and RMS is typically more suitable for evaluating human response.

As with airborne sound, annoyance with vibrational energy is a subjective measure, depending on the level of activity and the sensitivity of the individual. To sensitive individuals, vibrations approaching the threshold of perception can be annoying. Persons accustomed to elevated ambient vibration levels, such as in an urban environment, may tolerate higher vibration levels. Table 3 displays the human response and the effects on buildings resulting from continuous vibration (in terms of various levels of PPV).

Table 3 Human Reaction to Typical Vibration Levels

Vibration Level, PPV (in/sec)	Human Reaction	Effect on Buildings
0.006–0.019	Threshold of perception, possibility of intrusion	Vibrations unlikely to cause damage of any type
0.08	Vibrations readily perceptible	Recommended upper level of vibration to which ruins and ancient monuments should be subjected
0.10	Level at which continuous vibration begins to annoy people	Virtually no risk of “architectural” (i.e. not structural) damage to normal buildings
0.20	Vibrations annoying to people in buildings	Threshold at which there is a risk to “architectural” damage to normal dwelling – houses with plastered walls and ceilings
0.4–0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause “architectural” damage and possibly minor structural damage

Source: California Department of Transportation (Caltrans). 2020, April. *Transportation and Construction Vibration Guidance Manual*. Prepared by ICF International.

CONSTRUCTION NOISE MODELING

SCAL-10.16 - Construction Noise Modeling Attenuation Calculations

Levels in dBA Leq

Phase	RCNM				
	Reference				
	Noise Level	Receptor at	Receptor at	Receptor at	Receptor at
<i>Distance in feet</i>	<i>50</i>	<i>100</i>	<i>200</i>	<i>300</i>	<i>400</i>
Demolition	85.0	79.0	73.0	69.4	66.9
Site Prep	85.0	79.0	73.0	69.4	66.9
Grading	85.0	79.0	73.0	69.4	66.9
Building Construction	80.0	74.0	68.0	64.4	61.9
Architectural Coating	74.0	68.0	62.0	58.4	55.9
Paving	80.0	74.0	68.0	64.4	61.9
Finish/Landscaping	80.0	74.0	68.0	64.4	61.9

Attenuation calculated through Inverse Square Law: $L_p(R2) = L_p(R1) - 20\text{Log}(R2/R1)$

SCAL-10.16 - Vibration Damage Attenuation Calculations

Levels, PPV (in/sec)

<i>Distance in feet</i>	Vibration Reference Level	Receptor at 50 feet	Receptor at 75 feet	Receptor at 100 feet
	at 25 feet	<i>50</i>	<i>75</i>	<i>100</i>
Vibratory Roller	0.21	0.074	0.040	0.026
Clam shovel	0.202	0.071	0.039	0.025
Hoe Ram	0.089	0.031	0.017	0.011
Large Bulldozer	0.089	0.031	0.017	0.011
Caisson Drilling	0.089	0.031	0.017	0.011
Loaded Trucks	0.076	0.027	0.015	0.010
Jackhammer	0.035	0.012	0.007	0.004
Small Bulldozer	0.003	0.001	0.001	0.000

A P P E N D I X C

V M T M E M O R A N D U M

.....

Memorandum

Date: June 3, 2025

To: Alexis Mena and Rachel Goren, Placeworks

From: Kevin Zamzow-Pollock, Dana Weissman AICP, and Matt Goyne PE, Fehr & Peers

Subject: **Vehicle Miles Travelled and Vehicle Trip Analysis for the Big Basin Facilities Management Plan**

SF22-1216.02

This memorandum summarizes three analyses related to vehicle travel patterns prepared by Fehr & Peers for informational purposes regarding the Big Basin Facilities Management Plan (BBFMP) at Big Basin Redwoods State Park (BBRSP). The BBFMP has been undertaken primarily in response to the 2020 CZU Lightning Complex fire. As a result, baseline conditions are taken to be “pre-fire” conditions and future conditions with the BBFMP are “project” conditions.

The analyses presented in this memorandum are:

- Analysis of pre-fire vehicle miles travelled (VMT)
- Assessment of project VMT
- Potential for project to result in an increase in vehicle volume on nearby roadways

These analyses are presented for informational purposes only.

Pre-Fire VMT

To assess pre-fire vehicle miles travelled (VMT), Fehr & Peers used metrics from StreetLight Data. StreetLight Data is a big data resource that produces aggregate traffic metrics using location-based service (LBS) data from smartphones and other devices based on user-defined “zones”.¹

This analysis used zones placed along the northern portion of SR 236 near China Grade Road (“north zone”) and along the southern portion of SR 236 between Sky Meadow Road and Little Basin Road (“south zone”). StreetLight Data aggregates the average distance travelled for all trips that passed through each of these zones during the identified time period. While it is possible that a small number of trips may

¹ In 2022, StreetLight Data shifted to using data from connected vehicles. However, during the time period analyzed here, StreetLight Data was still using LBS data.



drive straight through the park without stopping, Fehr & Peers assumed that nearly all trips were destined for locations within Big Basin Redwoods State Park, as SR 236 would not be a direct route to any other destinations. Fehr & Peers used StreetLight Data outputs for an average weekday and weekend day for both summer 2018 and summer 2019, as shown in **Table 1**.

The trip lengths reflect the role that BBRSP serves as a state park in serving recreational and outdoor needs for people living in nearby major population centers throughout the region (e.g., Santa Cruz and San Jose are roughly 20 miles away, while San Francisco is 40 miles away).

Table 1: Average One-Way Trip Length in Miles in Summer 2018 and 2019

Year ¹	Zone	Weekdays ²	Weekends	Average of All Days
2018	North Zone	32.3	34.3	34.6
	South Zone	32.9	31.7	32.0
	Average	32.6	33.2	33.3
2019	North Zone	36.8	35.1	35.7
	South Zone	30.2	32.0	31.6
	Average	33.0	33.8	33.7

¹ Including the period between Memorial Day weekend and Labor Day weekend

² Weekday numbers exclude Fridays

Source: StreetLight Data, 2018; StreetLight Data, 2019; Fehr & Peers, 2025

To convert average one-way trip length to total VMT, Fehr & Peers multiplied the average one-way trip length by the average number of daily vehicle trips identified by StreetLight Data for the same time periods, as shown in **Table 2**. The resulting total VMT estimates are shown in **Table 3**.

Table 2: Average Daily Vehicle Trips in Summer 2018 and 2019

Year ¹	Weekdays ²	Weekends	Average of All Days
2018	1,150	3,100	1,800
2019	800	2,000	1,200

Values rounded to nearest 50 trips.

¹ Including the period between Memorial Day weekend and Labor Day weekend

² Weekday numbers exclude Fridays

Source: StreetLight Data, 2018; StreetLight Data, 2019; Fehr & Peers, 2025



Table 3: Total Daily VMT in Summer 2018 and 2019

Year ¹	Weekdays ²	Weekends	Average of All Days
2018	37,400	102,300	59,500
2019	26,400	67,900	40,900

Values rounded to nearest 100 VMT

¹ Including the period between Memorial Day weekend and Labor Day weekend

² Weekday numbers exclude Fridays

Source: StreetLight Data, 2018; StreetLight Data, 2019; Fehr & Peers, 2025

Project VMT

The BBFMP is intended as a planning document to guide recovery from the CZU Lightning Complex fire and to guide the stewardship, management, and use of existing and future facilities. The proposed project does not contain any transportation network changes anticipated to lead to a measurable or substantial increase in vehicle travel. The proposed project may contain the following transportation network changes identified by the California Governor's Office of Planning and Research (OPR) as not likely to require an induced travel analysis:²

- Rehabilitation, maintenance, replacement and repair projects designed to improve the condition of existing transportation assets (e.g., highways, roadways, bridges, culverts, tunnels, transit systems, and assets that serve bicycle and pedestrian facilities) and that do not add additional motor vehicle capacity
- Roadway shoulder enhancements to provide bicycle access, or to otherwise improve safety, but which will not be used as automobile vehicle travel lanes
- Addition of an auxiliary lane of less than one mile in length designed to improve roadway safety
- Installation, removal, or reconfiguration of traffic lanes that are not for through traffic, such as left, right, and U-turn pockets, or emergency breakdown lanes that are not utilized as through lanes
- Addition of a new lane that is permanently restricted to use only by transit vehicles
- Installation of roundabouts or traffic circles
- Installation or reconfiguration of traffic calming devices
- Initiation of new transit service
- Removal or relocation of off-street or on-street parking spaces
- Addition of traffic wayfinding signage
- Rehabilitation and maintenance projects that do not add motor vehicle capacity
- Addition of new or enhanced bike or pedestrian facilities on existing streets/highways or within existing public rights-of-way

² Governor's Office of Planning and Research. April 2018. *Technical Advisory on Evaluating Transportation Impacts in CEQA*. https://lci.ca.gov/docs/20180416-743_Technical_Advisory_4.16.18.pdf



- Addition of Class I bike paths, trails, multi-use paths, or other off-road facilities that serve non-motorized travel
- Installation of publicly available alternative fuel/charging infrastructure

The proposed project is not intended to increase the capacity of the park for visitation nor substantively change the park's role within the California state park system. The project proposes a reduction in day use parking and a moderate increase in camping capacity, as detailed in **Table 4**, and a shuttle service from Scotts Valley to serve those unable to get a day use parking space. The park may also employ strategies like parking and/or shuttle reservation systems to manage demand as needed. As a result, day use visitation is assumed to be the same as pre-fire visitation and camping visitation is limited by camping capacity, as shown in **Table 4**.

Table 4: Change in Key Capacity-Related Features

Feature	Pre-Fire	Project	Change in Capacity
Day use parking spaces (Main Day Use and Saddle Mountain)	380 ¹	225 ²	-155 parking spots
Total vehicle-accessible campsites/cabins	248 ³	262 ⁴	+ 14 sites
Total vehicle-accessible camping capacity (persons camping) ⁵	2,174	2,368	+ 194 persons
Total camping-associated vehicles ⁶	794	874	+80 vehicles

¹ Big Basin General Plan and EIR, May 2013, Table 2-2. The General Plan does not mention any pre-fire day use parking at Saddle Mountain.

² Based on 75 parking spaces at the MDU area with an average of 2.5 vehicles per day and 150 parking spaces at Saddle Mountain with an average of 1.5 vehicles per day.

³ Big Basin General Plan and EIR, May 2013, Table 2-3 (Main Day Use) plus 12 cabins at Saddle Mountain (page 2-16) and 51 tent sites, cabins, and group camping areas at Little Basin (page 2-18).

⁴ Based on 176 camp sites and 30 cabins along Sky Meadow Road near the MDU area and 44 camp sites and 12 tent cabins at Little Basin.

⁵ Both pre-fire and project values assume maximum visitor capacity of 8 persons per campsite or cabin, 16 persons per friends and family campsite (project only), and 40-50 visitors per group campsite (varies by specific facility).

⁶ Assumes 2.6 persons per vehicle for campsites and cabins and 5 persons per vehicle for group campsites.

Source: Big Basin General Plan and EIR, May 2013; Fehr & Peers, 2024-2025

With the improvements identified under the project, BBRSP would continue to serve similar populations as before the fire. No improvements proposed would attract visitors from farther away or otherwise increase the distances traveled to reach the park by changing the nature that the park serves within the Bay Area or statewide park systems. While the project would shift some parking and camping from the Main Day Use (MDU) area to Saddle Mountain and Little Basin, the change of location within the park would not represent a substantial change to regional VMT. Further, project features such as the reduction in day use parking capacity in the park and the addition of a Scotts Valley shuttle would reduce driving distances for many visitors. Those unable to obtain parking or unwilling to drive to Scotts Valley would need to pursue other recreational opportunities with the regional or state park system.



As a result, no increase in regional VMT is anticipated as a result of the BBRSP.

Analysis of Project Vehicle Volume on Nearby Roadways

Fehr & Peers assessed the potential for the BBRSP to increase vehicle volumes on nearby roadways. The project is unique from a traffic forecasting perspective, as it involves reallocating regional recreational trips rather than the addition of new residential or commercial land uses. Therefore, this assessment does not use a traditional travel demand model calibrated to residential or commercial travel, but rather presents the changes in vehicle travel patterns associated with the project and the relationship of these vehicle volumes to the existing volumes on the surrounding roadway network to support the project's Transportation and Noise CEQA analyses.

The BBRSP is not intended to increase the capacity of the park. As shown in **Table 4**, the project proposes a decrease in day use parking capacity and a moderate increase in camping capacity. As a result, the project is anticipated to reduce the overall vehicle traffic to BBRSP. However, due to the increase in camping facilities and relocation of day use parking from the Main Day Use area to Saddle Mountain, some visitors may choose to approach the park using different routes, contributing to a potential increase in traffic on some routes while decreasing overall traffic levels. The following sections present the context for these changes in traffic.

Potential Increase in Average Daily Vehicle Trips

Table 5 presents the estimated change in daily vehicle trips to BBRSP by trip destination and purpose. The estimates are based on the peak and average visitation days. The peak visitation days occur on summer weekends, when all day use parking and camping capacity is 100 percent occupied. However, this is an infrequent and conservative traffic condition. On an average summer day, the park was approximately 64 percent full based on pre-fire visitation data from June-August 2018. This typical summer day visitation level has remained consistent in more recent years based on traffic count data collected near the south entrance to BBRSP in June 2024 (the average summer day had 63 percent of the traffic of the peak summer day). This analysis is therefore based on an average summer day, which still represents a conservative estimate of annual average daily trips to the BBRSP, as it is based on summer visitation numbers and summer is the busiest season for park visitation.

As a conservative assumption for this assessment, each vehicle trip is assumed to occur once in each direction per day and thus the change in average daily bidirectional trips is provided. In reality, many people who camp at BBRSP remain for multiple nights and so the total number of daily camping-related vehicle trips is likely lower, reducing the average daily bidirectional trips.



Table 5: Estimated Change in Peak and Average Daily Vehicle Trips

Destination and Purpose	Pre-Fire	Project	Change in Peak Daily Trips	Change in Average Summer Daily Trips	Change in Average Summer Daily Bidirectional Trips
Main Day Use – Day Use	950 ¹	187 ²	-763	-485	-970
Main Day Use – Camping (Sky Meadow Road) ³	593	655	62	40	80
Saddle Mountain/Little Basin – Day Use	0 ⁴	225 ⁵	225	143	286
Saddle Mountain/Little Basin – Camping ³	201	219	18	11	22
Total	1,744	1,268	-458	-291	-582
Potential Rerouted Vehicle Trips (Change in Trips to Saddle Mountain/Little Basin)			243	155	308

Rounded to nearest whole vehicle trip.

¹ Big Basin General Plan and EIR, May 2013, Table 2-2. which reports 380 parking spaces. Estimate assumes 2.5 daily vehicles per space.

² Based on a proposed 75 spaces and an assumption of 2.5 daily vehicles per space.

³ Assumes 8 persons per campsite or cabin, 16 persons per friends and family campsite (project only), and 40-50 visitors per group campsite depending on specific facility. Assumes 2.6 persons per vehicle for campsites and cabins and 5 persons per vehicle for group campsites.

⁴ Big Basin General Plan and EIR, May 2013 does not mention any pre-fire day use parking at Saddle Mountain.

⁵ Based on a proposed 150 spaces and an assumption of 1.5 vehicles per space since Saddle Mountain parking is intended for longer visits.

Source: Big Basin General Plan and EIR, May 2013; Fehr & Peers, 2024-2025

The Main Day Use area experiences a large decrease in vehicle trips because the reduction in day use parking is greater than the small growth in camping capacity along Sky Meadow Road. Further, the routing of trips to the Main Day Use area will not change. Therefore, vehicle traffic traveling to and from the Main Day Use area will decrease on nearby roadways.

There is, however, an increase in trips to Saddle Mountain/Little Basin. This increase, estimated at 308 bidirectional trips on an average summer day, is the total number of vehicle trips which might contribute to an increase in vehicle traffic on nearby roadways in the vicinity of BBRSP.

This is a conservative approach that does not project a likely increase in trips on any specific roadway. The increase of 308 average daily bidirectional trips would likely be spread out among many roads which provide access to BBRSP; these different roads frequently have similar travel times from major population centers in the Bay Area which would encourage any increase in vehicle trips to be spread among them. Furthermore, many trips to Saddle Mountain/Little Basin would follow very similar routes as they would to the Main Day Use area, resulting in no traffic increase from those trips. Instead, this estimate is used as an upper bound for the purpose of CEQA analysis.



Comparison to Pre-Fire Baseline Vehicle Volumes

For comparison, this analysis relies on 2019 data from the Caltrans Traffic Census program to establish a pre-fire baseline volumes on major roads in the area.³ The bidirectional Annual Average Daily Traffic (AADT) for key roads in the vicinity of BBRSP is provided in **Table 6**. This table also indicates which roads could potentially see an increase in traffic due to the increase in vehicle trips to Saddle Mountain and Little Basin. Since Saddle Mountain is located to the east of the Main Day Use area, the shortest route for trips may be different than the route those trips would have taken to the Main Day Use area, resulting in a possible increase in traffic on certain roads.

Table 6: Average Bidirectional Daily Vehicle Volume for Key Local Highways

Highway	Location	AADT ¹	May See an Increase in Traffic
SR 9	East of SR 236 (Waterman Gap)	2,600	No
SR 9	North of Bear Creek Road (Boulder Creek)	10,000	Yes
SR 17	North of SR 35	58,000	Yes
SR 35	North of SR 9	1,200	No
SR 35	East of Bear Creek Road	400	Yes
SR 236	North boundary of BBRSP	280	No
SR 236	South boundary of BBRSP	560	Yes
Bear Creek Road ²	North of SR 35	580 ²	Yes

¹ Annual Average Daily Traffic (bidirectional)

² Bear Creek Road is not a Caltrans facility. However, the volume at its eastern end near SR 35 can be inferred from data for SR 35 by using the difference in volume between SR 35 east and west of its intersection with Bear Creek Road.

Source: Caltrans, 2019

The AADT from the Caltrans Traffic Census data reflects a lower average day than the summer average day presented in **Table 5**. Even so, the road with the lowest vehicle volume which could see an increase in traffic as a result of the BBFMP is SR 236 south of BBRSP, which has an AADT of 560, well above the previously identified upper bound of 308 bidirectional trips on an average summer day. Additionally, as previously noted, many of these trips would likely have taken SR 236 to access the Main Day Use area anyway, meaning the net increase would likely be much lower.

The BBFMP may also increase vehicle traffic to Scotts Valley, from which visitors can ride a shuttle into the park. However, since access to Scotts Valley is via SR 17, which had an AADT of 58,000 in 2019, any increase in traffic due to the BBFMP would be too small to represent a substantial increase in traffic or noise along SR 17. These trips would also use local roads like Scotts Valley Drive and Mount Hermon Road to access the Scotts Valley Transit Center itself. While historic volumes are not available for these roads, between SR 17 and the transit center both are four-lane arterial roads capable of accommodating well

³ The Caltrans Traffic Census Program summarizes annually vehicle volume metrics for state highways.
<https://dot.ca.gov/programs/traffic-operations/census>



over 10,000 bidirectional vehicles per day and similarly unlikely to be affected by an increase in traffic due to the BBFMP.