FINAL INITIAL STUDY/
NEGATIVE DECLARATION

WATER TREATMENT PLANT IMPROVEMENTS PROJECT

MACKERRICHER STATE PARK

SCH# 2020069026

August 2020

State of California
California State Parks
Mendocino County, California

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FINAL NEGATIVE DECLARATION

PROJECT: MACKERRICHER STATE PARK WATER TREATMENT PLANT IMPROVEMENTS PROJECT

LEAD AGENCY: CALIFORNIA State Parks

AVAILABILITY OF DOCUMENTS: The Initial Study (IS) for this Negative Declaration (ND) was made available throughout the 30-day review at the California State Parks Northern Service Center public information desk, the Sonoma-Mendocino District Headquarters office, and on the California State Park CEQA Notices website (www.parks.ca.gov). The Final Negative Declaration and all supporting materials will be available, by request, at California State Park's Northern Service Center.

PROJECT DESCRIPTION:

California State Parks proposes to upgrade the drinking water collection and treatment equipment at MacKerricher State Park to allow dependable year-round production of potable water. The Park currently obtains water from a single water source located along the western edge of Lake Cleone, but due to coastal erosion and storm damage, the park is in jeopardy of losing its existing supply of fresh water.

Findings:

An Initial study has been prepared to assess the proposed project's impacts on the environment and the significance of those impacts and is incorporated in the Final ND. Based on this Initial study, it has been determined that the proposed project would not have significant impacts on the environment with incorporation of standard and specific project requirements. This conclusion is supported by the following findings.

- There is no potential for impacts to: Agricultural and Forest Resources, Cultural Resources, Energy, Mineral Resources, Population and Housing, Public Services, Recreation, and Tribal Cultural Resources.
- Potential impacts resulting from the proposed project were found to be less than significant for: Aesthetics, Air Quality, Biological Resources, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Noise, Transportation, Utilities and Service Systems, and Wildlife.

This document along with the Draft Initial Study/Negative Declaration (SCH# 2020069026) comments and the Notice of Determination, constitute the Final Negative Declaration for the Water Treatment Plant Improvements project at MacKerricher State Park.

Pursuant to Section 21082.1 of the California Environmental Quality Act, California State Parks (CSP) has independently reviewed and analyzed the Final Initial Study and Final Negative Declaration for the proposed project and finds that these documents reflect the independent judgment of CSP. CSP, as lead agency, also confirms that the project requirements and avoidance measures detailed in these documents are feasible and will be implemented as stated in the environmental document.

Joel Bonilla Date	Brian Dewey Date
Environmental Coordinator Northern Service Center	Assistant Deputy Director Northern Service Center

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REVISIONS TO INITIAL STUDY

DESCRIPTION OF FINAL DOCUMENT EDITS

The Final initial Study for this Negative Declaration contains minor edits which are marked by a solid vertical line in the left margin of the document. Minor punctuation, spelling, grammatical corrections that contribute to ease of understanding, but have no significant impact on the content, have not been noted.

The following revisions, additions, and deletions have been made to the Initial Study. Additions and corrections are underlined; strikeout indicates a deletion:

V. Cultural Resources

Ethnographic Background

Two Native American groups reportedly inhabited the area of MacKerricher SP before the 1850s; though, there is disagreement on the boundaries since Euro-American intrusion disrupted traditional settlement patterns prior to conducting comprehensive ethnographic studies of the area. Additionally, different tribal and linguistic groups shared critical procurement areas, which skews delineation of clear boundaries. Generally, the location north of Cleone was Coast Yuki territory with Lake Cleone forming the approximate southern boundary. To the north, Coast Yuki territory extended past Rockport. The Northern Pomo occupied the coastline around Fort Bragg and extended north to Virgin Creek and present-day Lake Cleone. In the Lake Cleone area, the territory of the Coast Yuki and Northern Pomo overlapped (CDPR 1995).

Coast Yuki -

Dialectically, the Coast Yuki was a subgroup of the inland Yuki, speaking a language representing a small, isolated speech family (Kroeber 1925). The Coast Yuki comprised 11 groups and inhabited a 50-mile strip along the Mendocino Coast (Miller 1978). In MacKerricher, the Coast Yuki groups were the *Laliam-ontilka* near Cleone, the *Lilhuyak-ontilka* at Inglenook Beach, and the *Metkuyak-ontilka* at the mouth of Ten Mile River. After Euro-American settlement in the region, the population of the Coast Yuki dropped significantly. In 1972, they were determined ethnographically extinct (Miller 1978).

According to Kroeber (1953), the Coast Yuki called themselves *Yukoht-ontilka* (ocean people). Described as a small group of shell mound dwellers that occupied beach camps in the summer months and in the winter, groups moved more inland (Miller 1978). Although their economy focused on a variety of marine and terrestrial resources, their quest for marine foods was of importance. Invertebrates from the mid to high littoral rocky coast were gathered by everyone. Mussel and barnacles were preferred but gastropods and bivalves were also collected. Other resources from the ocean environment and littoral zone were seaweed, surf fish and sea lions, seal, and salt. Salmon caught in the local rivers was also vital to the Coast Yuki diet. Important terrestrial resources included acorns, seeds, and other vegetal products as well as elk and deer. Women were responsible for collecting plant resources and the men

hunted and fished. The Coast Yuki traveled to neighboring areas to acquire resources not readily available in their territory.

The Northern Pomo -

The Northern Pomo were one of seven tribes that spoke languages of the Pomoan linguistic family (McLendon and Oswalt 1978). Various tribelets of the Northern Pomo inhabited central Mendocino County on 22 miles of coastal frontage that extended into present day MacKerricher SP. To the east, their territory extended in an irregular band to the northwest shore of Clear Lake and followed the Navarro River south. The *Mato-Poma* was a tribelet whose territory encompassed MacKerricher SP (McLendon and Oswalt 1978). Not until encroachment by Euro-American settlers into the interior valleys around 1850, did the Northern Pomo live year-round on the coast. Prior to permanent occupation on the coast, various Northern Pomo tribes had favorite coastal campsites and procurement areas and occupied during the summer months.

In addition to their own territory, the Northern Pomo hunted and gathered food and procured various other resources in the Ten Mile River watershed and north along the coast in the tribal lands of the Coast Yuki. Like their Yuki neighbors, the Northern Pomo had similar resource preferences and relied heavily on the rich littoral resources of the coast, which provide an abundance of shellfish, seaweed, and surf fish. Marine mammals including sea lions and seals were hunted, while runs of salmon and steelhead were taken seasonally in the larger drainages. Terrestrial animals including deer, elk, and mammals such as rabbit were hunted or trapped. Tan oak, black oak, and hazel were important vegetal resources to the Northern Pomo. Birds were valued mainly for their brightly colored feathers; used to adorn baskets and ceremonial regalia (Van Bueren 2007).

XVII. Tribal Cultural Resources

The project area lies within the nuclear territory of the Coast Yuki and the Northern Pomo and are the applicable tribal authorities for lands encompassing the study area. Section V. *Cultural Resources* describes the ethnographic context of the project area. All state agencies including CSP are required to consult with Native American tribes regarding projects that may impact tribal cultural resources under California Assembly Bill (AB) 52 [PRC 21080.3.1(b)(d)]. Native American consultation pursuant to CEQA guidelines and AB 52 mandates, include a sacred lands file search with the Native American Heritage Commission (NAHC) and outreach to tribes that have requested formal consultation with the department for projects on their tribal land.

CSP contacted the NAHC for this project on two occasions (December 2016 and January 2020) requesting a sacred lands file search, a list of tribes requesting formal outreach pursuant to AB 52, and for a contact list of other tribes affiliated with the area. Additionally, CSP consulted their database of tribes that have requested formal consultation under AB 52 [PRC 21080.3.1(b)(d)] for departmental projects. The search of the CSP database and by the NAHC of tribes requesting formal consultation for the project area proved negative; however,

the NAHC did provide a contact list of five tribes affiliated with the area: Coyote Valley Band of the Pomo Indians, Noyo River Indian Community, Pinoleville Pomo Nation, Redwood Valley Little River Band of Pomo Indians, and Sherwood Valley Band of Pomo Indians. The NAHC search did not identify any Native American cultural resources or sacred sites in in 2016 or 2020 in the immediate area and archaeological studies (archival and field) of the project area by CSP proved negative for the presence of Native American archaeological sites.

Only two tribes responded to numerous outreach attempts by CSP for the project. The Redwood Valley Little River Band of the Pomo Indians and the Sherwood Valley responded to CSP's outreach for the project. Redwood Valley Little River Band of Pomo Indians wrote a letter stating the project was not within their immediate cultural territory and had no concerns with the project. CSP met with a representative of the Sherwood Valley Band of the Pomo Indians in 2017 at MacKerricher SP to discuss the water improvements project. During the meeting, no tribal cultural resources were identified in the project area by the tribal representative and they had little concern with the proposed project.

DISCUSSION

a) **NO IMPACT – TRIBAL CULTURAL RESOURCES**

No tribal cultural resources present within the project area. MacKerricher SP locality, situated on the coast is important to both the Coast Yuki and the Northern Pomo for its "sense of place" and the rich and diverse resources available there, including plants and animals (terrestrial and marine); however, tribal cultural resources within the project area were not identified during CSP's cultural studies or though consultation efforts for this project. By Implementing **Project Requirements CULT-1 through CULT-5** outlined in the Cultural Resources section, will ensure work will not impact previously unidentified tribal cultural resources.

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CHAPTER 1
INTRODUCTION

1.1 Introduction and Regulatory Guidance

The Draft Initial Study/Negative Declaration (IS/ND) has been prepared by California State Parks (CSP) to evaluate the potential environmental effects of the proposed Water Treatment Plant Improvements Project at MacKerricher State Park, Mendocino County, California. This document has been prepared in accordance with the California Environmental Quality Act (CEQA), Public Resources Code §21000 *et seq*., and the California Code of Regulations (CCR) §15000 *et seq*.

An Initial Study is conducted by a lead agency to determine if a project may have a significant effect on the environment [CEQA Guidelines §15063(a)]. If there is substantial evidence that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) must be prepared, in accordance with CEQA Guidelines §15064(a). However, if the lead agency determines that revisions in the project plans or proposals made by or agreed to by the applicant mitigate the potentially significant effects to a less-than-significant level, a Mitigated Negative Declaration may be prepared instead of an EIR [CEQA Guidelines §15070(b)]. The lead agency prepares a written statement describing the reasons a proposed project would not have a significant effect on the environment and, therefore, why an EIR need not be prepared. This Draft IS/ND conforms to the content requirements under CEQA Guidelines §15071.

1.2 Lead Agency

The lead agency is the public agency with primary approval authority over the proposed project. In accordance with CEQA Guidelines §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 CSP. The contact person for the lead agency regarding specific project information is Joel Bonilla, CSP Environmental Coordinator.

1.3 CEQA and Public Review of the Draft IS/ND

In accordance with Section 15073 of the CEQA Guidelines, a Negative Declaration (ND) or Mitigated Negative Declaration (MND) must be subject to a 30-day public review period when submitted to the State Clearinghouse for review by state agencies. As such, the Draft IS/ND was made available for public review from June 17, 2020 through July 21, 2020. Consistent with Section 15072(b) and 15072(d) of the CEQA Guidelines, the Notice of Intent to Adopt a Negative Declaration was published in the Fort Bragg Advocate Newspaper on June 18, 2020 and is on file at the California State Park's Northern Service Center in the City of Sacramento and at California State Parks' Sonoma-Mendocino Coast District Headquarters. The Draft IS/ND was provided to responsible agencies, interested groups and was made available for review at the California State Parks' Sonoma-Mendocino Coast District Headquarters and California State Parks' Northern Service Center during normal business hours.

California State Parks has complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. The environmental document review period closed on July 21, 2020 and one comment was received during that time. That comment is attached to this document. Based on the evaluation in the Draft IS/ND, California State Parks has determined that no substantial new environmental issues have been raised and that all concerns have been adequately addressed in the Draft and Final IS/ND. All potential impacts associated with the proposed project were found to be less than significant and would not result in significant environmental document for the proposed project.

This document combined with the Draft IS/ND constitutes the Final IS/ND for the proposed project a Mackerricher State Park. This document includes the State Clearinghouse letter that documents compliance with CEQA review requirements. California State Parks will consider the proposed IS/ND and adopt the Mackerricher State Park Water Treatment Plant Improvements Project and file a Notice of Determination.

1.4 Purpose and Document Organization

The purpose of this document is to evaluate the potential environmental effects of the proposed Water Treatment Plant Improvements Project at MacKerricher State Park. Avoidance and minimization measures have also been incorporated, as project requirements, to reduce or minimize impacts when feasible.

This document is organized as follows:

- Chapter 1 - Introduction

  This chapter introduces 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 Setting, Impacts, and Mitigation Measures

  This chapter identifies the significance of potential environmental impacts, explains the environmental setting for each environmental issue, and evaluates the potential impacts identified in the CEQA Environmental (Initial Study) Checklist. Mitigation or avoidance and minimization measures are incorporated, where appropriate, to reduce potentially significant impacts to a less than significant level.

- Chapter 4 - Mandatory Findings of Significance

  This chapter identifies and summarizes the overall significance of any potential impacts to natural and cultural resources, cumulative impacts, and impact to humans, as identified in the Initial Study.

- Chapter 5 - Summary of Mitigation Measures

  This chapter summarizes the mitigation measures incorporated into the project as a result of the Initial Study.

- Chapter 6 - References

  This chapter identifies the references and sources used in the preparation of this Draft IS/ND.

- Chapter 7 - Report Preparation

  This chapter provides a list of those involved in the preparation of this document.

1.5 Summary of Findings

Chapter 3 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.

Based on the Draft Initial Study and supporting environmental analysis provided in this document, the proposed Water Treatment Plant Improvements Project will result in less than significant impacts for the following issues: aesthetics, air quality, biological resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, transportation, and utilities and service systems. The project would have no impact on: agricultural and forest resources, cultural, energy, mineral resources, population and housing, public services, tribal cultural resources, wildfire, and recreation.

In accordance with §15064(f) of the CEQA Guidelines, a ND shall be prepared if the proposed project will not have a significant effect on the environment. Based on the available project information and the environmental analysis presented in this document, there is no substantial evidence that the proposed project would have a significant effect on the environment.

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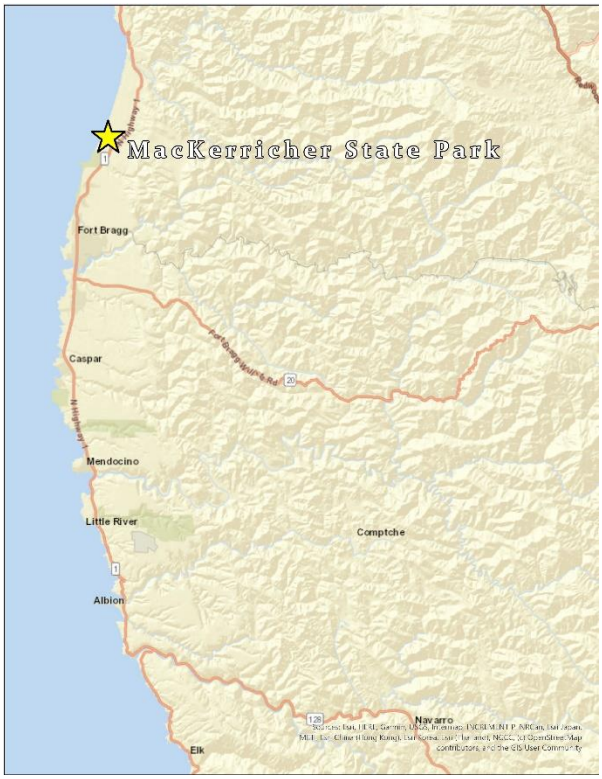
CHAPTER 2
PROJECT DESCRIPTION

Figure 1- MacKerricher SP Regional Map



2.1 Introduction

This Draft Initial Study/Negative Declaration (IS/ND) has been prepared by California State Parks (CSP) to evaluate the potential environmental effects of the proposed Water Treatment Plant Improvements Project at MacKerricher State Park (MacKerricher SP or the Park), located north of Fort Bragg, in Mendocino County, California. The proposed project will upgrade the drinking water collection and treatment equipment at MacKerricher SP to allow dependable year-round production of potable water for the Park. The Park currently obtains water from a single water source located along the western edge of Lake Cleone. Due to issues related to coastal erosion and storm damage, the park is in jeopardy of losing its existing supply of fresh water.

Figure 2 – Project Location

2.2 Project Location

MacKerricher SP is a 2,463-acre Park located on the Pacific Coast, in Mendocino County. The Park was established in 1952 and has heavily used facilities and resources, including a campground, hiking, biking, and equestrian trails, a beach and tide pools, and Lake Cleone. Lake Cleone is a freshwater lake within the Park and serves as its only source for domestic water supplies. This project proposes water system improvements to safeguard the production of potable water for the park. Water system improvements are proposed at various locations within the Park. These locations include the inoperable water intake along the entrance road in Mill Creek, the pumphouse along the western edge of Lake Cleone and the water treatment plant in the Park maintenance yard.

The project sites are located on BLM land description Section 18 and 19, Township 19 North, and Range 17 West.

2.3 Background and Need for the Project

To establish dependable year-round production of potable water for Park visitors, CSP proposes to improve the water treatment system at MacKerricher SP. The Park currently obtains water from a single source located along the western edge of Lake Cleone. The lake was historically a seasonally closed coastal lagoon at the mouth of Mill Creek, but installation of an artificial berm and a logging haul road along the beach edge eliminated tidal influence by the 1970s. Since then, the artificial berm and logging road have steadily deteriorated as a result of coastal erosion and storm damage. In an effort to establish year-round production of potable water for Park visitors, CSP proposes the following: rehabilitate the existing Mill Creek water intake, replace the existing raw water treatment plant and reconfigure the existing Lake Cleone pump station, allowing for its continued use, as a secondary water source.

2.4 Project Objectives

The mission of CSP is to provide for the health, inspiration, and education of the people of California by helping to preserve the state's extraordinary biological diversity, protecting its most valued natural and cultural resources, and creating opportunities for high-quality recreation. The goal of this project is to establish a dependable year-round production of potable water for Park visitors.

The objectives of the proposed water treatment system improvements are to:

- Rehabilitate the existing water intake in Mill Creek, upstream of Lake Cleone, as the primary water source
- Installation of a new raw water supply line and electrical conduit from Mill Creek to the water treatment plant
- Replace the existing water treatment plant
- Replace and remove the existing redwood water storage tanks
- Reconfigure the existing Lake Cleone pump station with operational safety improvements, allowing for continued use as a secondary water source

2.5 Project Description

California State Parks proposes to improve the existing water treatment system at MacKerricher SP by creating a dependable year-round production source of potable water for Park visitors. To achieve this goal, parks will:

Rehabilitate Existing Mill Creek Water Intake and Sump

The existing raw water intake functions by allowing creek water to infiltrate an 8-inch perforated vitrified clay pipe (VCP) buried approximately 4-feet beneath the creek bed. This infiltration pipe transitions to a 8-inch solid VCP segment as it leaves the creek and traverses the

southern bank, for approximately 23-feet, where it connects to an existing 48-inch diameter corrugated metal pipe (CMP) wet well (sump).

In its existing state, the collection pipe from Mill Creek continues to provide sufficient inflow volume to the sump to support Park usage. However, due to deterioration of the wet well, water collecting in the sump was determined to have poor water quality.

The project will retrofit the deteriorating sump with an internal fiberglass liner, backfill any voids with grout, install a new submersible pump, and install a new above ground control panel system in the immediate vicinity of the sump.

The existing 8-inch perforated VCP pipe within Mill Creek will remain in place and a new connection between the new fiberglass sump liner and the existing 8-inch solid pipe will be installed within approximately 12-feet of the sump. The connection will be made outside of the creek.

Installation of the fiberglass liner, along with the intake pipe connection, will require dewatering of the sump. A temporary plug of the existing intake pipe will also occur within approximately 12-feet of the sump (outside the extents of Mill Creek). The sump is anticipated to be dewatered by discharging in an overland, sheet flow manner, south of the park entrance road, through areas of existing vegetation. High flow point discharge is not anticipated.

To accommodate long-term maintenance and access to the sump, a new access road approximately 12-foot wide, will be constructed. The road will replace the existing, unpaved access path to the sump. The paved road will extend from the park entrance road to the sump, approximately 35-feet. Excavation for the access road placement is expected to be up to 12-inches in depth.

Installation of new raw water supply line and electric conduit from Mill Creek to the water treatment plant

A new 2-inch raw water supply line and separately a new 2-inch or 3-inch electrical conduit will be installed between the retrofitted Mill Creek sump and the water treatment area within the maintenance yard. The underground water and electrical lines will each be approximately 600-feet long. Ground disturbance will be minimized by installing the conduits in the same trench for open trench portions, and from the same boring/receiving pits necessary for the Horizontal Directional Drilling (HDD) portions. Separation between the electric and water conduits is anticipated to be approximately 12-inches or as determined feasible by the contractor.

In the maintenance yard where existing buried conduits exist and in areas of existing park roadways, the water and electrical conduits will be installed via open-trenches, measuring approximately 36-inches deep by 12-inches wide and totaling approximately 350-feet long.

For the off-road conduit construction, the lines will be installed using a trenchless method. Boring pits of approximately 10-feet long by 10-feet wide and 5-feet deep will be excavated adjacent to the Park's roadway serving as entrance and exit points for the horizontal directional drill equipment. Natural resource monitoring will be conducted as part of the trenching work.

The water and electric lines will extend east along the park entrance road, cross under Mill Creek, and ultimately connect with the rehabilitated sump. Final routing of the waterline and electrical services will be determined in the working drawing phase of the project. It is anticipated that the segment of piping that will cross Mill Creek will be installed using HDD construction methods.

Replace the existing water treatment plant

The existing conventional water filtration system will be replaced with a new prepackaged filtration system. The replacement system has similar dimensions as the one being replaced and will not require building modifications.

Replace and remove the existing redwood water storage tanks

Two 18,000-gallon treated water redwood storage tanks and one 36,000-gallon raw water redwood storage tank will be replaced with a combination of two 10,000-gallon PVC raw water storage tanks and two 36,000-gallon welded stainless steel storage tanks for treated water.

The four new storage tanks will be located in the northeast corner of the Park maintenance yard, immediately adjacent to the existing water treatment plant building.

The 10,000-gallon and 36,000-gallon tanks will be up to approximately 25-feet in diameter and will be mounted on a concrete foundation. The foundation will require an excavation of approximately 36-inches deep and 24-inches wide to pour a concrete slab. The concrete slab will be approximately 16-feet long by 30-feet wide.

The tanks will be connected to the water treatment plant by underground raw water lines located in the immediate vicinity of the tank foundations. The lines will be tied into from the Mill Creek and Lake Cleone intakes. Excavation work for the underground water lines will vary between 5-feet to 15-feet of linear trench work, with an approximate depth of 36-inches and 1-inch width. The underground lines will be installed under the existing asphalt to the extent possible.

Following installation and implementation of the new storage system and appurtenances, the existing redwood tanks and associated foundations will be removed, with minor re-grading for drainage.

Reconfiguration of the existing Lake Cleone pump station

The existing pump station is situated within the high-water extent of Lake Cleone and regularly floods. The existing pump house will be removed and reconstructed approximately 35-feet upslope, at an elevation above the limits of the lake and high-water extent. A new concrete foundation will have a footprint of approximately 10-feet by 12-feet and excavation for the foundation will extend out approximately 18-inches. Water conveyance will continue to use the existing buried 2-inch water supply pipe, with minor excavation expected in the vicinity of the new pump house to facilitate the new water supply pipe connection. Excavation is expected to be approximately 36-inches in depth.

2.6 Project Implementation

Access to the Park would remain open to the public except in the immediate project area. The water system would continue to operate from the existing water storage tank during the installation of new water treatment equipment. None of the project elements would interrupt normal activities at the Park.

The primary park entrance, at MacKerricher State Park road, would be closed during construction activities at the Mill Creek site to ensure public safety. State Parks would provide notification in the local area and through park postings prior to and during all construction activities that would result in closures. Alternative options would be publicized, and visitors would be redirected to the Mill Creek Avenue park road for access to the park and campgrounds.

Design

The attached design drawings show the locations of the proposed water system improvement elements. All work will occur in pre-disturbed areas, will be subject to oversight by Parks Resources staff and are consistent with the Department Operations Manual.

Access and Staging

Existing Parks roads and disturbed areas will be used for access to the sites and staging. At the Mill Creek site, the existing unpaved access road to the sump will be paved as part of this project. Additionally, the park entrance road will be temporarily closed and used as a staging area. The main staging area will be located at the Park Maintenance Yard. At the Lake Cleone site, the existing dirt access road will be used for staging and access to the pumphouse. Upon project completion, a portion of this dirt road will be decommissioned by decompacting and hydroseeding, to aid in revegetation.

Equipment

CSP will use heavy equipment and construction crews with hand and mechanical tools for project construction. Heavy equipment such as excavators, loaders, dump trucks, water trucks, and backhoes will be used. Vehicles will be used to transport crews, materials, and hand tools.

BMPS and Dewatering

BMPs will be incorporated into the project design to ensure that natural and cultural resources in and around the project site are adequately protected during and after construction activities. The BMPs discussed in this document and used in the implementation of the project are obtained from the California Stormwater Quality Association (CSQA) *Stormwater Best Management Practices Construction Handbook* (CSQA 2003). Temporary BMPs will be used to keep sediment on-site throughout the duration of the project. During construction, BMPs will be checked regularly, maintained, and modified as needed. In addition, permanent BMPs will

be used after project related construction work is completed to stabilize the site and minimize erosion. CSP has consistently referenced CSQA BMPs and has identified them as an acceptable standard for use in all park units of the State Park System. All work will be completed in compliance with permitting requirements.

Timing

CSP will commence construction in the year 2021 upon receiving all required regulatory approvals.

Construction will occur over two seasons, starting in the year 2021 and ending in the year 2022. Construction activities will include:

1. Install BMPs (Areas of mature vegetation adjacent to the project site identified for protection prior to construction)
2. Establish access, equipment staging area, and stockpile areas
3. Maintenance yard site clearing/grading, water tanks foundation excavation
4. Water tank foundation formwork and Mill Creek sump vegetation clearing
5. Directional drill, open trench from tank foundation to Mill Creek sump
6. Backfill trench and maintenance yard pavement patchwork
7. Treated water and raw tank construction
8. Mill Creek Sump site grading and access improvements; implementation of SWPPP
9. Mill Creek wet well retrofit
10. Mill Creek wet well electrical systems installation and testing
11. Package water treatment unit replacement
12. Removal of existing redwood storage tank and site clean-up
13. Minor vegetation clearing at Lake Cleone pumphouse site and PG&E pole relocation
14. Lake Cleone pumphouse foundation excavation and formwork
15. Lake Cleone pumphouse concrete and pumphouse construction
16. Lake Cleone pumphouse upgrade electrical systems and pipping reconfiguration

Work will occur during daylight weekday hours between 7:00 am and 6:00 pm. However, Saturday work could be implemented to accelerate work, especially for winterization needs or to meet management objectives during a limited window of low flow conditions in the creek.

2.7 Project Requirements

Under CEQA, CSP has the distinction of being considered a lead agency, a public agency that has a primary responsibility for carrying out or approving a project and for implementing CEQA; a responsible agency, a public agency other than the lead agency that has responsibility for carrying out or approving a project and for complying with CEQA; and a trustee agency, a state agency having jurisdiction by law over natural resources affected by a project that are held in trust for the people for the State of California. With this distinction comes the responsibility to ensure that actions that protect both cultural and natural resources are always taken on all

projects. Therefore, CSP has created a list of Project Requirements that are included in project design to avoid or minimize impacts to resources.

CSP has two types of Project Requirements, Standard and Specific. Standard Project Requirements are assigned to all projects state-wide, while Specific Project Requirements are assigned based on the specific actions required to complete the project. Unlike Project Requirements, mitigation measures can be found in the specific section as required (Chapter 5 contains a list of all mitigation measures and project requirements). The following Project Requirements have been included in this project:

Table 1 - Project Requirements

ISSUE	PROJECT REQUIREMENT
Aesthetics	
STANDARD PROJECT REQUIREMENT AES-1: SCENIC VIEWS	• Do not alter viewscapes to expose structures or undesirable views along scenic highways or scenic viewing locations. • Maximize the use of salvaged mature vegetation to reduce the time of regrowth. • Rehabilitate and remove all construction related impacts to pre-project or better than pre-project conditions.
Air Quality	
STANDARD PROJECT REQUIREMENT AIR-1: EMISSIONS OF FUGITIVE DUST AND OZONE	• All construction areas (dirt/gravel roads and surrounding dirt/gravel area) will be watered at least twice daily during dry, dusty conditions while in use by large machinery for project actions. • All trucks hauling soil or other loose materials on public roads will be covered or required to maintain at least two feet of freeboard. • All construction-related equipment engines will be maintained in good condition, in proper tune (according to manufacturer's specifications), and in compliance with all state and federal requirements. • Potential dust producing actions will be suspended if sustained winds exceed twenty five (25) miles mph, instantaneous gusts exceed 35 mph, or dust from construction might obscure driver visibility on public roads. • Earth or other material that has been transported onto paved roadways by trucks, construction equipment, erosion, or other project-related activity will be promptly removed. • Idling time shall be minimized to 10 minutes for all diesel-powered equipment.
Biological Resources	
PROJECT SPECIFIC REQUIREMENT BIO-1: **SPECIAL STATUS PLANT SPECIES**	Surveys for special status plant species with a potential to occur in the project area will be conducted during the appropriate blooming periods or when identity can be confirmed. All occurrences of special status plant species within the project areas will be recorded on project maps, flagged or otherwise identified on the ground. Where possible, occurrences of all special status plants will be avoided and protected

	from construction activities. Those locations where special status plants can't be avoided will be subject to the following conditions: <u>Perennial Species</u> • Prior to construction plants will be carefully excavated and transplanted nearby in suitable habitat. All transplant work will be conducted under the direction of a CSP Environmental Scientist or CSP-approved biologist. • Transplanting will occur during the dormant growing season (i.e. late fall) when the plants are least disturbed and when they can be watered by winter precipitation. <u>Annual Species</u> • Seeds from annual special status plant species will be collected during the appropriate season and properly stored prior to ground disturbing activities. Seeds will be sown during the appropriate season in suitable locations identified by a CSP Environmental Scientist.
STANDARD PROJECT SPECIFIC PROJECT REQUIREMENT BIO-2: NORTHERN RED-LEGGED FROG	• Prior to the start of construction, a CSP Environmental Scientist or CSP-approved biologist will conduct a training session for all construction personnel involved with the project. At a minimum, the training will include a description of this species and its' habitat and the measures that will be implemented to protect this species. The training session will include instruction in the appropriate protocol to follow in the event a northern red-legged frog is encountered or found onsite. Handouts with photos of this species will be provided to construction personnel. • Before any ground-disturbing construction activities begin at the Lake Cleone or Mill Creek water intake project sites, a CSP-approved biologist familiar with northern red-legged frog will conduct a survey for this species to determine the presence within the project site. If frogs are found on these project sites then individuals will be removed and released in a suitable location outside the project site, as directed by a CSP Environmental Scientist. • A CSP-approved biologist will conduct a visual inspection of the construction zones at the Lake Cleone and Mill Creek water intake project sites for northern red-legged frog prior to the start of work each morning or as directed by a CSP Environmental Scientist. • If a northern red-legged frog is found, then the start of work at this location will be delayed until the frog moves out of the site on its own accord, or is relocated to a suitable location outside of the project area by the CSP-approved biologist, as directed by a CSP Environmental Scientist.

SPECIFIC PROJECT REQUIREMENT BIO-3: NORTHERN WESTERN POND TURTLE	• Prior to the start of construction, a CSP Environmental Scientist or CSP-approved biologist will conduct a training session for all construction personnel involved with the project. At a minimum, the training will include a description of this species and its habitat and the measures that will be implemented to protect this species. The training session will include instruction in the appropriate protocol to follow in the event a western pond turtle is encountered or found onsite. Handouts with photos of this species will be provided to construction personnel. • Before any ground-disturbing construction activities begin at the Lake Cleone or Mill Creek water intake project sites, a CSP-approved biologist familiar with northern western pond turtle will conduct a survey for this species to determine the presence within the project site. If juvenile or adult turtles are found on the project site then individuals will be removed and released in a suitable location outside the project site, as directed by a CSP Environmental Scientist. • A CSP-approved biologist will conduct a visual inspection of the construction zones at the Lake Cleone and Mill Creek water intake project sites for northern western pond turtle prior to the start of work each morning or as directed by a CSP Environmental Scientist. • If a northern western pond turtle is found, then start of work at this location will be delayed until the turtle moves out of the site on its own accord, or is relocated to a suitable location outside of the project area by the CSP-approved biologist, as directed by a CSP Environmental Scientist.
STANDARD PROJECT REQUIREMENT BIO-4: NESTING MIGRATORY BIRD AND RAPTOR SPECIES	If construction-related activities exceeding ambient noise levels are conducted between February 1 and August 31 then focused surveys for nesting migratory bird and raptor species will be conducted by a CSP Environmental Scientist or CSP-approved biologist before construction activities occur in these months to identify active nests. • Surveys for active raptor nests will be conducted within a 500-foot radius of the project area no more than 7 days prior to the beginning of construction. If nesting raptors are found, no construction activities will occur within a 500-foot radius of the nest tree until the young have fledged and the young will no longer be impacted by project activities, as determined by the CSP Environmental Scientist or CSP-approved biologist. • Surveys for active migratory bird nests will be conducted within a 100-foot radius of the project no more than 7 days prior to the beginning of construction. If active nests are located, no construction activities will occur within a 150-foot radius of the nest tree until the young have fledged and the young will no longer be impacted by project activities, as determined by the CSP Environmental Scientist or CSP-approved biologist.
SPECIFIC PROJECT REQUIREMENT BIO-5:	• Where possible all ground disturbing activities will occur outside of the Root Health Zone (RHZ = 5 times the Diameter at Breast Height

SENSITIVE NATURAL COMMUNITIES/HABITATS	(dbh)) of all trees with a dbh of 12 inches or greater. If construction activities that could potentially damage trees (as determined by a CSP Environmental Scientist) are approved within the RHZ of tree trunks, then trees not scheduled for removal will be protected prior to the start of construction using the tree trunk protection measure as identified in Section 015639 of the Project Manual). Tree trunk and root protection will consist of a wood guard that is constructed from rough sawn 2"x6"x8' pieces of lumber that are placed at 12" on center and then attached vertically around the trunk of the tree using 3" wide nylon straps. Lumber shall extend to the natural base of the tree and must protect any exposed roots. A CSP Environmental Scientist will check this during construction, at their discretion. Wood guards will be removed when construction is complete. • In work locations where trenching or other ground disturbing activities are scheduled within the RHZ zone of trees with a dbh of 12 inches or greater, then hand excavation will be required to avoid severing roots that are larger than 1 inch in diameter. It is permissible to tunnel (HDD) under the RHZ at a depth greater than 2 feet. It is also permissible to remove soil by hand from roots. • A CSP-approved biologist will monitor the excavation of the water line from the maintenance area to the Mill Creek water intake site to ensure that the *Pinus muricata* Alliance (Bishop pine forest) is not affected by construction activities. • A CSP-approved biologist will monitor construction activities at the existing Lake Cleone pump house and Mill Creek project sites to ensure that impacts to sensitive wetland and riparian habitat work are kept to the minimum necessary to accomplish project objectives. • No construction-related activities will be allowed outside of delineated work areas unless authorized in advance by a CSP Environmental Scientist. • Periodic monitoring of construction activities may be conducted at the discretion of a CSP Environmental Scientist. • Staging of construction equipment and project materials will occur on paved surfaces or previously hardened surfaces to minimize soil and duff compaction of native habitat.
PROJECT SPECIFIC REQUIREMENT BIO-6: SUDDEN OAK DEATH	All project activities that could spread *Phytophthora ramorum* to new locations will be subject to Best Management Practices (including proper sanitation measures) developed by the California Oak Mortality Task Force and available online at http://www.suddenoakdeath.org/index.html.
Cultural Resources	

SPECIFIC PROJECT REQUIREMENT CULT-1: **Environmentally Sensitive Areas (ESA)**	• Archaeologically (Environmentally) sensitive areas near the project area will be flagged with orange flagging to restrict access into ESAs during project work.
SPECIFIC PROJECT REQUIREMENT CULT-2: **ARCHEOLOGICAL MONITORING**	• At the discretion of the project archaeologist, a CSP-qualified archaeologist will monitor ground-disturbing activities for this project. The archaeologist will have the authority to stop construction work in the area of the find and evaluate it and implemented appropriate treatment measures to avoid having a significant impact to historical resources per PRC 15064.5.
SPECIFIC PROJECT REQUIREMENT CULT-3: **NATIVE AMERICAN MONITORING**	• A Native American Monitor will be present during ground-disturbing activities for this project, if requested.
STANDARD PROJECT REQUIREMENT CULT-4: **UNDOCUMENTED CULTURAL RESOURCES**	• In the event that previously undocumented cultural resources are encountered during project construction (including but not limited to dark soil containing shellfish, bone, flaked stone, groundstone, or deposits of historic trash), work within the immediate vicinity of the find will stop until CSP-qualified cultural resource specialist has evaluated the find and implemented appropriate treatment measures to avoid have a significant impact to historical resources per PRC 15064.5
STANDARD PROJECT REQUIREMENT CULT-5: **HUMAN REMAINS OR BURIAL ARTIFACTS**	• In the event human remains were discovered, work would cease immediately in the area of the find and the project manager/site supervisor would notify the appropriate CSP 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 CSP District Superintendent (or authorized representative) would 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). • If the coroner determines the remains represent Native American interment, the NAHC in Sacramento to identify the most likely descendants and appropriate disposition of the remains. Work would not resume in the area of the find until proper disposition is complete (PRC §5097.98). No human remains or funerary objects would 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 would 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 would also occur as necessary to define additional site mitigation or future restrictions.

SPECIFIC PROJECT REQUIREMENT CULT-6: INGRESS/EGRESS INTO PROJECT AREA:	• Ingress/egress routes not previously established will required review and approval from a DPR qualified archaeologist.
SPECIFIC PROJECT REQUIREMENT CULT-7: DISPOSAL OF SPOILS:	• All excess spoils resulting from project work will be disposed of outside of the park unless proposed disposal areas in the park receive approved by a DPR qualified archaeologist.
SPECIFIC PROJECT REQUIREMENT CULT-8: PROJECT SCOPE CHANGES:	• Changes in the project design including but not limited to the addition of land, changes in location, or construction methodology in the currently proposed project area must be recognized as being outside of the scope of this review for CEQA. All such additions and/or changes will required further archaeological review/analysis.
GEOLOGY AND SOILS	
SPECIFIC PROJECT REQUIREMENT GEO-1: REMEDIATION OF DISTURBED AREAS	• All excavated areas for floodplain creation, haul roads, and landing/staging areas will be revegetated or treated to recover to pre-construction conditions or better as outlined in the project plans or SWPPP. • Excavated slopes will be graded to a stable angle and protected against erosion by track walking, and seeding/mulching bare areas. • Where feasible access routes will be limited to previously disturbed areas. • Recontour and/or outslope main routes of travel if necessary to allow sheet flow of water across the landscape and reduce channelization. • All base erosion control measures must be in place, functional, and approved in an initial inspection prior to commencement of construction activities. • Disturbed areas will be seeded, planted, and mulched per the revegetation plan. All protective devices shall be in place at the end of each workday when the five-day rain probability exceeds forty (40) percent
SPECIFIC PROJECT REQUIREMENT GEO-2: SEISMIC DESIGN CRITERIA	• Seismic design of structures will be performed in accordance with the provisions of the 2016 California Building Code, based on the 2015 International Building Code and the American Society of Civil Engineers publication: Minimum Design Loads for Buildings and other Structures.
HAZARDOUS AND HAZARDOUS MATERIALS	
STANDARD PROJECT REQUIREMENT Hazmat -1: SPILL PREVENTION AND RESPONSE	• Prior to the start of construction, all equipment will be cleaned before entering the project site. During the project, equipment will be cleaned and repaired (other than emergency repairs) outside the project site boundaries. All contaminated 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.
	• Prior to the start of construction, all equipment will be inspected for leaks and regularly inspected thereafter until removed from the project site.
	• Prior to the start of construction, a Spill Prevention and Response Plan (SPRP) will be prepared 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 the following:
	  • A map that delineates construction staging areas, and where refueling, lubrication, and maintenance of equipment will occur.
	  • A list of items required in an on-site spill kit 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 during the project.
	  • Identification of lawfully permitted or authorized disposal destinations.

STANDARD PROJECT REQUIREMENT Hazmat-2: WILDFIRE AVOIDANCE AND RESPONSE	• A Fire Safety Plan will be developed by a CSP-approved forester, prior to the start of construction. • Spark arrestors or turbo-charging (which eliminates sparks in exhaust) and fire extinguishers will be required for all heavy equipment. • Construction crews will be required to park vehicles away from flammable material, such as dry grass or brush. At the end of each workday, heavy equipment will be parked on roads or staging areas to reduce the chance of fire.
Hydrology and Water Quality	
STANDARD PROJECT REQUIREMENT HYDRO-1: EROSION AND SEDIMENT CONTROL AND POLLUTION PREVENTION	• Best Management Practices (BMPs) to be used in all construction areas to reduce or eliminate the discharge of soil, surface water run-off, and pollutants during any ground disturbing activities as approved by the Regional Water Quality Control Board. • The CSP Contractor will install long-term erosion control measures for any areas where ground disturbing activities result in bare soil areas. The soil will be properly decompacted and mulched or revegetated with appropriate native grass seed, sterile grass seed, and/or native duff with the final selection made by a CSP-qualified representative.
SPECIFIC PROJECT REQUIREMENT Hydro-2: PERMIT AND SITE PLAN ADHERENCE AND IMPLEMENTATION	• Limit disturbance area to the necessary extent as outlined in the engineered project plans. • Design, install, and maintain temporary BMPs for the protection of disturbed areas that may be subjected to erosion or surface run-off with the potential to release sediment, nutrients, or hazardous materials to surface or ground water sources. • Implement a dewatering plan for construction activities at Mill Creek Sump.

	• Use designated and established staging, refueling, and maintenance areas for equipment that has the required BMPs to prevent the potential for contamination of surface or ground water sources. • Any stockpiled material shall have appropriate BMPs according to the permitting requirements to ensure that wind and water erosion potential is eliminated. • Contractor shall be familiar with the conditions of all required project permits and shall implement all required BMPs prior to commencing grading operations.
Noise	
STANDARD PROJECT REQUIREMENT NOISE-1: NOISE EXPOSURE	• Internal combustion engines used for any purpose in the project areas 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., engine enclosures, acoustically attenuating shields or shrouds, intake silencers, ducts, etc.) whenever feasible and necessary. • Stationary noise sources and staging areas will be located as far from visitors as possible. If they must be located near visitors, stationary noise sources will be muffled to the extent feasible, and/or where practicable, enclosed within temporary sheds.
STANDARD PROJECT REQUIREMENT NOISE-2: WORK HOURS	• Project related activities will generally be limited to the daylight hours, Monday through Friday. However, weekend work may be implemented to accelerate construction or address emergency or unforeseen circumstances. No work shall occur before 8:00 am or after 6:00 pm
Recreation	
STANDARD PROJECT REQUIREMENT REC-1: SIGNAGE	• During construction, bike and pedestrian access to adjacent trails will be clearly delineated and signed. Periodic road closures will be posted and alternative routes, if available will be identified.
Traffic	
STANDARD PROJECT REQUIREMENT TRAFFIC-1: TRAFFIC CONTROL PLAN	Prior to commencing construction, the Contractor shall prepare a traffic control plan that includes the following components: • Exclusionary fencing will be placed along the project limits, as necessary, to exclude non-construction personnel from the construction area. • Speed limits shall be set for heavy equipment traveling to and from the project site by the State's Representative. • Pedestrian access adjacent trails will be clearly delineated and signed.

2.8 Consistency with Local Plans and Policies

All project components would be implemented within the boundaries of MacKerricher SP and would be consistent with the CSP mission and management directives aimed at protecting public health, natural and cultural resources while providing for public recreational

opportunities. The proposed project is consistent with local plans and policies currently in effect. Please see Chapter 3, Section XI, Land Use and Planning, for further details.

2.9 Discretionary Approvals

The project also requires approval from the following government agencies:

- Regional Water Quality Control Board, Division of Drinking Water
- Coastal Development Permit (Mendocino County)
- California Department of Fish and Wildlife

Additional internal document reviews include compliance with Public Resources Code § 5024. CSP will acquire all necessary reviews and permits prior to implementing any project components requiring regulatory review.

2.10 Related Projects

- The MacKerricher State Park Accessibility Improvements Project:
  The purpose of this project is to remove accessibility barriers at MacKerricher State Park. The work will occur at five (5) sites within the Park: Surfwood Campground, East Pinewood Campground, West Pinewood Campground, Visitor Center Comfort Station, and Camp Host Site.
    - This project is scheduled for construction in 2021

- CSP conducts a maintenance program for routine maintenance activities that are minor in scope and not cumulatively considerable. These activities include minor restoration to existing facilities, and installation of interpretive projects planned for the park unit. Any projects proposed in areas that have not been previously discussed will be evaluated under a separate CEQA document.

CHAPTER 3
ENVIRONMENTAL CHECKLIST

PROJECT INFORMATION	
1. Project Title:	MacKerricher State Park Water System Improvements Project
2. Lead Agency Name & Address:	California Department of Parks and Recreation
3. Contact Person & Phone Number:	Joel Bonilla (916) 445-8885
4. Project Location:	MacKerricher State Park
5. Project Sponsor Name & Address:	Northern Service Center California State Parks One Capitol Mall, Suite 410 Sacramento, CA 95814
6. General Plan Designation:	Resource Management Zone (MacKerricher SP General Plan), Open Space (Mendocino County General Plan)
7. Zoning:	Coastal Zone (Mendocino County General Plan)
8. Description of Project:	California State Parks proposes to upgrade the drinking water collection and treatment equipment at MacKerricher State Park to allow dependable year-round production of potable water for the park.
9. Surrounding Land Uses & Setting:	Refer to Chapter 3 of this document (Section XI, Land Use Planning)
10. Approval Required from Other	Refer to Chapter 2 of this document (Section XVIII, Tribal Cultural Resources)
17. California Native American tribe consultation pursuant to PRC 21080.3.1:	Refer to Chapter 3 of this document (Section XVIII, Tribal Cultural Resources)

1. 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.

☒ None		
☐ Aesthetics	☐ Agricultural Resources	☐ Air Quality
☐ Greenhouse Gas Emissions	☐ Wildfire	☐ Tribal Cultural Resources
☐ Biological Resources	☐ Cultural Resources	☐ Geology/Soils
☐ Hazards & Hazardous Materials	☐ Hydrology/Water Quality	☐ Land Use/Planning
☐ Mineral Resources	☐ Noise	☐ Population/Housing
☐ Public Services	☐ Recreation	☐ Transportation
☐ Utilities/Service Systems	☐ Mandatory Findings of Significance	☐ Energy

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 original scope of the proposed project **COULD** have had a significant effect on the environment, there **WILL NOT** be a significant effect because revisions/mitigations to the project have been made by or agreed to by the applicant. 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** or its functional equivalent will be prepared. ☐

I find that the proposed project **MAY** have a "potentially significant impact" or "potentially significant unless mitigated impact" on the environment. However, at least one impact has been adequately analyzed in an earlier document, pursuant to applicable legal standards, and has been addressed by mitigation measures based on the earlier analysis, as described in the report's attachments. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the impacts not sufficiently addressed in previous documents. ☐

I find that, although the proposed project could have had a significant effect on the environment, because all potentially significant effects have been adequately analyzed in an earlier EIR or Negative Declaration, pursuant to applicable standards, and have been avoided or mitigated, pursuant to an earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, all impacts have been avoided or mitigated to a less-than-significant level and no further action is required. ☐

_____ _____

Joel Bonilla
Environmental Coordinator

Date

ENVIRONMENTAL ISSUES

I. AESTHETICS.

ENVIRONMENTAL SETTING

MacKerricher SP is one of California's largest coastal parks at 2,463-acres. It contains many varied natural communities including extensive dunes, unique wetland habitats, and a relatively undisturbed marine environment typical of the northern California coast. Important scientific resources in the Park range from several sensitive and rare plant and animal species to the Inglenook Fen, the only coastal fen in California. In addition, MacKerricher SP's cultural resources chronical Native American activities in the area.

Mendocino County does not have officially designated scenic highways. However, State Route-1 (SR-1) is a highway segment that runs adjacent to the Park and is designated a "heritage corridor" by California Public Resources Code Section (PRC) 5077.5.

The Park spans 10 miles of coastline, starting at Glass Beach in Fort Bragg, and continuing north up the coast to Ten Mile River. An old haul road passes through MacKerricher SP, parallel to the coastline. Between the highway and ocean, an extensive dune system covers more than 1,200 acres, one of the major scenic attractions and prominent features of the Park.

Except as provided in Public Resources Code Section 21099, would the project:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

DISCUSSION

a) **Less than Significant** – The proposed project would temporarily affect the scenic qualities of the park in the immediate vicinity of the work. Construction equipment, materials and crew activities have the potential to disrupt visitors' enjoyment of the natural landscape for the duration of the project. However, upon completion the park would be

returned to its original appearance. Due to the temporary nature of the work, the project would have a less than significant impact on scenic vistas.

b) **No Impact** - The proposed project would not impact scenic resources or historic buildings within a state designated scenic route. Mendocino County does not have officially designated scenic highways. SR-1 is a heritage corridor under PRC 5077.5. However, the project would not be visible from the highway. Due to the temporary nature of the work and with the implementation of **Standard Project Requirement AES-1** (Chapter 2), the project would have no impacts.

c) **Less Than Significant** – A temporary decrease in the visual appeal of the area immediately affected by the work is expected as a result of construction activities. The presence of construction vehicles and other support equipment and associated emissions and noise may make it difficult for visitors to appreciate and experience the visual character and quality of the project site and the surrounding landscape. There would be no permanent or long-term degradation of the visual character of the site or its surroundings as a result of this project. Therefore, the impact from the project would be less than significant.

d) **Less Than Significant** – Lighting is not an element of this project and no new light sources would be introduced into the landscape. Two 10,000-gallon water stainless steel storage tanks will be constructed in the northeast corner of the Park maintenance yard, away from public view. All construction work would be limited to daylight hours, eliminating the need for work lights. Therefore, the impact would be less than significant.

STANDARD OR SPECIFIC PROJECT REQUIREMENT -

STANDARD PROJECT REQUIREMENT AES-1: SCENIC VIEWS	• Do not alter viewscapes to expose structures or undesirable views along scenic highways or scenic viewing locations. • Maximize the use of salvaged mature vegetation to reduce the time of regrowth. • Rehabilitate and remove all construction related impacts to pre-project or better than pre-project conditions.

MITIGATION MEASURE – NONE

II. AGRICULTURAL AND FOREST RESOURCES.

ENVIRONMENTAL SETTING

The Park is within the Mendocino County Coastal Zone and designated Open Space under the Mendocino County Coastal Element. None of the land within or immediately adjacent to the Park is zoned forest land or timberland production. The community of Cleone, which is adjacent to the Park, contains land under Williamson Act contract (MCGP, Coastal Element, 2009).

Farmland

California's agricultural resources are monitored by the Farmland Mapping and Monitoring Program (FMMP), under the California Department of Conservation (CDC). Every two years, the FMMP publishes statistical data related to the status of California Farmland. According to their most recent Important Farmland publication for Mendocino County (2016), the project location is identified as Nonagricultural and Natural under the FMMP.

Forestland and Timberland

California Public Resource Code Section 12220(g) defines forestland as land that can support 10 percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits.

"Timberland" is land owned by the federal government and designated by the State Board of Forestry and Fire Protection as experimental forestland, which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees. Sections 51112 or 51113 (h) of the California Public Resources Code defines "Timberland Production Zone" (TPZ) as land used for growing and harvesting timber and compatible uses.

In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forestland, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. The proposed project is located within MacKerricher SP and contains no land zoned for agriculture or in agricultural use, forest land or timberland production.

Williamson Act

The Williamson Act, also known as the California Land Conservation Act of 1965, enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. As of the most recent status report in 2010, Mendocino County had approximately 486,665 acres of land under Williamson Act contracts. MacKerricher SP is not within Williamson Act Contract.

Would the project:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
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?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in PRC section 12220(g)), timberland (as defined in PRC section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forestland or conversion of forestland to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environmental, which, due to their location or nature could result in conversion of Farmland, to non-agricultural use or conversion of forestland to non-forest use?	☐	☐	☐	☒

DISCUSSION

a-e)) **No Impact** - All work proposed as part of this project will be confined within park boundaries. Therefore, this project will have no impact on any category of California Farmland, conflict with any existing zoning for agricultural use or Williamson Act contract or result in the conversion of farmland to non-agricultural use or forestland to non-forest land. Furthermore, the proposed project is not within a timberland production zone and consistent with PRC section 12220(g), which allows for management of forestland for non-forest product uses, including recreation, aesthetics, fish and wildlife, biodiversity, and water quality.

STANDARD OR SPECIFIC PROJECT REQUIREMENT - NONE

MITIGATION MEASURE - NONE

III. AIR QUALITY.

ENVIRONMENTAL SETTING

The project site is located within the California Air Resources Board's (CARB) North Coast Air Basin, whose region includes Mendocino, Trinity, Del Norte and Sonoma Counties. The project site is under the jurisdiction of the Mendocino County Air Quality Management District (MCAQMD) and the U.S Environmental Protection Agency (EPA), Region 9.

CARB makes state area designations for ten criteria pollutants (an air pollutant for which acceptable levels of exposure can be determined and for which an ambient air quality standard has been set): level ozone, suspended particulate matter (PM_{10}), fine particulate matter ($PM_{2.5}$), carbon monoxide, nitrogen dioxide, sulfur dioxide, sulfates, lead, hydrogen sulfide, and visibility reducing particulates (CARB 2020). In contrast to the State area designations, the EPA makes national area designations for six criteria pollutants: ground-level ozone, particulate matter (PM_{10}) and fine particulate matter ($PM_{2.5}$), carbon monoxide, lead, nitrogen dioxide, and sulfur dioxide. A pollutant is designated "attainment" if the state standard for that pollutant was not violated at any site in the area for a three-year period. If there was at least one violation of a state standard for a pollutant in the area, it is designated as "nonattainment" for that pollutant. If there is not enough data available to determine whether the standard is exceeded in an area, the area is designated as "unclassified".

CARB 2020 Area Designations – State and National Criteria Pollutants

The MCAQMD is designated as "attainment" for the following state criteria pollutants: ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, sulfates, lead and fine particulate matter ($PM_{2.5}$). However, the MCAQMD is in "non-attainment", having not met the state standard under the California Clean Air Act for particulate matter (PM_{10}). Hydrogen sulfide and visibility reducing particles are categorized unclassified (CARB 2018).

Under national designation, the Mendocino County is categorized as unclassified/attainment for five national criteria pollutants. Particulate matter (PM_{10}) is categorized as unclassified.

Table 2 - State and National Criteria Pollutants Comparison

Pollutant	*State Designation*	*National Designation*
Ozone	Attainment	Unclassified/Attainment
PM_{10}	Nonattainment	Unclassified
$PM_{2.5}$	Attainment	Unclassified/Attainment
Carbon Monoxide	Attainment	Unclassified/Attainment
Nitrogen Dioxide	Attainment	Unclassified/Attainment
Sulfur Dioxide	Attainment	Unclassified/Attainment
Sulfates	Attainment	N/A
Lead	Attainment	Unclassified/Attainment
Hydrogen Sulfide	Unclassified	N/A
Visibility Reducing Particles	Unclassified	N/A

Mendocino County Air Quality Management District

MCAQMD develops standards to reduce emissions in compliance with state and federal regulation. In June of 2010, the MCAQMD recommended that agencies follow the Bay Area Air Quality Management District (BAAQMD) CEQA guidelines related to thresholds when evaluating new projects. In December 2013, MCAQMD published an interim CEQA criteria and Greenhouse Gas (GHG) pollutant thresholds advisory to clarify conflicting regulatory language. The MCAQMD significance thresholds for evaluating project impacts under CEQA are provided in Table 3, below.

Table 3 - MCAQMD Significance Thresholds Evaluation

Criteria Pollutant	*Avg. Daily Emission (Construction) (lb/day)*	*Indirect avg. Daily Emissions (Operational) (lb/day)*
ROG	54	180
NO_x	54	42
PM_{10}	82	82
$PM_{2.5}$	54	54
Fugitive Dust (PM_{10}/$PM_{2.5}$)	BMP	Same as above
Local CO	None	125 tpy
GHG (Stationary)	None	10,000 MT/yr
GHG (Non-Stationary)	None	1 MT of CO_2e/yr

Air Quality in South Coast Sub-Basin of Mendocino County

MCAQMD, for the purpose of providing background information for CEQA documents on specific projects, divides the county into air sub-basins. MacKerricher SP is located within the South Coast sub-basin. The South Coast primarily consist of low-density residential development and forest land, with large areas of parkland and a small amount of agricultural land. There is minimal industrial development. SR-1 serves as the main transportation corridor in the area and passes through the sub-basin. The heaviest traffic typically occurs during summer weekends and special events. The primary manmade sources of PM_{10} pollution in the area are wood combustion (woodstoves, fireplaces, and outdoor burning) and fugitive dust. The MCAQMD has no monitoring equipment in the South Coast area (MCGP,2009).

MCAQMD Air Quality Rules and Regulations

There are currently no ordinance or codes that provide mitigation for potential conflicts with air quality attainment plans. However, the MCAQMD has set regulations in place to maintain healthy levels of air quality through their Air Pollution Control Rules of the MCAQMD.

Sensitive Receptors

Sensitive receptors include individuals as well as groups relating to specific land uses. Some individuals are considered to be more “sensitive” than others to air pollutants. The reasons for greater sensitivity than average include health problems, proximity to the emission source, or

duration of exposure to air pollutants. Land uses such as primary and secondary schools, hospitals, and convalescent homes are considered to be sensitive receptors to poor air quality because the very young, elderly and infirm are more susceptible to respiratory infections and other air quality related health problems than the general public. Residential uses are considered sensitive receptors because people in residential areas are often at home for extended periods of time, so they can be exposed to pollutants for extended periods. Recreational areas are considered moderately sensitive to poor air quality because vigorous exercise associated with recreation places a high demand on the human respiratory function. Sensitive receptors in the proposed project areas include recreational uses (trail-users, park visitors, etc.) as well as the sparse residential development in the vicinity of the project.

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:	POTENTIALLY SIGNIFICANT IMPACT	LES S THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b) 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.	☐	☐	☒	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors adversely affecting a substantial number of people?	☐	☐	☒	☐

DISCUSSION

a) **No Impact** - The work proposed would not conflict with or obstruct the implementation of any applicable air quality management plan for MCAQMD.

b) **Less than Significant Impact** - Implementation of the proposed project would not result in the ongoing operation of any new emissions sources. Conditions would remain generally unchanged, thus, there will be minimal impact related to long-term emissions of criteria air pollutants and ozone precursors, but there will be temporary emissions. The short duration of construction and small project footprint will result in impacts of which are not significant. Table 4 presents summary of construction related emissions against MCAQMD Significance Thresholds. Construction assumptions used in the model are provided by the modeling software.

Table 4 - Estimated Construction Emissions with BMPs (lbs./day) and MCAQMD Significance Thresholds

PROJECT PHASES	ROG LBS./DAY	NO_X LBS./DAY	PM_{10} LBS./DAY	$PM_{2.5}$ LBS./DAY
DEMOLITION	2.1075	19.7928	1.1069	0.9905
SITE PREPARATION	1.6263	17.4794	6.6056	3.6695
GRADING	1.3588	14.3899	5.5928	3.1242
CONSTRUCTION	2.0091	14.6063	0.8115	0.7005
PAVING	0.8884	7.8384	0.4813	0.4019
ARCHITECTURAL COATING	0.2541	1.5564	0.1144	0.0999
PEAK DAILY TOTAL	2.1075	19.7928	6.6056	3.6695
MCAQMD SIGNIFICANCE	54	54	82	54
EXCEED SIGNIFICANCE	No	No	No	No

*Note: The "City Park" land use type was used in the modeling software as a proxy for State Park land use type.

BMPs will in place to minimize fugitive dust during ground disturbance activities. Potential impacts from fugitive dust emission will be limited by implementation of **STANDARD PROJECT REQUIREMENT AIR-1** (Chapter 2). Compliance with these standards will reduce air quality emission impacts related to the project to a less than significant level.

c) **Less Than Significant Impact** - Project construction activities would not emit air contaminants at a level that, by themselves, would violate any local, state, or federal ambient quality standard, or contribute to a permanent or long-term increase in any air contaminant. Short-term construction emissions will be limited by implementation of **STANDARD PROJECT REQUIREMENT AIR-1**. Compliance with these standards will reduce air quality emission impacts related to the project to a less than significant level.

d) **Less Than Significant Impact** - The project will not generate any long-term objectionable odors. During the construction of the project there may be short-term objectionable odors from large equipment exhaust, but they will be limited by implementation of **STANDARD PROJECT REQUIREMENT AIR-1**.

STANDARD OR SPECIFIC PROJECT REQUIREMENTS – AIR QUALITY

STANDARD PROJECT REQUIREMENT AIR-1: EMISSIONS OF FUGITIVE DUST AND OZONE	• All construction areas (dirt/gravel roads and surrounding dirt/gravel area) will be watered at least twice daily during dry, dusty conditions while in use by large machinery for project actions. • All trucks hauling soil or other loose materials on public roads will be covered or required to maintain at least two feet of freeboard.

	• All construction related equipment engines will be maintained in good condition, in proper tune (according to manufacturer's specifications), and in compliance with all state and federal requirements. • Potential dust producing actions will be suspended if sustained winds exceed twenty five (25) miles mph, instantaneous gusts exceed thirty five (35) mph, or dust from construction might obscure driver visibility on public roads. • Earth or other material that is transported onto paved roadways by trucks, construction equipment, erosion, or other project-related activity will be promptly removed. • Idling time will be minimized to ten (10) minutes for all diesel-powered equipment.

MITIGATION MEASURE - NONE

IV. BIOLOGICAL RESOURCES.

ENVIRONMENTAL SETTING

MacKerricher SP is a 2,463-acre park in coastal Mendocino County located west of State Route 1 and extending approximately nine miles from the north end of the city of Fort Bragg to the south bank of Ten Mile River. Park acreage includes tidal and submerged lands leased from the State Lands Commission for an underwater park and terrestrial lands leased from the federal Bureau of Land Management.

The southern portion of MacKerricher SP consists of a coastal terrace dissected by small to medium sized drainages and terminating in steep, rock bluffs and isolated beaches. A relatively gentle topography, highlighted by Lake Cleone and surrounding wetlands and coniferous forests, characterizes the central portion of MacKerricher SP. Most of the park acreage occurs north of Lake Cleone, consisting primarily of an extensive dune system punctuated by small seasonal wetlands and two large wetland complexes, including a very rare coastal fen. A continuous stretch of beach extends from Laguna Point north to the Ten Mile River.

Grasslands and coastal scrub vegetation predominate on the coastal terraces south of Laguna Point. Coniferous forest dominated by bishop pine (*Pinus muricata*) and shore pine (*Pinus contorta* ssp. *contorta*) occupy upland areas surrounding Lake Cleone, while wetland/riparian vegetation occur in low-lying areas adjacent to the lake and its primary source, Mill Creek. The dune system north of Lake Cleone supports dune scrub, grassland swales, and wetland/riparian vegetation (Inglenook Fen, Inglenook Creek) contrasting with larger areas of barren sand. A narrow strip of coastal strand vegetation borders the park's beaches.

Natural Communities

The California Department of Fish and Wildlife (CDFW) have classified vegetation types (natural communities) occurring in the state, which are described in the Manual of California Vegetation (Sawyer et al 2009) and that utilize standards complying to the U.S. National Vegetation Classification Standard adopted by the federal government (USNVC 2019).

The classification level/category commonly used in describing vegetation is Alliance, which is equivalent to the more generic term plant community or natural community. Alliances are based on the dominant, or less commonly co-dominant, species within the vegetation layer that is most important in defining its type (e.g. tree, shrub, and herb). Vegetation can be more finely differentiated into Associations, and are named by the diagnostic species, usually from multiple forms or layers.

A CSP botanist has identified five (5) vegetation types within or immediately adjacent to the project areas. These are:

- *Alnus rubra* (Red Alder Forest) Forest Alliance
- *Pinus muricata* (Bishop Pine Forest) Forest Alliance
- *Frangula purshiana*/*Rubus ursinus* Association

- *Anthoxanthum odoratum – Avena barbata* Association
- *Typha latifolia – Schoenoplectus acutus* Association

The California Department of Fish and Wildlife (CDFW) designates sensitive natural communities due their rarity and the Bishop Pine Forest is a CDFW sensitive community. Both the Bishop Pine Forest and the Red Alder Forest types comprise environmentally sensitive habitat areas (ESHA), as defined in the California Coastal Commission (CCC) certified Coastal Element of the Mendocino County General Plan.

***Alnus rubra* Forest Alliance**

Red alder (*Alnus rubra*) and to a lesser extent Sitka willow (*Salix sitchensis*) dominates the canopy of the *Alnus rubra* Forest Alliance, a riparian vegetation type identified by Mendocino County as an ESHA. Common shrub and herbaceous species include natives such as cascara buckthorn (*Frangula purshiana*), salmonberry (*Rubus spectabilis*), California blackberry (*Rubus ursinus*), red elderberry (*Sambucus racemosa* var. *racemosa*) and hedge-nettle (*Stachys ajugoides*) var. *rigida*). Patches of invasive non-native species are limited in extent, but include velvet grass Himalaya berry (*Rubus armeniacus*) and velvet grass (*Holcus lanatus*). A mostly closed canopy *Alnus rubra* Forest Alliance comprises the vegetation at the Mill Creek water intake site, with a dense understory of herbaceous and shrubby species.

***Pinus muricata* Forest Alliance**

Bishop pine (*Pinus muricata*) dominates the canopy of the *Pinus muricata* Forest Alliance; beach pine (*Pinus contorta* ssp. *contorta*) occurs in the canopy as scattered individuals. Common shrub and herbaceous species include wax myrtle (*Myrica californica*), salal (*Gaultheria shallon*), twinberry (*Lonicera involucrata*), bracken fern (*Pteridium aquilinum* var. *pubescens*), reed grass (*Calamagrostis nutkaensis*), California blackberry (*Rubus ursinus*), false Solomon's seal (*Smilacina stellata*), hedge-nettle, and velvet grass. The proposed water line route from the maintenance area to the park entrance road traverses a small area of very open Bishop pine forest.

***Anthoxanthum odoratum – Avena barbata* Association**

Non-native sweet vernal grass (*Anthoxanthum odoratum*) and slender oat (*Avena barbata*) dominate this herbaceous vegetation type. Other common species include non-native species such as orchard grass (*Dactylis glomerata*) and English plantain (*Plantago lanceolata*); native species include California blackberry. This vegetation type predominates along most of the water line route from the maintenance area to the park entrance road.

***Typha latifolia – Schoenoplectus acutus* Association**

Cattail (*Typha latifolia*) and hardstem bulrush (*Schoenoplectus acutus*) co-dominate this marsh community, identified as coastal brackish marsh in some older vegetation classification systems. Other common native species include slough sedge (*Carex obnupta*) and salt grass (*Distichlis spicata*). This vegetation encompasses the shoreline of Lake Cleone and the current pump house and water intake structure.

***Frangula purshiana/Rubus ursinus* Association**

Cascara buckthorn and California blackberry co-dominate this vegetation, which grows in wetter (mesic) upland locations of the park and at the site of the new pump station. Other common species at the pump house site include native bracken fern, immature tanoak (*Notholithocarpus densiflorus*), Oso berry (*Oemleria cerasiformis*), Western sword fern (*Polystichum munitum*), and California wax myrtle (*Morella californica*).

SPECIAL-STATUS SPECIES

Sensitive biological resources that occur or potentially occur in or near the proposed project area are discussed in this section. Special-status species (aka sensitive species) are defined as plants and animals that are legally protected or that are considered sensitive by federal, state, or local resource conservation agencies and organizations. Specifically, this includes species listed as state or federally Threatened or Endangered, those considered as candidates for listing as Threatened or Endangered, species identified by the United States Fish and Wildlife Service (USFWS) and/or California Department of Fish and Wildlife (CDFW) as California Species of Special Concern (SSC), animals identified by CDFW as Fully Protected or Protected, other protected or sensitive animals, and plants considered by the California Native Plant Society (CNPS) to be rare, threatened, or endangered. Also included are habitats that are considered critical for the survival of a listed species or have special value for wildlife species and plant communities that are unique or of limited distribution.

All special-status species and their habitats were evaluated for potential impacts from the proposed MacKerricher SP Water System Improvements Project. Existing available data, including the MacKerricher State Park General Pan (CDPR 1995), were collected and reviewed to determine the proximity of special status plants, animals, and their habitats to the project areas. Queries of the California Department of Fish Wildlife's California Natural Diversity Database (CDFG 2020), the California Native Plant Society's[1] On-line Inventory (CNPS 2020), and the U.S. Fish and Wildlife Service IPaC program (USFWS 2020) were conducted for special-status species and habitats within the Fort Bragg 7½ -minute United States Geological Society (USGS) quadrangle maps.

Project areas were visited in 2017, 2019 and 2020 to verify and evaluate data identified above.

Special-status plant and animal species are described below along with their potential to occur within or adjacent to the project area.

PLANT SPECIES

Forty-three special-status plant species have been identified by the California Natural Diversity Data Base (CNDDB 2020), CNPS (2020), and the USFWS (2020) for the Fort Bragg 7½ -minute USGS quadrangle. Most of these species are restricted to habitat that does not occur within or adjacent to project areas (e.g. coastal dunes, coastal scrub). Extensive surveys for

[1] California Native Plant Society (CNPS) Rare Plant Ranks: List 1A = presumed extinct in California; List 1B = rare or endangered in California and elsewhere; List 2 = rare or endangered in California, more common elsewhere; List 3 = need more information; List 4 = plants of limited distribution. Threat code extensions are: .1 = seriously endangered in California; .2 = fairly endangered in California; and .3 not very endangered in California.

special status plant species were conducted in 2001 in the southern portion of MSP from just north of Lake Cleone to Pudding Creek (EDAW, Inc. 2001). A CSP botanist conducted site-specific surveys in 2019 during the appropriate blooming periods or when plants could be positively identified.

Special-Status Plant Species that are Known to Occur, or Could Potentially Occur within Project Areas:

Bolander's reed grass (*Calamagrostis bolanderi*) – Bolander's reed grass is a California Rare Plant Rank 4.2 perennial rhizomatous herb that blooms from May to August at elevations from sea level to approximately 1493 feet amsl (above mean sea level). This California endemic species ranges from Humboldt to Sonoma Counties and occurs in various habitats, including bogs and fens, broadleafed upland forest, closed-cone coniferous forest, coastal scrub, meadows and seeps, marshes and swamps (freshwater), and North Coast coniferous forest. Potential habitat for this species exists at the Lake Cleone water intake site.

Coast lily (*Lilium maritimum*) – Coast lily is a California Rare Plant Rank 1B.1 perennial bulbiferous herb that is endemic to California and occurs at elevations of approximately 16 feet to 1560 feet amsl in Del Norte, Humboldt, Mendocino, Marin, and Sonoma Counties. It blooms from May to August and inhabits broadleafed upland forest, closed-cone coniferous forest, coastal prairie, coastal scrub, marshes and swamps (freshwater), and North Coast coniferous forest. Coast lily occurs in the park and potential marginal habitat exists at the Lake Cleone water intake site.

Deceiving sedge (*Carex saliniformis*) – Deceiving sedge is a California Rare Plant Rank 1B.2 perennial rhizomatous herb that is endemic to California. Blooming June through July, this species occurs at elevations of approximately 10 feet to 755 feet amsl in Humboldt, Mendocino, Santa Cruz and Sonoma Counties. It requires mesic habitats and is found in coastal prairie, coastal scrub, meadows and seeps, and marshes and swamps (coastal salt). Potential habitat for this species exists at the Lake Cleone and Mill Creek water intake sites.

Harlequin lotus (*Hosackia gracilis*) – Harlequin lotus is a California Rare Plant Rank 4.2 perennial rhizomatous herb that inhabits wetlands and roadsides from Santa Cruz County through Del Norte County and north into Oregon and Washington. It is found in various habitats, including broadleafed upland forest, coastal bluff scrub, closed-cone coniferous forest, cismontane woodland, coastal prairie, coastal scrub, meadows and seeps, marshes and swamps, North Coast coniferous forest, and valley and foothill grassland. Blooming from March to July, this species occurs at elevations from sea level to approximately 2300 feet amsl. Harlequin lotus provides larval food for the one of the rarest butterflies in the world, the federally endangered Lotis Blue Butterfly (*Lycaeides argyrognomon lotis*). Harlequin lotus occurs in the park and potential habitat exists at the Lake Cleone water intake site.

Johnny-nip (*Castilleja ambigua* var. *ambigua*) – Johnny-nip is a California Rare Plant Rank 4.2 annual herb that blooms from March to August at elevations from sea level to approximately 1430 feet amsl. It ranges from Santa Cruz County to Del Norte County and north into Oregon and Washington. Johnny-nip occurs in several habitats, including coastal bluff scrub, coastal prairie, coastal scrub, marshes and swamps, valley and foothill grassland, and the margins of

vernal pools. Potential habitat for this species exists at the Lake Cleone and Mill Creek water intake sites.

Lyngbye's sedge (*Carex lyngbyei*) – Lyngbye's sedge is a California Rare Plant Rank 2B.2 perennial rhizomatous herb that blooms from April to August at elevations from sea level to approximately 32 feet amsl. Ranging on or near the coast from Napa County to Del Norte in California and north to Alaska, this species is restricted to brackish or freshwater swamp habitats. Lyngbye's sedge occurs in the park on the south bank of the Ten Mile River. Potential habitat for this species exists at the Lake Cleone water intake site.

Purple-stemmed checkerbloom (*Sidalcea malviflora* ssp. *purpurea*) – Purple-stemmed checkerbloom is a California Rare Plant Rank List 1B.2 perennial rhizomatous herb that blooms May through June. It occurs from San Mateo to Mendocino Counties in broad-leaved upland forest and coastal prairie habitats at elevations of approximately 50 feet to 210 feet amsl. This species occurs in the park and marginally suitable habitat exists between the maintenance yard and the Mill Creek intake site.

Sea watch (*Angelica lucida*) – Sea watch is a California Rare Plant Rank List 4.2 perennial herb that occurs in coastal bluff scrub, coastal dunes, coastal scrub, and marshes and swamps (coastal salt) habitat of coastal Mendocino, Humboldt and Del Norte Counties and elsewhere in North America. It blooms May through September and ranges in elevation from sea level to approximately 492 feet amsl. Suitable habitat may exist at the Lake Cleone water intake site.

Swamp harebell (*Campanula californica*) – Swamp harebell is a California Rare Plant Rank 1B.2 perennial rhizomatous herb endemic to California, with reported occurrences in Mendocino, Marin, Santa Cruz, and Sonoma Counties. It requires mesic habitats, including bogs and fens, closed-cone coniferous forest, coastal prairie, meadows and seeps, marshes and swamps (freshwater), and North Coast coniferous forest. Blooming from June to October, this species occurs at elevations from sea level to approximately 1330 feet amsl. This species has been identified in the park and potential habitat for this species exists at the Lake Cleone and Mill Creek water intake sites.

WILDLIFE SPECIES

Fifteen special status wildlife species have been identified by the California Natural Diversity Data Base (CNDDB 2020) and/or the United States Fish and Wildlife Service (USFWS 2020) for the Fort Bragg and Inglenook USGS quads (Appendix 2). Based on unpublished biological surveys and inventories there are several other special status wildlife species that are known or suspected to occur in MSP. Suitable habitat is available in or adjacent to the project areas for sixteen special status wildlife species, which are described below.

Special-Status Wildlife Species that are Known to Occur, or Could Potentially Occur within the Project Area

Northern red-legged frog (*Rana aurora*) – Northern red-legged frog is a SSC amphibian species that breeds in permanent water bodies such as ponds, lakes, slow moving streams, marshes and wetlands from Mendocino County to British Columbia, Canada (Jennings and

Hayes 1994; Stebbins 2003). Although the related, and Federally Threatened, California red-legged frog (Rana draytonii) has been reported from northern Mendocino County, biologists have determined it does not range north of Elk Creek (AmphibiaWeb 2020). Suitable habitat may be present in Lake Cleone and was reported at Mill Creek in 1945 (CDFW 2018b).

Northern western pond turtle (*Actinemys marmorata*) – Northern western pond turtle is a SSC species that inhabits still or slow moving aquatic habitats with submerged or emergent vegetation and also requires open basking areas and sandy or loose soil sites to lay eggs (Jennings and Hayes 1994; Stebbins 2003). Mating usually occurs in April and May and females then lay eggs in upland nest locations. Nests must have sufficient internal humidity for eggs to develop and hatch properly (Jennings and Hayes 1994). Lake Cleone and Mill Creek provides potential aquatic habitat for the northern western pond turtle.

Nesting Migratory Birds and Raptors are protected by the federal Migratory Bird Treaty Act (16 U.S.C. 703-712), and by the state Department of Fish and Game Code (Sections §3503, §3503.5, and §3513). Under these laws, all raptors and migratory birds and their nests are protected. A wide variety of migratory birds and several raptor species potentially occur in the project areas. Several raptor species are known to occur within MSP, including short-eared owl, northern harrier, white-tailed kite, Cooper's hawk, and sharp-shinned hawk. All are California Species of Concern except for the white-tailed kite, which is a California Fully Protected Species. There is a potential for these species to nest within the general vicinity of the project areas.

SENSITIVE NATURAL COMMUNITIES

Sensitive plant communities are those that are regionally uncommon or unique, unusually diverse, or of special concern to local, state, and federal agencies. Removal or substantial degradation of these plant communities constitutes a significant adverse impact under CEQA. The CDFW's CNDDB maintains a list of the state's plant communities (also known as alliances) and identifies those of high inventory priority due to their rarity and threat. These are considered sensitive natural communities by regulatory agencies.

The CDFW classifies the *Pinus muricata* Forest Alliance as a sensitive natural community, which occurs along the proposed water line from the maintenance yard to the Mill Creek project site. The *Alnus rubra* Forest Alliance and *Pinus muricata* Forest Alliance comprise environmentally sensitive habitat areas (ESHA), as defined in the California Coastal Commission (CCC) certified Coastal Element of the Mendocino County General Plan. ESHA's are subject to regulatory authority of the Mendocino County Planning Department within the CCC-defined coastal zone.

SUDDEN OAK DEATH

Discovered in 1995, Sudden Oak Death (SOD) is caused by the pathogen *Phytophthora ramorum*, which has infected and killed thousands of tanoak, coast live oak, Shreve oak, and California black oak trees in coastal forests from Humboldt County to Monterey County (COMTF 2008). This water mold also infects many other species, including California bay laurel (*Umbellularia californica*), Pacific madrone (*Arbutus menziesii*), California buckeye (*Aesculus californica*), coast redwood, Douglas-fir, big leaf maple (*Acer macrophyllum*),

California honeysuckle (*Lonicera hispidula var. vacillans*), California coffeeberry (*Rhamnus californica*), toyon (*Heteromeles arbutifolia*), rhododendron (Rhododendron spp.), manzanita (*Arctostaphylos* spp.) and huckleberry (*Vaccinium* spp.).

SOD may be spread when host plants, wood chips, burls, other host plant products or soils contaminated with the pathogen's spores are moved to previously uninfected areas (COMTF 2009). SOD thrives in cool, wet to moist climates, and living plants and its spores can be found in soil and water as well as plant material. The risk of SOD spread is greatest in muddy areas and during rainy weather where spore-harboring hosts are present. Detached plant leaves, organic material, and soil, which may harbor spores of the pathogen, are more likely to stick to vehicles, equipment, and humans when they are wet.

Mendocino County is one of 14 California counties to have confirmed SOD findings and is under state and federal quarantine regulations governing the movement of affected plants or plant material out of the quarantined area (COMTF 2020). The California County Agricultural Commissioners are the enforcement agents for state and federal regulations governing *Phytophthora ramorum*.

WETLANDS AND WATERS OF THE UNITED STATES

Waters

The federal Clean Water Act (CWA) is a 1977 amendment to the Federal Water Pollution Control Act of 1972, which set the basic structure for regulating discharges of pollutants to waters of the United States. The intent was to maintain the chemical, physical, and biological integrity of the nation's waters [Federal Water Pollution Control Act/Clean Water Act, 33 U.S.C. 1251, §101(a), 2002]. In addition, the CWA intended to provide a mechanism for regulating discharges of pollutants into the waters of the U.S and gave the U.S. Environmental Protection Agency (USEPA) authority to implement pollution control programs, such as setting wastewater standards for industry and water quality standards for all contaminants in surface waters.

Section 404 of the CWA establishes programs to regulate the discharge of dredged and fill material into waters of the United States, including wetlands. The term "waters of the U.S." applies to the jurisdictional limits of the authority of the US Army Corps of Engineers (USACE) to regulate navigable waters under Section 404 of the CWA. Section 502(7) of the Act defines navigable waters as "waters of the United States, including the territorial seas." By definition, navigable waters include all wetlands and tributaries to "waters of the United States."

Section 10 of the federal Rivers and Harbors Act of 1899 provides the USACE additional authority to regulate navigable waters. Under this statute, the USACE regulates excavation or filling operations or the alteration or modification of the course, location, condition, or capacity of any navigable water of the United States. Waters are defined in this statute as all waters used in interstate or foreign commerce, waters subject to the ebb and flow of the tide, all interstate waters including interstate wetlands and all other waters such as intrastate lakes, rivers, streams, mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, and natural ponds.

For purposes of Section 404 of the Clean Water Act, the lateral limits of USACE-jurisdiction over non-tidal water bodies (e.g. streams) extend to the ordinary high-water mark (OHWM), in the absence of wetlands (USACE 2005). No project work would occur within the OHWM of Mill Creek. Removal of the existing pump station at Lake Cleone would be limited to a small area of less than 1/10 of an acre within the OHWM of the lake.

Pursuant to Fish and Game Code Section 1600 et seq., the CDFW regulates any work undertaken in or near a river, stream, or lake that flows at least intermittently through a bed or channel. No project work would occur within the bed and bank of Mill Creek.

Wetlands

The federal Clean Water Act (CWA) defines wetlands as lands that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. The U.S. Army Corps of Engineers (USACE) has jurisdictional authority of wetlands under provisions found in Section 404 of the CWA. Typically, USACE-jurisdictional wetlands meet three criteria: hydrophytic vegetation, hydric soils, and wetland hydrology. The current Lake Cleone water intake and pump house sites are bordered by but not within USACE-jurisdictional wetlands.

The California Coastal Commission defines wetlands as all “lands which may be covered periodically or permanently with shallow water…” (Section 30121, Coastal Act). The presence of only one of the three wetland parameters (i.e., soils, vegetation, or hydrology) that are needed to meet the USACE definition of a wetland is needed to meet the criteria for a Coastal Commission wetland. Coastal wetlands border but are not within the limits of the Lake Cleone pump house site.

	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
WOULD THE PROJECT:				
a)Have a substantial adverse effect, either directly or through habitat modification, on any species identified as a sensitive, candidate, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the 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, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?	☐	☐	☒	☐
c) Have a substantial adverse effect on federally protected wetlands, as defined by §404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
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?	☐	☐	☐	☒
e)Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

DISCUSSION

In order to reduce impacts to sensitive, candidate, or special status species to a less than significant level, Project Requirements would be incorporated into the project description and implemented.

a) **Less Than Significant** – (i) Special-status plant species. As stated in the Environmental Setting above, suitable to marginally habitat occurs within project areas for nine special-status plant species. Integration of **Specific Project Requirement Bio-1: Special Status Plant Species** (see Chapter 2, Project Description) would reduce any potential impacts to a less than significant level.

(ii) **Northern red-legged frog.** Suitable breeding habitat for this species may be present in Lake Cleone and potential upland habitat may be available around the pump house. Integration of **Specific Project Requirement Bio-2 Northern Red-legged Frog** (see

chapter 2, Project Description) would reduce any potential impacts to a less than significant level.

(iii) **Northern western pond turtle.** Suitable breeding habitat for this species may be present in Mill Creek and the Lake Cleone sites; potential upland habitat may be available around the pump house and above the banks of Mill Creek. Integration of **Specific Project Requirement Bio-3: Northern Western Pond Turtle** (see chapter 2, Project Description) would reduce any potential impacts to a less than significant level.

(iv) **Nesting bird species.** Nesting Migratory Birds and Raptors are protected by the federal Migratory Bird Treaty Act (16 U.S.C 703-712), and by the state Department of Fish and Wildlife Code (Sections §3503, §3503.5 and §3513). Under these laws, all raptors and migratory birds and their nests are protected. Many migratory birds and several raptor species can potentially occur in the project area. If migratory birds or raptors are present within the project areas, temporary impacts to nesting birds could result from project implementation. No permanent habitat loss would occur as a result of the project. Integration of **Standard Project Requirement Bio-4: Nesting Migratory Bird and Raptor Species** (see Chapter 2, Project Description) would reduce any potential impacts to a less than significant level.

b) **Less Than Significant** – As described in the Environmental Setting above, the *Pinus muricata* Forest Alliance is a CDFW-designated sensitive natural community; however, installation of the new water line will avoid negative effects to this community. The *Alnus rubra* Forest Alliance and comprise the dominant vegetation at some project sites. The *Alnus rubra* Forest Alliance consists of sensitive riparian habitat (ESHA) adjacent to Mill Creek and is subject to regulation under provisions of the Mendocino County LCP. Proposed work at the Mill Creek site includes limited brushing of native shrubs and herbaceous plants. A Mendocino County Coastal Development Permit (CDP) will be required for work at this site. Although Mill Creek constitutes a Water of the U.S. as defined in the CWA, no proposed work would occur within the OHWM. All permit/agreement conditions of the CDP would be implemented, reducing any potential impacts to a less than significant level.

Integration of **Specific Project Requirement Bio-5: Sensitive Natural Communities/Habitats** (see Chapter 2, Project Description) would reduce any potential impacts to sensitive natural communities and sensitive habitats to a less than significant level.

c) **No Impact** - As described in the Environmental Setting above, the existing Lake Cleone water intake and pump house site is within USACE-jurisdictional waters; however, no discharge of dredged or fill material will occur at this site and no CWA 404 permit is required for project activities at this location. Coastal wetland habitat (ESHA) borders the existing Lake Cleone pump house site, but will not be affected by project activities.

d) **No Impact** - The proposed project will not impede fish passage or wildlife movement. The project would not interfere substantially with the movement of any native resident fish or wildlife species or with established native resident or migratory wildlife corridors.

e) **Less Than Significant Impact** - As stated in the Environmental Setting above, Mendocino County is subject to state and federal quarantine regulations for the pathogen *Phytophthora ramorum*, which causes the often fatal disease known as Sudden Oak Death in numerous species of native plants, especially oaks. Project activities could inadvertently transport this disease to new uninfected locations through pathogen spores in soil or on infected plant material that stick to construction vehicles, equipment, or personnel. Implementation of **Project Specific Requirement Bio-6: Sudden Oak Death** (see Chapter 2, Project Description) would reduce any potential impacts to a less than significant level.

f) **No Impact** - This project would not conflict with any Habitat Conservation Plans, Natural Communities Conservation Plans, or other approved habitat conservation plan.

STANDARD OR SPECIFIC PROJECT REQUIREMENT

Biological Resources	
SPECIFIC PROJECT REQUIREMENT BIO-1: **SPECIAL STATUS PLANT SPCIES**	Surveys for special status plant species with a potential to occur in the project area will be conducted during the appropriate blooming periods or when identity can be confirmed. All occurrences of special status plant species within the project areas will be recorded on project maps, flagged or otherwise identified on the ground. Where possible, occurrences of all special status plants will be avoided and protected from construction activities. Those locations where special status plants can't be avoided will be subject to the following conditions: <u>Perennial Species</u> • Prior to construction plants will be carefully excavated and transplanted nearby in suitable habitat. All transplant work will be conducted under the direction of a CSP Environmental Scientist or CSP-approved biologist. • Transplanting will occur during the dormant growing season (i.e. late fall) when the plants are least disturbed and when they can be watered by winter precipitation. <u>Annual Species</u> • Seeds from annual special status plant species will be collected during the appropriate season and properly stored prior to ground disturbing activities. Seeds will be sown during the appropriate season in suitable locations identified by a CSP Environmental Scientist.

STANDARD PROJECT SPECIFIC PROJECT REQUIREMENT BIO-2: NORTHERN RED-LEGGED FROG	• Prior to the start of construction, a CSP Environmental Scientist or CSP-approved biologist will conduct a training session for all construction personnel involved with the project. At a minimum, the training will include a description of this species and its habitat and the measures that will be implemented to protect this species. The training session will include instruction in the appropriate protocol to follow in the event a northern red-legged frog is encountered or found onsite. Handouts with photos of this species will be provided to construction personnel. • Before any ground-disturbing construction activities begin at the Lake Cleone or Mill Creek water intake project sites, a CSP-approved biologist familiar with northern red-legged frog will conduct a survey for this species to determine the presence within the project site. If frogs are found on these project sites then individuals will be removed and released in a suitable location outside the project site, as directed by a CSP Environmental Scientist. • A CSP-approved biologist will conduct a visual inspection of the construction zones at the Lake Cleone and Mill Creek water intake project sites for northern red-legged frog prior to the start of work each morning or as directed by a CSP Environmental Scientist. • If a northern red-legged frog is found, then the start of work at this location will be delayed until the frog moves out of the site on its own accord, or is relocated to a suitable location outside of the project area by the CSP-approved biologist, as directed by a CSP Environmental Scientist.
SPECIFIC PROJECT REQUIREMENT BIO-3: NORTHERN WESTERN POND TURTLE	• Prior to the start of construction, a CSP Environmental Scientist or CSP-approved biologist will conduct a training session for all construction personnel involved with the project. At a minimum, the training will include a description of this species and its' habitat and the measures that will be implemented to protect this species. The training session will include instruction in the appropriate protocol to follow in the event a western pond turtle is encountered or found onsite. Handouts with photos of this species will be provided to construction personnel. • Before any ground-disturbing construction activities begin at the Lake Cleone or Mill Creek water intake project sites, a CSP-approved biologist familiar with northern western pond turtle will conduct a survey for this species to determine the presence within the project site. If juvenile or adult turtles are found on the project site then individuals will be removed and released in a suitable location outside the project site, as directed by a CSP Environmental Scientist. • A CSP-approved biologist will conduct a visual inspection of the construction zones at the Lake Cleone and Mill Creek water intake project sites for northern western pond turtle prior to the start of work each morning or as directed by a CSP Environmental Scientist.

	• If a northern western pond turtle is found, then the start of work at this location will be delayed until the turtle moves out of the site on its own accord, or is relocated to a suitable location outside of the project area by the CSP-approved biologist, as directed by a CSP Environmental Scientist.
STANDARD PROJECT REQUIREMENT BIO-4: NESTING MIGRATORY BIRD AND RAPTOR SPECIES	If construction-related activities exceeding ambient noise levels are conducted between February 1 and August 31 then focused surveys for nesting migratory bird and raptor species will be conducted by a CSP Environmental Scientist or CSP-approved biologist before construction activities occur in these months to identify active nests. • Surveys for active raptor nests will be conducted within a 500-foot radius of the project area no more than 7 days prior to the beginning of construction. If nesting raptors are found, no construction activities will occur within a 500-foot radius of the nest tree until the young have fledged and the young will no longer be impacted by project activities, as determined by the CSP Environmental Scientist or CSP-approved biologist. • Surveys for active migratory bird nests will be conducted within a 100-foot radius of the project no more than 7 days prior to the beginning of construction. If active nests are located, no construction activities will occur within a 150-foot radius of the nest tree until the young have fledged and the young will no longer be impacted by project activities, as determined by the CSP Environmental Scientist or CSP-approved biologist.
SPECIFIC PROJECT REQUIREMENT BIO-5: SENSITIVE NATURAL COMMUNITIES/HABITATS	• Where possible all ground disturbing activities will occur outside of the Root Health Zone (RHZ = 5 times the Diameter at Breast Height (dbh)) of all trees with a dbh of 12 inches or greater. If construction activities that could potentially damage trees (as determined by a CSP Environmental Scientist) are approved within the RHZ of tree trunks, then trees not scheduled for removal will be protected prior to the start of construction using the tree trunk protection measure as identified in Section 015639 of the Project Manual). Tree trunk and root protection will consist of a wood guard that is constructed from rough sawn 2”x6”x8’ pieces of lumber that are placed at 12” on center and then attached vertically around the trunk of the tree using 3” wide nylon straps. Lumber shall extend to the natural base of the tree and must protect any exposed roots. A CSP Environmental Scientist will check this during construction, at their discretion. Wood guards will be removed when construction is complete. • In work locations where trenching or other ground disturbing activities are scheduled within the RHZ zone of trees with a dbh of 12 inches or greater, then hand excavation will be required to avoid severing roots that are larger than 1 inch in diameter. It is permissible to tunnel (HDD) under the RHZ at a depth greater than 2 feet. It is also permissible to remove soil by hand from roots.

	• A CSP-approved biologist will monitor the excavation of the water line from the maintenance area to the Mill Creek water intake site to ensure that the ***Pinus muricata* Alliance** (Bishop pine forest) is not affected by construction activities. • A CSP-approved biologist will monitor construction activities at the existing Lake Cleone pump house and Mill Creek project sites to ensure that impacts to sensitive wetland and riparian habitat work are kept to the minimum necessary to accomplish project objectives. • No construction-related activities will be allowed outside of delineated work areas unless authorized in advance by a CSP Environmental Scientist. • Periodic monitoring of construction activities may be conducted at the discretion of a CSP Environmental Scientist. • Staging of construction equipment and project materials will occur on paved surfaces or previously hardened surfaces to minimize soil and duff compaction of native habitat.
PROJECT SPECIFIC REQUIREMENT BIO-6: SUDDEN OAK DEATH	All project activities that could spread *Phytophthora ramorum* to new locations will be subject to Best Management Practices (including proper sanitation measures) developed by the California Oak Mortality Task Force and available online at http://www.suddenoakdeath.org/index.html.

MITIGATION MEASURE - None

V. CULTURAL RESOURCES.

Regulatory Setting

"Cultural resources" as used in this document refers to all "built environment" resources (structures, bridges, railroads, water conveyance systems, etc.), culturally important resources, and archaeological resources (both prehistoric and historical) regardless of significance.

Historical resources are considered under the California Environmental Quality Act (CEQA), as well as California Public Resources Code (PRC) Section 5024.1, which established the California Register of Historical Resources (California Register). In addition, PRC Section 5024 requires state agencies to identify and protect state-owned resources that meet National Register of Historic Places (NRHP) listing criteria. It further specifically requires California State Parks to inventory state-owned structures on its property. Sections 5024(f) and 5024.5 require state agencies to provide notice to consult with the State Historic Preservation Officer (SHPO) before altering, transferring, relocating, or demolishing state-owned historical resources that are listed on or are eligible for inclusion in the National Register or are registered or eligible for inclusion as California Historical Landmarks

Cultural resources encountered in the park (and project area) are the result of human behaviors in, and adaptations to the natural setting. A basic understanding of the environment and the cultural context is fundamental since placement of prehistoric and historic sites on the landscape is often associated with proximity to an abundance of natural resources. Represented throughout MacKerricher SP landscape, are various prehistoric and historical archaeological site types.

Environmental Setting

The project area is located within MacKerricher SP on the northern Mendocino Coast. MacKerricher SP spans approximately 2,463acres west of Highway 1 and encompasses much of the land west of the town of Cleone on a strip of coastline between Fort Bragg and Ten Mile River. The Park includes one of the few flat ocean terraces on the Mendocino coast with an elevation range from sea level to 120 feet (CDPR 1995).

"Mediterranean maritime" aptly describes the climate on the Mendocino coast, which is influenced by proximity to the ocean. Moderate temperatures with small daily and seasonal fluctuations, frequent dense fogs, and northwesterly winds characterize the local climate. The average annual temperature is 54 degrees F. The rainy season is October through April with average annual precipitation in the park around 40 inches; however, that can vary from 20 to 80 inches (CDPR 1995).

Situated on the western edge of the Coast Range, MacKerricher SP includes marine terraces and extensive dune fields that divide the park into two distinct sections, north and south. The project area is located at this division in the approximate center of the park near Lake Cleone and Mill Creek. From Ten Mile River, the park extends south to Lake Cleone and includes five and a half miles of sandy shoreline flanked by low bluffs and coastal dunes. The southern

portion of the park is an open, relatively flat marine terrace with rocky bluffs and small-secluded beaches and gradually slopes up from the Glass Beach parcel, north towards Lake Cleone and Laguna Point.

The park's natural topography supports diverse plant communities, which includes coastal strand vegetation on the beaches; dune-swale plant communities, grasslands and coastal scrub, conifer forests, and riparian vegetation associated with the numerous streams, lagoons, lakes (Sandhill Lake and Lake Cleone), Inglenook Fen, and other wetland communities located throughout the park. In addition to the varied terrestrial plant communities, the marine and tidal environments are plentiful and diverse, consisting of a wide range of marine habitats supported on the sandy beaches and rocky shores. The fauna in the park is also considerable and consists of a variety of large and small terrestrial mammals, anadromous fish, and from the ocean and littoral zones, marine mammals, and invertebrates.

Cultural setting

There are two main categories of cultural resources, the archaeological environment and the historic, both influenced by the resources available in the area. The topography, weather, and abundance of natural resources on the Mendocino Coast provided an ideal setting for both prehistoric and historic utilization and settlement of the region. Archaeological and ethnographic data from studies in the park, suggest Native populations heavily utilized the area encompassing MacKerricher SP including the Ten Mile dunes, the Lake Cleone locale, and the southern bluffs (coastal terraces). These areas provided access to a rich and varied ecological setting, ideal for subsistence including resource procurement and processing, and other activities related to occupation of major year-round villages and short-term campsites. Historically, the entire park was part of the Mendocino Indian Reservation. The land after abandonment of the reservation became public domain and available to purchase for settlement and development. In the following years, the land now located within MacKerricher SP became a major transport corridor for the timber.

Ethnographic Background

Two Native American groups reportedly inhabited the area of MacKerricher SP before the 1850s; though, there is disagreement on the boundaries since Euro-American intrusion disrupted traditional settlement patterns prior to conducting comprehensive ethnographic studies of the area. Additionally, different tribal and linguistic groups shared critical procurement areas, which skews delineation of clear boundaries. Generally, the location north of Cleone was Coast Yuki territory with Lake Cleone forming the approximate southern boundary. To the north, Coast Yuki territory extended past Rockport. The Northern Pomo occupied the coastline around Fort Bragg and extended north to Virgin Creek and present-day Lake Cleone. In the Lake Cleone area, the territory of the Coast Yuki and Northern Pomo overlapped (CDPR 1995).

Coast Yuki -

Dialectically, the Coast Yuki was a subgroup of the inland Yuki, speaking a language representing a small, isolated speech family (Kroeber 1925). The Coast Yuki comprised 11 groups and inhabited a 50-mile strip along the Mendocino Coast (Miller 1978). In MacKerricher, the Coast Yuki groups were the *Laliam-ontilka* near Cleone, the *Lilhuyak-ontilka* at Inglenook Beach, and the *Metkuyak-ontilka* at the mouth of Ten Mile River. After Euro-American settlement in the region, the population of the Coast Yuki dropped significantly. In 1972, they were determined ethnographically extinct (Miller 1978).

According to Kroeber (1953), the Coast Yuki called themselves *Yukoht-ontilka* (ocean people). Described as a small group of shell mound dwellers that occupied beach camps in the summer months and in the winter, groups moved more inland (Miller 1978). Although their economy focused on a variety of marine and terrestrial resources, their quest for marine foods was of importance. Invertebrates from the mid to high littoral rocky coast were gathered by everyone. Mussel and barnacles were preferred but gastropods and bivalves were also collected. Other resources from the ocean environment and littoral zone were seaweed, surf fish and sea lions, seal, and salt. Salmon caught in the local rivers was also vital to the Coast Yuki diet. Important terrestrial resources included acorns, seeds, and other vegetal products as well as elk and deer. Women were responsible for collecting plant resources and the men hunted and fished. The Coast Yuki traveled to neighboring areas to acquire resources not readily available in their territory.

The Northern Pomo -

The Northern Pomo were one of seven tribes that spoke languages of the Pomoan linguistic family (McLendon and Oswalt 1978). Various tribelets of the Northern Pomo inhabited central Mendocino County on 22 miles of coastal frontage that extended into present day MacKerricher SP. To the east, their territory extended in an irregular band to the northwest shore of Clear Lake and followed the Navarro River south. The *Mato-Poma* was a tribelet whose territory encompassed MacKerricher SP (McLendon and Oswalt 1978). Not until encroachment by Euro-American settlers into the interior valleys around 1850, did the Northern Pomo live year-round on the coast. Prior to permanent occupation on the coast, various Northern Pomo tribes had favorite coastal campsites and procurement areas and occupied during the summer months.

In addition to their own territory, the Northern Pomo hunted and gathered food and procured various other resources in the Ten Mile River watershed and north along the coast in the tribal lands of the Coast Yuki. Like their Yuki neighbors, the Northern Pomo had similar resource preferences and relied heavily on the rich littoral resources of the coast, which provide an abundance of shellfish, seaweed, and surf fish. Marine mammals including sea lions and seals were hunted, while runs of salmon and steelhead were taken seasonally in the larger drainages. Terrestrial animals including deer, elk, and mammals such as rabbit were hunted or trapped. Tan oak, black oak, and hazel were important vegetal resources to the Northern Pomo. Birds were valued mainly for their brightly colored feathers; used to adorn baskets and ceremonial regalia (Van Bueren 2007).

Prehistoric Background

Human presence on the Mendocino Coast extends back approximately 11,000 years; unfortunately, knowledge on early occupation of the region is incomplete due to limited archaeological investigations. These early periods suggest more meager and mobile lifeways, which could account for the underrepresented and poorly defined archaeological evidence for these periods. For the last 3,000 years, the archaeological record for this region is more comprehensive and more clearly understood. Investigations on the Mendocino Coast by Layton (1990) and White (1989), as well as numerous others have aided in the development of regional chronological sequences that have broadened our understanding of prehistoric settlement patterns on the Mendocino coast. Additionally, several studies of interior Mendocino County sites have provided insight on the relationships between coastal and interior indigenous groups.

White (1989) focused his archaeological studies at MacKerricher SP during the late 1980s, which included the excavation of 11 prehistoric Native American shell mound sites. In addition to White's work in the park, Lindahl conducted a limited subsurface investigation in 2003 at a large shell midden site; unfortunately, this work has not been completed (or published). Lindahl's investigation was particularly important because it produced some of the oldest reliable dates for prehistoric sites in the park and possibly some of the oldest dates on the Mendocino Coast. Furthermore, the site may have the potential to produce significantly older dates in deeper deposits verified at the site through auger samples. Dates derived from radiocarbon analysis conducted for Lindahl's work ranged from circa 900 +/- 40 BP to 2890 +/- BP and fit well with the dates obtained from obsidian hydration of several specimens collected at the site.

The work by White (1989) is the most comprehensive in the park and generated chronological data used to develop a local expression of the late cultural history associated with prehistoric sites in the area. This work outlined a three phased chronology for the area, identified several research problems that form the basis subsequent work, and was a major step toward understanding local archaeology on the Mendocino Coast (White 1989).

The phases developed by White (1989:141) for late period sites include:

MacKerricher Phase (A.D. 0-350): This phase was characterized by residency over fairly long periods on the coast. Occupation occurred sometime during the late spring through summer season. Visits likely scheduled to correspond to the appearance of elk on the coastal prairie, and Stellar sea lion in the near-by shore zone. Shellfish were a significant staple and probably taken by searching out a varied catch from tide pool and rocks on the open coast, selecting for larger individuals. Hammer stones and anvils are exclusively found within the MacKerricher Phase and are likely associated with processing large mussels (White 1989: 123). Obsidian stone tools derived from the Borax Lake or Mount Konocti sources in the Clear Lake Basin occur in near equal frequencies (White 1989). The MacKerricher Chronology has a 950-year gap between A.D. 350 – A.D. 1300.

Sandhill Phase (A.D. 1300 – 1850): Sandhill Phase sites in contrast to MacKerricher Phase sites were likely occupied for shorter durations. This phase is characterized by a decreased reliance on marine and terrestrial mammal hunting, evidenced by reduced frequency of animal bone and the sparsity of chipped stone material. The introduction of different shellfish processing methods is suggested by the absence of hammer stones and anvils. In Sandhill site deposits, charred mussel and barnacle is common. The presence of shallow baking pit features with an abundance of charcoal and mussel shell may indicate that mussel shells were baked before the meat was removed (White 1989:124). Bow and arrow technology and Small Corner-Notched projectile points manufactured from chert are inferred this period.

Ten Mile Phase (A.D. 1850 – 1870): The Ten Miles Phase is the period when Native American camps were used during the tenure of the Mendocino Indian Reservation (1856-1866). Site components contain historic materials found in association with traditionally Native American artifacts and food refuse. Ten Mile Phase artifacts consist of glass seed beads, chipped bottle glass and ceramic, and metal and wood manufactured items (White 1989:111). Absent in this phase are the baking hearths found in the Sandhill Phase. Mill lumber was perhaps used to make shelters. Flaked chert materials reflect continuity with traditional technologies. Occupation of sites appears both short duration and intensity, possibly one or two seasons. Archaeological deposits appear as discrete refuse areas (White 1989: 126).

Mendocino Indian Reservation -

MacKerricher SP found its beginnings as an Indian reservation. In 1856, the Mendocino Indian Reservation was established and was the first official reservation in the northwestern section of the State. Establishment of the reservation was due to pressures from American settlers troubled by Indian depredations, and threatened vigilante reprisals unless the government intervened (CDPR 1995). The reservation was approximately 25,000 acres, and included the entire Ten Mile Township and covered all of what is now MacKerricher SP. The Noyo River formed the southern boundary of the reservation and extended north to Ten Mile River to form the northern boundary. The coast delineated western boundary, and inland the boundary was the first forested ridgeline.

The primary objective of the reservation was to concentrate Native people into one area for better control, less vulnerable to attacks by Euro-American settlers, and to teach farming and other simple trades (CDPR 1995). In addition to the local Native American groups, the U.S. Army brought indigenous people from throughout Northern California to the reservation including Indians from Anderson Valley, Ukiah, Round Valley, Russian River Valley, Sulphur Creek, Bodega Bay, Humboldt County, Pit River, Hat Creek, Butte Creek, Feather River, and the greater Mendocino County. This grouping of local Native American tribes with more distant neighbors was problematic with enemies residing in close contact on reservation land. The inevitable consequence related to this assemblage of people was constant strife amongst the various tribal groups.

In 1856, over three-thousand reported Indians were residing on the reservation (CDPR 1995). On the reservation, the government attempted to institute agricultural undertakings as well as

educate the Indians. In addition to farming, the Indians were encouraged to continue gathering their traditional foods, particularly fish (CPDR 1995). The government did not provide the support or assistance the Indians forcibly driven from their homes needed and the reservation became a place of privation and disease.

In 1857 one and half miles north of the Noyo River, the military garrison Fort Bragg was established. Later the Fort would become the core of the city of Fort Bragg. The intent of the military garrison was to maintain order and keep peace on the reservation and surrounding lands. Troops stationed at Fort Bragg watched over the reservation and attempted to mitigate problems between conflicting tribal groups, and between Native populations and settlers. During the 1850s and 1860s, the military presence had little effect at reducing conflict between the settlers and the Indian population (CDPR 1995) and consequently, the reservation failed and in 1866, officially closed. The public put pressure on the government not long after the reservation was closed when the value of timber resources and other economic opportunities in the region were recognized. Once available for purchase, the government offered the land for settlement and development at $1.25 per acre (Unit History File n.d.).

After Mendocino Indian Reservation tenure ended, most Native people returned to their former homelands, especially those forced onto the reservation from out of the area. For the local tribal groups, Euro-American settlers had taken over their traditional ancestral lands, which significantly affected their traditional lifeways. Hunting, fishing, and gathering places were no longer available and as a result, local Native American groups gradually became more dependent on employment for their livelihood. With permission of landowners, many settled on the ranches, and as needed, worked on those ranches. Other employment included working in the hop and grain fields or as wood choppers (Unit History File n.d.).

Historical Background

Early Exploration and Settlement

Established in 1812, Fort Ross was the first permanent settlement on the Northern California coast. After the Russians left Fort Ross in 1841, California's Mexican government encouraged permanent settlement in the Mendocino region by making land grants available to its citizens. By 1845, William Richardson established one of two ranchos on the Mendocino Coast. Richardson's Albion Rancho, situated approximately ten miles south of present-day MacKerricher SP, aided in the settlement of the Mendocino Coast by making the region more accessible to other settlers (CDPR 1995:47).

By 1851, a handful of settlers occupied the Mendocino coast around the Big River area north of Albion Ranchero. In the winter of 1850-51, the brig *Frolic,* heading for San Francisco with a cargo of Chinese goods crashed in the ocean near Point Cabrillo. A salvage crew sent from San Francisco was unable to retrieve the lost cargo but on return, reported on established settlements and giant redwoods along the Mendocino Coast. This account exposed the regional economic potential associated with a redwood lumber industry. In 1852, construction of the first lumber mill was in the Big River area. The timber industry accelerated the influx of

American settlers and the area continued to grow as the demand for timber increased. Towns were located along the Mendocino coast in areas with topography conducive to loading ships for lumber transport and for unloading goods for commerce.

History Relevant to MacKerricher SP Locality: Settlement, Development, Commerce

Duncan MacKerricher, originally from Quebec, Canada settled on the Mendocino Coast in 1864 with his wife Jessie. Prior to operating a dairy at the Mendocino Indian Reservation, MacKerricher worked at the mill in Casper for two years. After the federal government abandoned the reservation, MacKerricher was one of the first settlers to purchase newly available reservation land. Originally, MacKerricher purchased 640 acres and eventually amassed over 1000 acres into his Laguna Ranch. A portion of MacKerricher's holdings became the core of the present-day state park (CDPR n.d., 1866, 1868; CDPR 1995:48).

Following termination of the reservation, many of the local Indians stayed and worked for MacKerricher where he allowed them to continue their traditional land-use activities and practices. With the help of the Indians that stayed on, MacKerricher operated a dairy and produced butter that shipped from Mendocino to San Francisco. In addition to cattle, MacKerricher raised hogs and draft horses, and grew crops including hay and potatoes (CDPR 1995:48).

MacKerricher promoted the development of the town of Cleone and began selling lots in 1882. By 1884, Cleone had two saloons, two hotels, and a general store. Shipping provided the economic base for the town; however, most of the town's 25 residents were farmers and stockmen. MacKerricher, while promoting the town, entered into a contract with two lumber entrepreneurs (Alexander Jefferson and Sam Kennedy) and gave them the rights to construct a wharf, an apron chute, and shipping yard on his property. The facilities served two sawmills, one on Laguna Creek established in 1883, and the other built around the same time on the south fork of the Ten Mile River (CDPR 1995: 48).

In 1885, the Little Valley Lumber Company incorporated, and purchased the Laguna Creek mill to add to their holdings. The mill could produce 60,000 board feet per day, and manufactured and shipped railroad ties, pilings, and tanbark. To transport timber products from the mill to the wharf, the Little Valley Lumber Company constructed a gravity-operated railroad/tramway (CDPR 1995; 49).

The Union Lumber Company (ULC) purchased the Little Valley Lumber Company in 1902 with the goal of becoming the largest lumber manufacturer in the country. When timber sources began to diminish, the Union Lumber Company refocused timber harvest efforts on the Ten Mile River. To transport timber resources from Ten Mile River to the mill in Fort Bragg, the company constructed a railroad in 1916. In 1945, ULC removed the rails and paved the grade to convert the railroad to a truck-hauling road. Trucks continued to haul timber on the road until segments of the road washed out in the mid-1980s (CDRP 1995: 49).

Duncan MacKerricher operated the ranch until 1908 when he and his wife moved to the town of Fort Bragg. MacKerricher's wife died in 1923, and in 1926, MacKerricher died. The ranch property, though reduced in size from prior parcel sales, remained in the family until 1949, at which time some of the land was sold to the State for use as a park. The original 20-acres purchased by the State from the MacKerricher heirs included Lake Cleone and Cleone Beach, which ultimately became the park core. Acquisition of additional land has been ongoing and the park now includes over nine miles of ocean frontage, Ten Mile Beach, the mouth of Ten Mile River, Ten Mile Dunes, Inglenook Fen, Sand Hill Lake, Pudding Creek Trestle, and the Glass Beach property.

MacKerricher State Park - Post War

The acquisition of the MacKerricher property following World War II, came amidst a period of tremendous state-wide growth during this Post-War period. California benefitted from a prewar buildup in newfound technological and military industries that, combined with the state's already powerful agricultural and construction industries during the war, resulted in an economic boom. This financial growth meant that California was uniquely equipped to handle the massive growth of its post war population. Communities, industries, and governmental departments needed to act swiftly during this Post-War Period to meet the needs of a growing population with increased incomes, recreational time, and with newfound luxuries such as the increasingly popular automobile.

To meet the demand, California State Parks' first challenge was to find and acquire the lands necessary to supply the growing population with recreational opportunities. This challenge was addressed when the State Legislature passed the "Omnibus Park Acquisition Bill" in 1945, earmarking 10 million dollars to the department for land acquisitions. Additional funds from the newly released Tidewater Oil revenues (1954), allowed State Parks to begin acquiring land throughout the state to provide recreational opportunities in the underserved regions, such as the Mendocino Coast. With land secured, the next challenge was to develop the newly acquired park property. To do this, California State Parks hired Colonel Edwin Kelton, a former Army Corps of Engineers officer whose experience in constructing military installations during the war matched the fast track timeline and desired utilitarian designs needed to meet Parks' needs. As State Parks began to acquire lands, such as the MacKerricher property, the agency addressed the need to design and oversee the construction of new infrastructure by hiring architect Robert Uhte. His unique career path from serving the country during World War II in the Navy, to full time Ranger at Yosemite, to architecture student a UC Berkeley allowed him to address State Parks' specific situation.

Upon Uhte's arrival, he was tasked with designing buildings to appease State Parks management, who pushed for an easily constructed and maintained standard plan design, while the public pushed for regionally unique structures that maintained the existing park rustic aesthetic created by the CCC. Ultimately, by working in tandem with various parties and organized subcommittees to meet both groups' interests, Uhte's produced standard plan

building designs that were regionally specialized and sympathetic to the Park Rustic Style, while meeting State Park Management wishes to minimize expenditures on materials, construction cost, and maintenance. As such, Uhte's standard plan designs were ultimately implemented in 107 parks throughout the State during the Post-War period of growth.

At MacKerricher SP, after the 1949 purchase of the property from the MacKerricher heirs, California State Parks removed approximately 10 buildings associated with the MacKerricher's agricultural operation to begin developing the park. Except for a row of orchard trees in the current maintenance yard area, little remains of the original MacKerricher Ranch (1909 T Sheet). In 1951, after preliminary work, MacKerricher SP opened to the public on a limited basis. It did not officially open until after 1953, upon completion of a 20-site campground with day use facilities, park infrastructure including sewage, redwood water tanks, and an operating maintenance yard. It expanded in 1957 with 70 additional campground units to meet the public's needs.

California State Parks used Uhte's standard plan design for all the public use facilities constructed at MacKerricher SP during this period. As typical throughout the newly developed parks across the state, the standard plan comfort stations and combination buildings at MacKerricher SP are set on concrete foundations featuring concrete block exterior half walls and character-defining open louvered wood ventilation openings surrounding trapezoidal windows below the low-pitched gable of the roofline. Examples of these buildings can be located at the East and West Pinewood, Surfwood, and Cleone Campgrounds, though two of the comfort stations were converted into combination buildings in the early 2000s. Additional standard plan facilities from this era include a board and batten kiosk/office at the Park's entrance area that was modified into a visitor center. The Maintenance area has a variety of buildings including a standard plan, rectangular wood-frame shop building with three metal roll up doors and vertical board and batten siding. Other buildings include an ancillary wood frame storage shed, designed and constructed to meet operational needs during the Post-War Period, and a non-standard plan laundry building that was converted into a carport by 2002.

CULTURAL RESOURCES

Research indicates the Park has been the subject of many archaeological investigations and cultural resource inventories over the last 60 years. Cultural resource studies have consisted of both terrestrial surveys and subsurface investigations. The first official archaeological investigation was in 1949, after the State acquired the land. The survey included the entire park unit at that time. Schulz (1985) conducted surveys in the park in 1985 for a coastal site protection program and bluff stabilization project. This work resulted in the subsurface investigation of 11 prehistoric sites identified damaged or threatened by bluff or dune erosion and was carried out by Greg White 1988.

Since the 1980s, numerous other archaeological studies have taken place in the park for a multitude of activities including major and minor capital outlay projects, routine and deferred maintenance, accessibility improvements, habitat restoration, and scientific research by

universities. These investigations influenced work in support of the current project. Although earlier work covered the currently proposed project area, that work was completed over 30 years ago. To address potential impacts to the archaeological resources from the proposed project, the project area was resurveyed, and an archaeological monitor was present during a subsurface geotechnical investigation. These inventories provided the baseline cultural resources information for the impact assessment.

Archaeological and Historic Resources

Previous cultural resource investigations resulted in the documentation of an extensive assemblage of Native American sites in the park, with significantly less historic archaeological sites. Many of the Native American sites have historic components related to aboriginal occupation of the area during the Mendocino Indian Reservation era (1856-1866). The collection of Native American sites in the park reflect a unique and relatively intact series of settlement systems in an area used with varying intensity over the last 3,000 to 4,000 years. Historic sites in the park relate to settlement, ranching, transportation, and logging.

Despite the abundance of documented sites in the park, none appear to be in the project area. Two archaeological sites (CA-MEN- 2290 and -2357) are in the vicinity of the project area but well enough away to not be threatened by project work. A developed road used to access the pump house is located between the two sites with a sizable buffer on either side. Both sites relate to Native American utilization of the area. CA-MEN-2290 is comprised of a light to moderate dispersed scatter of shell with midden soil. Mussel shells dominate the assemblage with some barnacle, chiton, and small limpet shell. CA-MEN-2357 is a shell rich midden comprised primarily of mussel with some barnacle, chiton, limpets, and burned bone.

Historic Resources

The only remnant of the MacKerricher ranch within the project area are trees from the MacKerricher ERA Orchard. As of 2020, the park has undergone some major changes, some of which were discussed in the background section above. In the late 1990s, the State undertook the first effort to convert existing buildings to meet ADA requirements; two comfort stations, one at East Pinewood and one at West Pinewood were converted into combination buildings (shower and toilet facilities). As mentioned above, the laundry building was heavily modified and is currently used as a carport. In 1993 and 1999, respectively, a comfort station and a combination building once located near Lake Cleone were demolished. With the demolition of these buildings and the heavy modifications of three others, there is in no longer a Standard Plan historic district within the Park because they do not form a cohesive architectural representation of State Parks architecture from either period (Allen and Newland 2017).

As designed, this project will rehabilitate a c.1977 water system comprised of non-historic piping and redwood water tanks in addition to upgrading utilitarian park operation facilities.

POTENTIALLY SIGNIFICANT	SIGNIFICANT WITH	LESS THAN SIGNIFICANT	NO

	IMPACT	MITIGATION	IMPACT	IMPACT
WOULD THE PROJECT:				
a) Cause a substantial adverse change in the significance of a historical resource, as defined in §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource, pursuant to §15064.5?	☐	☐	☐	☒
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒

RESOURCE CRITERIA FOR DETERMINING SIGNIFICANCE

The analysis for determining the significance of impacts of the Proposed Action to Cultural Resources is based on criteria **a – c** described in the environmental checklist above.

DISCUSSION

a) NO IMPACT - HISTORICAL RESOURCE

As designed, the project will remove and replace the pumphouse at Lake Cleone. While records indicate that it was originally constructed in 1953 as part of the original infrastructure, it is a completely utilitarian building that has exceeded its expected lifespan. If they were an eligible historic district, the pump house would have contributed to that district for its use only, not its architecture. It is no longer safe to operate, and it does not meet current codes. The project proposes to remove it and construct a replacement building 35-feet upslope, and above the flood plain, to meet current needs. This action will not impact any eligible resources because the replacement building will be similar in size and scale and the new pump house will continue to function as it was originally intended by providing potable water to the park.

The only potentially eligible historic resources in the project area are the remnant orchard trees that represent the MacKerricher ranch era. Most of the project work will be occurring below ground, and in some cases, close to the trees. To ensure that there are no adverse impacts to these historic resources see Specific Project Requirement Cult-2 in the Archaeological Resource Section below.

b) NO IMPACT - ARCHAEOLOGICAL RESOURCES

Although cultural resource inventories confirm that the park has a high degree of archaeological sensitivity, no archaeological sites were identified within the project area.

Two sites in proximity to the project area are far enough away not to be impacted by planned activities if **Specific Project Requirement CULT-1** is implemented. Given the proximity of previously recorded sites and the general sensitivity of the area, implementing Specific Project Requirement **CULT-2** and **Standard Project Requirement CULT-4** will ensure that any inadvertent finds of archaeological resources are protected and no significant impact occurs to historical resources.

c) NO IMPACT - DISCOVERY OF HUMAN REMAINS

Burials have not been documented or recorded in the project area; however, there is always a potential of unanticipated discoveries of human bone. If any human remains or burial artifacts were identified, implementation of **Standard Project Requirement CULT-5** would maintain the impact to a less than significant level.

Project Requirements – Specific and Standard (CULT 1 thru 5)

SPECIFIC PROJECT REQUIREMENT CULT-1: **Environmentally Sensitive Areas (ESA)**	• Archaeologically (Environmentally) sensitive areas near the project area will be flagged with orange flagging to restrict access into ESAs during project work.
SPECIFIC PROJECT REQUIREMENT CULT-2: **ARCHEOLOGICAL MONITORING**	• At the discretion of the project archaeologist, a CSP-qualified archaeologist will monitor ground-disturbing activities for this project. The archaeologist will have the authority to stop construction work in the area of the find and evaluate it and implemented appropriate treatment measures to avoid having a significant impact to historical resources per PRC 15064.5.
SPECIFIC PROJECT REQUIREMENT CULT-3: **NATIVE AMERICAN MONITORING**	• A Native American Monitor will be present during ground-disturbing activities for this project, if requested.
STANDARD PROJECT REQUIREMENT CULT-4: **UNDOCUMENTED CULTURAL RESOURCES**	• In the event that previously undocumented cultural resources are encountered during project construction (including but not limited to dark soil containing shellfish, bone, flaked stone, groundstone, or deposits of historic trash), work within the immediate vicinity of the find will stop until CSP-qualified cultural resource specialist has evaluated the find and implemented appropriate treatment measures to avoid have a significant impact to historical resources per PRC 15064.5
STANDARD PROJECT REQUIREMENT CULT-5: **HUMAN REMAINS OR BURIAL ARTIFACTS**	• In the event human remains were discovered, work would cease immediately in the area of the find and the project manager/site supervisor would notify the appropriate CSP 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 CSP District Superintendent (or authorized representative) would 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). • If the coroner determines the remains represent Native American interment, the NAHC in Sacramento to identify the most likely descendants and appropriate disposition of the remains. Work would not resume in the area of the find until proper disposition is complete (PRC §5097.98). No human remains or funerary objects would 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 would 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 would also occur as necessary to define additional site mitigation or future restrictions.

VI. ENERGY.

ENVIRONMENTAL SETTING

State Title 20 and Title 24, under the California Code of Regulations, state new buildings constructed in California must comply with the standards contained in Title 20, Public Utilities and Energy, and Title 24, Building Standards Code, of the California Code of Regulations. These efficiency standards apply to new construction of both residential and nonresidential buildings, and they regulate energy consumed for heating, cooling, ventilation, water heating, and lighting. The building efficiency standards are enforced through the local building permit process. Local government agencies may adopt and enforce energy standards for new buildings, provided these standards meet or exceed those provided in Title 24 guidelines.

The Resource Management Element of the Mendocino County General Plan encourages the use of renewable energy systems in the County (MCGP, Resource Element, 2009).

WOULD THE PROJECT:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☐	☒
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

DISCUSSION

a) **No Impact** - Construction activities would consume energy through the operation of heavy equipment, trucks and worker traffic. The Contractor would use only as much heavy equipment as needed to construct the project, thus would not result in wasteful, inefficient, or unnecessary consumption of energy resources during the project construction.

b) **No Impact** – The project will not conflict with or obstruct any state or local plan for renewable energy or energy efficiency. Additionally, the project is designed in accordance with California Building Code and Building Energy Efficiency Standards.

STANDARD OR SPECIFIC PROJECT REQUIREMENT - NONE

MITIGATION MEASURE - NONE

VII. GEOLOGY AND SOILS.

ENVIRONMENTAL SETTING

TOPOGRAPHY

MacKerricher State Park is entirely within the Coast Range Geomorphic Province of California. The Coast Ranges are a series of relatively low mountain ranges and associated valleys that trend northwest, subparallel to the active San Andreas Fault. The Coast Ranges are predominantly composed of thick late Mesozoic and Cenozoic (251 million years ago to present) sedimentary rocks. The rocks of the Coast Ranges (referred to as the Franciscan Complex) formed as a massive pile of rock and sediment in an ancient subduction zone. The bulk of the formation is a sheared matrix with large blocks of various rock types.

The San Andreas Fault system, consisting of numerous splays, runs almost the entire length of the Coast Ranges. To some degree, the San Andreas Fault system has shaped the landscape across the whole province south of the Mendocino triple junction. The movement along the faults for the past 20 million years has been generally strike-slip. The landscape reflects this sideways deformation with local areas of uplift or subsidence often reflected as parallel sequences of linear valleys and ridges.

LOCAL GEOLOGY

At MacKerricher SP, the mid-Pleistocene and mid-Holocene phases are recognized by dune formations. Subsequent periods of dune formations occurred during what is known as the Medieval Climatic Anomaly. Modern dune processes continue to modify the ancient dunes.

The project site is located within the western portion of the Coast Range geomorphic province of California. Based on mapping by Jenning and Strand (1960), the site is underlain by Pleistocene-aged marine and marine terrace deposits. Boring samples conducted for this project revealed terrace deposits generally consists of loose to very dense poorly graded sand and very soft to very stiff silt with sand and lean clay to a maximum depth explored of 20 feet. Bedrock consisting of moderately to slightly weathered, strong to very strong sandstone was found below terrace deposits at depths ranging from 7 feet to 20 feet (Geocon, 2019).

Seismicity

MacKerricher SP is located within proximity to the Mendocino Triple Junction which is the intersection of the Mendocino fracture zone, the San Andreas Fault, and the Cascadia subduction zone. The San Andreas Fault is approximately 10 miles offshore from the project area and the Maacama Fault occurs approximately 23 miles to the east of the site. The northern segment of the North Coast portion of the San Andreas Fault is capable of a magnitude 7.6 earthquake and the Maacama Fault is capable of a magnitude 7.1 earthquake (CGS, 2019a; CGS, 2019c). MacKerricher SP is within a region near major, active faults and will on average experience stronger earthquake shaking more frequently (CGS, 2016).

Soils

The Cabrillo-Hesser Complex (Mendocino County, Western Part, CA, Map Unit 117), Tregoning-Cleone Complex (Mendocino County, Western Part, CA, Map Unit 212) and the Tropaquepts map units (Mendocino County, Western Part, CA, Map Unit 214) all occur within the project area.

The Cabrillo-Hesser Complex is composed of 50 percent Cabrillo and similar soils and 30 percent Hesser and similar soils. The remaining 20 percent consists of soils that are of minor extent such as: Biaggi, Crispin, Sirdrak, and Tropaquepts (NRCS, 2020). The Cabrillo and Hesser soils are not hydric and occur on gentle slopes. Cabrillo and Hesser soils are found on Marine terraces. Cabrillo parent material comes from fluviomarine deposits derived from sandstone while Hesser parent material comes from eolian deposits derived from sandstone. Cabrillo soil is somewhat poorly drained while Hesser soil is somewhat excessively drained.

The Tregoning-Cleone complex is composed of 60 percent Tregoning and similar soils and 20 percent Cleone and similar soils. The remaining 20 percent consists of soils that are of minor extent such as: Tropaquepts, Hesser, Cabrillo, Harecreek, and Blacklock. The Tregoning soils are hydric while the Cleone soils are not. Both occur on gentle slopes, are poorly drained, found on marine terraces, and both have parent material originating from eolian sands derived from sandstone.

The Tropaquepts map unit is composed of 80 percent Tropaquepts and similar soils. The remaining 20 percent consist of soils that are minor in extent such as: Tregoning, Shinglemill, Aborigine, and Blacklock. Tropaquepts is a hydric soil, poorly drained and found on gentle sloping marine terraces. Tropaquepts parent material comes from fluviomarine deposits derived from igneous, metamorphic and sedimentary rock.

Coastal Erosion

The coastline at the outlet of Mill Creek is prone to coastal erosion from wave action generated by periodic strong winter storm events. Past storm events have breached the haul road berm at this location.

NOAA's National data Buoy Center has deployed a wave buoy offshore of the project site since 1981 (Station ID 46014, Latitude: 39°11'45"N, Longitude: 123°58'10") in a water depth of 274.3 meters (approximately 900 feet). A wave analysis was conducted to determine the extreme wave conditions from wave data collected by this buoy between 1981 and 2007. The annual maximum significant wave height was found to range between 17 feet to 34 feet, with the wave period varying between 14 seconds and 20 seconds. These extreme wave events can result in a wave runup varying between several feet to more than 10 feet high. When extreme wave events coincide with a high tide, the wave runup elevation can be high enough to overtop breached areas of the Old Haul Road and cause water to flow into the interior of the park. The water will then flow towards the lowest point, which is near the parking lot at the edge of Lake Cleone (WRA, 2008).

WOULD THE PROJECT:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) 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? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii. Strong seismic ground shaking?	☐	☐	☒	☐
iii. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv. Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
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?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste disposal systems, where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒

DISCUSSION

a) **Less Than Significant** - The area is not along a fault or in a landslide prone area. No structures designed for human occupancy are located at the project site. Moderate to strong seismic ground shaking is possible from earthquake events on the faults discussed in the Environmental Setting section above. Due to the presence of loose graded sand in the project vicinity, the project area may be susceptible to liquefaction during strong ground-shaking events.

i. The Alquist-Priolo Earthquake Fault Zoning Act of 1972 was implemented to regulate development near active faults and to prevent construction of buildings for human occupancy on or near active faults (i.e., that have ruptured within the past 11,000 years). The project site is not located within a special-study zone under the Alquist-Priolo Earthquake Fault Zoning Act as mapped by the California Geological Survey and no structures that would be designed for human occupancy are proposed as part of this project.

ii. As noted in the Environmental Setting under Seismicity, the project site is located near a highly seismically active area. As a result, there is a chance for moderate to strong ground-shaking at the project site during a seismic event in this area. The Project-Specific Requirement **Geo-2** along with Specific Project Requirement **Hazmat-2** (see Chapter 2, project requirements) will reduce the potential for affects to the public to less than significant.

iii. Seismic-induced ground failure, such as liquefaction, usually occurs in unconsolidated granular soils that are water saturated. The potential for secondary seismic effects such as liquefaction, rapid settlement, or lateral spreading is possible for locations with relatively loose saturated granular soils, such as at the Lake Cleone pump house location. However, a geotechnical investigation conducted for the project determined that no special design measure or mitigation with respect to liquefaction are necessary. Additionally, Specific Project Requirement **Geo-1** and **Geo-2** will reduce the risk for failure as a result of seismic-related ground failure to less than significant.

iv. Although the coastal bluffs in this region are highly erodible, the project area is away from the bluff edge and has relatively flat to gently rolling slopes. Additionally, construction or alteration of any slopes on or in the vicinity of the site are not proposed as part of this project. Therefore, there will be no impact.

b) **Less Than Significant** - Ground disturbance activities could temporarily result in increased soil erosion near Mill Creek and at Lake Cleone. However, implementation of **Geo-1** and **Hydro-1** (see Chapter 2, project requirements) will minimize the potential for erosion during or after construction activities to a less than significant level.

c) **Less than Significant Impact** – A geotechnical study conducted for the project evaluated potential for liquefaction in sandy layers located below groundwater using the Standard Penetration Test-based approach following the methodology of Youd et al (2001) as outlined in CGS Special Publication 117A, Guidelines for Evaluating and Mitigation Seismic Hazards in California (CGS, 2008). The evaluation indicated that the sandy soil below the

seasonal high groundwater elevation is sufficiently dense to resist liquefaction with Factor of Safety greater than 1.3. Therefore, no special design measures with respect to liquefaction are necessary. Thus, there will be a less then significant impact (Geocon, 2019).

d) **No Impact** – A geotechnical study conducted for the project concluded that near-surface soil at the project site is predominantly sandy with little to no plasticity. Therefore, specific design or construction measures with respect to expansive soil are not necessary for the project (Geocon, 2019). No impact.

e) **No Impact** – No septic tanks, sewers or wastewater facilities are proposed at part of this project. Therefore, this project will have no impact.

f) **No Impact** – There are no known paleontological or geologic resources existing within the project area. Therefore, no impact to these resources is anticipated as a result of this project.

STANDARD OR SPECIFIC PROJECT REQUIREMENT

SPECIFIC PROJECT REQUIREMENT GEO-1: REMEDIATION OF HIGH DISTURBANCE AREAS
• All excavated areas will be revegetated or treated to recover to pre-construction conditions or better. • Where feasible access routes will be limited to previously disturbed areas. • Temporary access routes will be recontoured to restore natural drainage patterns. • All base erosion control measures must be in place, functional, and approved in an initial inspection prior to commencement of construction activities. • Disturbed areas are to be seeded, planted, and mulched.
Specific Project Requirement Geo-2: Seismic Design Criteria
• Seismic design of structures will be performed in accordance with the provisions of the 2016 California Building Code, based on the 2015 International Building Code and the American Society of Civil Engineers publication: Minimum Design Loads for Buildings and other Structures.

MITIGATION MEASURE – NONE

VIII. GREENHOUSE GAS EMISSIONS.

ENVIRONMENTAL SETTING

The California Global Warming Solutions Act of 2006 requires the State to implement a series of actions to achieve a reduction in GHG emissions to 1990 levels by 2020 (California Air Pollution Control Officers Association, 2008).

The statewide cap for 2020 Greenhouse Gas (GHG) emissions was set at 431 million metric tons of carbon dioxide equivalents. In 2017, emissions from GHG emitting activities statewide were 424 million metric tons of carbon dioxide equivalents. Compared to 2016, California's CDP grew 3.6 percent while carbon intensity of its economy declined by 4.5 percent (CGHGEI 2019).

As part of the implementation of actions to reduce GHG emissions, CSP has developed a "Cool Parks" initiative to address climate change and GHG emissions. Cool Parks proposes that CSP, as well as resources under its care, adapt to the environmental changes resulting from climate change. In order to fulfill the Cool Parks initiative, CSP is dedicated to using alternative energy sources, low emission vehicles, recycling and reusing supplies and materials, and educating staff and visitors on climate change (CSP, 2019).

The proposed project is located at MacKerricher State Park, within the MCAQMD which is responsible for enforcing the state and federal Clean Air Acts as well as local air quality protection regulations. Mendocino County is primarily rural, the amount of greenhouse gases generated by human activities (primarily the burning of fossil fuels for vehicles, heating, and other uses) is small in total compared to other, more urban counties (although higher per capita due to the distances involved in traveling around the county) and miniscule in statewide or global terms (MCGP, 2009).

WOULD THE PROJECT:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

DISCUSSION

a) **Less Than Significant Impact** – According to recommendations by the Association of Environmental Professionals on How to Analyze GHG Emissions and Global Climate change in CEQA Documents (March 5, 2007), an individual project does not generate enough GHG emissions to significantly influence global climate change. Rather, global climate change is a cumulative impact. This means that a project may participate in a potential impact through its incremental contribution combined with the contributions of all other sources of GHG. In assessing cumulative impacts, it must be determined if a project's incremental effect is "cumulatively considerable." (CEQA Guidelines §15064(i)(1) and §15130).

In 2011, the CEQA Guidelines, Section 15064.4 Appendix G was modified to include thresholds of significance for Greenhouse Gases. The project would have potential significant impacts if the project would:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment;

- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Due to the nature of the proposed project, CSP has determined that it is appropriate to assess potential GHG impacts qualitatively – as allowed by CEQA Guidelines §15064.4(a)2.

The proposed project could produce GHGs during fuel combustion, particularly during the grading and earthwork. Project vehicles and heavy equipment consists of an excavator, bulldozer, grader, roller, rubber tire loader, backhoe, logging truck, paver, and dump truck. However, not all vehicles and equipment would operate simultaneously. Some equipment will only be operating during certain stages of the project depending on the nature of the work. Additionally, MacKerricher State Park will maintain its natural composition during the water systems operational phase.

b) **No Impact** - The state of California has not developed specific GHG thresholds of significance for use in preparing environmental analyses under CEQA, and Mendocino County has not adopted GHG thresholds to determine significance. The Association of Environmental Professionals' document *Alternative Approaches to Analyzing Greenhouse Gas Emissions and Global Climate Change in CEQA Documents,* states that emissions for criteria pollutants tend to follow similar patterns as the emissions for GHG emissions" (AEP, 2007). Therefore, it is reasonable to assume that if all other pollutants from the project are determined to be less than significant, the CO2 emissions will also be less than significant. The proposed project will not violate Mendocino County's air quality standards and will not result in a cumulatively considerable increase in emissions. Therefore, the proposed project

will not generate significant GHG emissions and will therefore not conflict with the current state and local guidelines or any applicable plans, policies or regulations concerning GHG emissions.

STANDARD OR SPECIFIC PROJECT REQUIREMENT AIR-1(see Chapter 2, project requirements)

MITIGATION MEASURE – NONE

IX. HAZARDS AND HAZARDOUS MATERIALS.

ENVIRONMENTAL SETTING

Hazardous Materials

Hazardous materials are items or substances which are flammable, reactive, corrosive, or toxic, which because of these properties, pose potential harm to the public or environment. The California Department of Toxic Substances Control (DTSC) has the responsibility of compiling information on hazardous material sites, pursuant to Government Code Section 65962.5(a). The collective list of hazardous material sites is known as the "Cortese" List. The Cortese list is accessible through the DTSC Envirostor data management system.

GeoTracker is the Water Boards' data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater. GeoTracker contains records for sites that require cleanup, such as Leaking Underground Storage Tank (LUST) sites, Department of Defense sites, and cleanup program sites (Waterboards 2015).

Airports

The Mendocino County Comprehensive Airport Land Use Plan (MCACALUP) includes five public use airports within the county. MacKerricher SP is not within the boundary of the MCACALUP. The Fort Bragg airport is located within proximity to the project location. However, this is a private use airport located approximately .9 mile southeast (straight line distance) of the project location and not included in the MCACALUP (Airnav 2020).

Fire Hazards

The California Department of Forestry and Fire Protection (CalFire) has a legal responsibility to provide fire protection on all State Responsibility Area lands, which are defined based on land ownership, population density and land use. MacKerricher State Park is within a State Responsibility Area. CalFire categorizes fire hazard severity for parts of MacKerricher State Park as "Moderate" and "High" (CalFire 2018).

CSP Wildfire Management Plan

Fire protection is provided by the California Department of Forestry and Fire Protection (CAL FIRE), as outlined in a Cooperative Fire Protection Agreement with CSP. They are supported by the Mendocino Fire Protection Department and the Fort Bragg Fire Department, as necessary. The CAL FIRE Fort Bragg Fire Station is approximately 5-9 miles (8-14 km) from the project site. Additional assistance is available from Parlin Fork Conservation Camp (California Department of Corrections). CAL FIRE also maintains an Air Attack Base at the Ukiah Municipal Airport, approximately 65 miles (105 km) and 15-20 minutes flight time away. The CAL FIRE Helitack Base is located in Willits, about 35 miles (56 km) to the east of Fort Bragg.

Schools

There are no schools within one-quarter mile of the project location.

WOULD THE PROJECT:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials, substances, or waste into the environment?	☐	☐	☐	☒
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites, compiled pursuant to Government Code §65962.5, and, as a result, create a significant hazard to the public or environment?	☐	☐	☐	☒
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 or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death from wildland fires?	☐	☐	☒	☐

DISCUSSION

a) **Less Than Significant Impact** - During excavation, grading, and construction activities for the proposed project, it is anticipated that limited quantities of miscellaneous hazardous substances (such as petroleum-based products/fluids, solvents, and oils) will be employed in the project and staging area. The proposed project will comply with all relevant federal, state, and local statutes and regulations related to transport, use, or

disposal of hazardous materials. Therefore, impacts will be less-than-significant. Construction activities will incorporate project requirements **Hazmat-1** and **Hazmat-2,** thus minimizing hazards resulting from routine transport, use, or disposal of hazardous materials.

b) **Less Than Significant Impact** - The operation and storage of construction equipment on the project site has the potential to affect water quality through the accidental or inadvertent release of oil, grease, or fuel into Mill Creek. However, spill prevention measures will be in-place during construction to address the accidental or inadvertent release of oil, grease, or fuel into adjacent waterways. Additionally, specific project requirements will require the storage of reserve fuel and the refueling of construction equipment within the staging area, and inspection of vehicles for oil and fuel leaks.

c) **No Impact** - The project area is not located within a quarter (.25) mile of an existing or proposed school.

d) **No Impact** - The project area is not listed on the Cortese list of hazardous material sites pursuant to Government Code Section 65962.5.

e) **No Impact** - The project area is not located within an airport land use plan or within two (2) miles of a public use airport.

f) **No Impact** - The proposed project will not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

g) **Less Than Significant Impact** - The project area is within a CalFire designated "High" fire severity hazard area (Calfire 2018). However, the proposed project will not present new uses that will increase the fire risk. Additionally, fire suppression equipment, such as fire extinguishers, will be kept on-site during construction and in accordance with local fire codes and standards. Furthermore, **Hazmat-2** will ensure a Fire Safety Plan be developed by a CSP-approved forester, prior to the start of construction.

STANDARD OR SPECIFIC PROJECT REQUIREMENTS

STANDARD PROJECT REQUIREMENT Hazmat-1: SPILL PREVENTION AND RESPONSE	• Prior to the start of construction, all equipment will be cleaned before entering the project site. During the project, equipment will be cleaned and repaired (other than emergency repairs) outside the project site boundaries. All contaminated 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. • Prior to the start of construction, all equipment will be inspected for leaks and regularly inspected thereafter until removed from the project site. • Prior to the start of construction, a Spill Prevention and Response Plan (SPRP) will be prepared 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 the following: ▪ A map that delineates construction staging areas, and where refueling, lubrication, and maintenance of equipment will occur; ▪ A list of items required in an on-site spill kit 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 during the project; and ▪ Identification of lawfully permitted or authorized disposal destinations.
STANDARD PROJECT REQUIREMENT Hazmat-2: WILDFIRE AVOIDANCE AND RESPONSE	• A Fire Safety Plan will be developed by a CSP-approved forester, prior to the start of construction. • Spark arrestors or turbo-charging (which eliminates sparks in exhaust) and fire extinguishers will be required for all heavy equipment. • Construction crews will be required to park vehicles away from flammable material, such as dry grass or brush. At the end of each workday, heavy equipment will be parked on roads or staging areas to reduce the chance of fire.

MITIGATION MEASURE – NONE

X. HYDROLOGY AND WATER QUALITY.

ENVIRONMENTAL SETTING

Watershed

MacKerricher SP is within the Pudding Creek-Frontal Pacific Ocean watershed (HUC-10 Watershed), which is a sub-watershed of the larger Big-Navaro-Garcia watershed (HUC-8 Watershed). The North Coast Regional Water Quality Control Board (NCRWQCB) has jurisdiction over the watershed and establishes beneficial uses of water within the region. According to the NCRWQCB Water Quality Control Plan for the North Coast Region (2018 Basin Plan), existing beneficial uses for this region include: municipal, domestic, agricultural, industrial and commercial supply, groundwater recharge, freshwater replenishment, navigation, hydropower generation, recreation (contact and non-contact activities); cold freshwater habitat; wildlife habitat; migration of aquatic organisms; spawning, reproduction, and/or early development, and aquaculture.

Flooding

The Federal Emergency Management Agency (FEMA), through its flood map service center, produces flood hazard maps in support of the National Flood Insurance Program. These maps display flood hazard areas and provide a base for floodplain management. According to the latest (2017) flood hazard map (panel 1010), components of the project are within special flood hazard Zone A. Zone A identifies areas within a community subject to inundation by the 100-year flood. The 100-year flood has a one-percent chance of being equaled or exceeded in any given year.

According to the Mendocino County General Plan, MacKerricher SP should be under a special caution during a tsunami alert, and the beach area should be cleared if a flood tide and a tsunami are coincident. The beach area, from sea level to 25 feet above sea level, is considered susceptible to tsunami inundation.

Water Quality and Water Supply

The NCRWQCB Water Quality Control Plan for the North Coast Region (2018 Basin Plan) contains regulations adopted by the local water board to control the discharge of waste and other controllable factors affecting the quality of waters of the state within the boundaries of the North Coast Region. Waterbodies at MacKerricher SP are considered Minor Coastal Streams, as defined by the NCRWQCB Basin Plan.

Regulatory Setting

RWQCB

The Porter-Cologne Act grants the State Water Resources Control Board and each of the nine (9) RWQCBs power to protect water quality and is the primary vehicle for implementation of California's responsibilities under the CWA. The applicable RWQCB for the proposed project is the North Coast RWQCB. Under its regulatory authority established by this act, the North Coast RWQCB has adopted a Basin Plan that contains water quality standards and control

measures for the Basin. Permits required for this project from the RWQCB may include the National Pollution Discharge Elimination System permit (NPDES) and the Water Quality Certification.

The NPDES permit is required when proposing to or discharging of waste into any surface water of the state. For discharges to surface waters, these requirements become a federal National Pollution Discharge Elimination System (NPDES) Permit from the Regional Board in the project area.

Federal Clean Water Act (CWA) Section 401 Water Quality Certification is required for every federal permit or license for any activity which may result in a discharge into any waters in the United States. Activities include flood control channelization, channel clearing, and placement of fill. The Regional Board reviews the request for certification and may waive certification or may recommend either certification or denial of certification to the State Board Executive Director.

CDFW

The California Department of Fish and Game requires a Stream Alteration Agreement (SAA) for projects that will divert or obstruct the natural flow of water, change the bed, channel or bank of any stream, or use any material from a streambed. The SAA is a contract between the applicant and CDFW stating what can be done in the riparian zone and stream course.

USACE

Work in a river, stream, or wetland, may require a U.S. Army Corps of Engineers (USACE) permit. The regulatory authority of the USACE for riparian projects is based on Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act. Section 404 of the Clean Water Act requires Corps authorization for work involving intentional or unintentional placement of fill or discharge of dredged materials into any “waters of the United States”. The USACE also has general permits that cover restoration activities.

WOULD THE PROJECT:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including	☐	☐	☒	☐

	through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i.	result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
ii.	substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
iii.	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; or	☐	☐	☒	☐
iv.	impede or redirect flood flows?	☐	☐	☒	☐
d)	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
e)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒

DISCUSSION

a) **Less Than Significant Impact** - Short-term adverse impacts to water quality could occur during project construction related activities near Mill Creek or Lake Cleone. However, by scheduling construction during low flow or no flow periods and implementing **SPECIFIC PROJECT REQUIREMENTS GEO-1**, **STANDARD PROJECT REQUIREMENT HYDRO-1 AND STANDARD PROJECT REQUIREMENT Hazmat-1** (see Chapter 2, project requirements), the risk of water quality impacts during construction will be less than significant. The project will be required to obtain and comply with multiple permitting/regulatory agencies permits and conditions prior to project implementation. This permitting requirement is developed to minimize the risk of water quality degradation from sediment and other potential hazardous materials used during project construction. Additionally, in-water work is not proposed as part of this project.

b) **Less Than Significant Impact** – The project will not significantly alter or deplete local groundwater. Local groundwater may be encountered during some excavation activities; this will not impact the groundwater flow, recharge or direction within the project area. Groundwater encountered will be used for watering transplants, pumped to natural

depressions or dispersed at a distance not less than one hundred (100) feet from the channel and no return flow will be allowed to the channel.

c) **Less Than Significant Impact** – The project does not propose to alter drainage patterns or alter the course of existing water bodies. Revegetation of the disturbed areas and installation of erosion control BMPs will help stabilize soils and prevent siltation.
   i. Implementation of **STANDARD PROJECT REQUIREMENT HYDRO-1, AND SPECIFIC PROJECT REQUIREMENT GEO-1** (see Chapter 2, project requirements) will reduce the potential impact to construction related on or off-site erosion or siltation to a less than significant level.
   ii. A new access road, approximately 12-ft wide by 36-ft will extend from the park entrance road to the sump near Mill Creek. However, the road will not substantially increase the rate or amount of surface run-off.
   iii. This project will not create or contribute run-off that would exceed the capacity of existing or planned stormwater drainage systems. No substantial additional sources of polluted run-off are expected from this project. Implementation of **Standard Project Requirement Hydro-1 and Hydro-2** will reduce any impacts from polluted runoff to less than significant.
   iv. Components of this project are proposed within the 100-year flood zone. At Mill Creek, an above ground control panel for the water system will be installed and at Lake Cleone, the existing pumphouse will be relocated outside of the lake ordinary high-water line. However, these improvements are minor and not expected to impede or redirect flood flows, thus resulting in a less than significant impact.

d) **Less Than Significant Impact** – The pump station is situated within the high-water extents of Lake Cleone and regularly floods. This project will move the pump house outside of the lake ordinary high-water line. The pump house is not for residential use and will be used for equipment storage. At Mill Creek, a new above ground control panel will be installed adjacent to the existing sump. However, the panel is relatively small and not expected to impede or redirect flood flows.

e) **No Impact** – The project will conform with the beneficial uses listed in the NCRWQCB Water Quality Control Plan for the North Coast Region (2018 Basin Plan) for Minor Coastal Streams.

STANDARD OR SPECIFIC PROJECT REQUIREMENT

STANDARD PROJECT REQUIREMENT HYDRO-1: EROSION AND SEDIMENT CONTROL	• Best Management Practices (BMPs) will be used in all construction areas to reduce or eliminate the discharge of soil, surface water run-off, and pollutants during any ground disturbing activities as approved by the Regional Water Quality Control Board.

AND POLLUTION PREVENTION	• The CSP Contractor will install long-term erosion control measures for any areas where ground disturbing activities result in bare soil areas. The soil will be properly decompacted and mulched or revegetated with appropriate native grass seed, sterile grass seed, and/or native duff with the final selection made by a CSP-qualified representative.
SPECIFIC PROJECT REQUIREMENT Hydro-2: PERMIT AND SITE PLAN ADHERENCE AND IMPLEMENTATION	• Limit disturbance area to the necessary extent as outlined in the engineered project plans. • Design, install, and maintain temporary BMPs for the protection of disturbed areas that may be subjected to erosion or surface run-off with the potential to release sediment, nutrients, or hazardous materials to surface or ground water sources. • Implement a dewatering plan for construction activities at Mill Creek Sump. • Use designated and established staging, refueling, and maintenance areas for equipment that has the required BMPs to prevent the potential for contamination of surface or ground water sources. • Any stockpiled material will have appropriate BMPs according to the permitting requirements to ensure that wind and water erosion potential is eliminated. • Contractor will be familiar with the conditions of all required project permits and shall implement all required BMPs prior to commencing grading operations.

MITIGATION MEASURE - None

XI. LAND USE AND PLANNING.

ENVIRONMENTAL SETTING

Mendocino County - General Plan

MacKerricher SP is a 2,463-acre coastal recreation area, zoned as Open Space in the Mendocino County General Plan and Coastal Element. Open Space lands are those considered unsuitable for development or most valuable left in the undeveloped natural state. Lands adjacent to the Park near the project site are designated Rural Residential by the County of Mendocino. Development and uses within the coastal zone are guided by the Mendocino Local Coastal Program.

Mendocino Coastal Element Policy 4.3-4 states that Mill Creek Drive shall remain open for free vehicle, equestrian, and pedestrian day use access to the MacKerricher Beach parking lot. CSP shall be encouraged to seek alternative methods of controlling access to the campgrounds (MCGP, Coastal Element, 2009).

MacKerricher State Park - General Plan

Development and uses within MacKerricher SP are guided by the MacKerricher SP General Plan. The project is located within the Lake Cleone Resource Management Zone (RMZ) which consists of the lake itself and the area of riparian vegetation that surrounds the like and its inlet, Mill Creek. Resource management objectives for the Park include but are not limited to balancing the needs for a park water supply, a popular recreation resource, a scenic resource, and protection of important natural and cultural resources.

North Coast Regional Water Quality Control Plan - NCRWQCB Basin Plan

The NCRWQCB Water Quality Control Plan for the North Coast Region (2018 Basin Plan) contains regulations adopted by the local water board to control the discharge of waste and other controllable factors affecting the quality of waters of the state within the boundaries of the North Coast Region. Waterbodies at MacKerricher SP are considered Minor Coastal Streams, as defined by the NCRWQCB Basin Plan.

WOULD THE PROJECT:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

DISCUSSION

a) **No Impact** - The project will not divide or impact established communities since none exist at the project location. The project is completely within MacKerricher SP which is designated as Open Space land by Mendocino County.

b) **Less Than Significant Impact** - MacKerricher SP development and uses are guided by CSP policy, Mendocino County's Local Coastal Plan, General Plan, and the regulations of various agencies with jurisdiction authority. During construction activities at the Mill Creek intake site, the primary park entrance would be closed to visitors to ensure public safety. However, implementation of Standard Project Requirement **Rec-1** (see Chapter 2, project requirements) will ensure the public are informed of road closures. State Parks would provide local notifications via park postings prior to and during all construction activities that would result in closures. Alternative options would be publicized, and visitors would be redirected to the Mill Creek Avenue park road for access to park campgrounds and Laguna Point facilities. Additionally, components of this project are proposed within the 100-year flood zone. However, the project will conform with the beneficial uses listed in the NCRWQCB Water Quality Control Plan for the North Coast Region (2018 Basin Plan).

STANDARD OR SPECIFIC PROJECT REQUIREMENT – REC-1

MITIGATION MEASURE – NONE

XII. MINERAL RESOURCES.

ENVIRONMENTAL SETTING

The Surface Mining and Reclamation Act (SMARA) mandates the California Geological Survey (CGS) to provide economic-geologic expertise to assist in the projection and development of mineral resources through the land-use planning process. The primary products are mineral land classification maps and reports created by CGS' Division of Mines and Geology. Mineral land classification address specific types of mineral deposits that occur in specific geographical areas.

Mendocino County General Plan

The most predominant minerals found in Mendocino County are aggregate resource minerals, primarily sand and gravel, found along many rivers and streams. Aggregate hard rock quarry mines are also found throughout the county. General Plan Policy RM-58 establishes environmental protection as a high priority during mineral extraction and associated processing operations and in site reclamation. Recovery of mineral resources is not allowed when adverse environmental or social effects outweigh the public benefit (MCGP, 2008).

Public Resources Code § 5001.65

Commercial exploration of resources in units of the State Park system is prohibited. Additionally, CSP policy does not permit the commercial extraction of mineral resources due to impacts to resources.

California State Parks

Mineral resource extraction is not permitted within State Park property under the Resource Management Directives of the Department of Parks and Recreation.

WOULD THE PROJECT:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Result in the loss of availability of a known mineral resource that is or would be of value to the region and the residents of the state?	☐	☐	☐	☒
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?	☐	☐	☐	☒

DISCUSSION

a-b) **No Impact** – No significant mineral resources have been identified within the boundaries of the CSP unit and all project activities will occur within CSP lands. The project will not change land use activities on the site and will therefore not result in the loss of availability of a known mineral resource or a locally important mineral resource recovery site. As stated in the Environmental Setting above, under PRC § 5001.65, mining within any unit of the State Park System is prohibited.

STANDARD OR SPECIFIC PROJECT REQUIREMENT - NONE

MITIGATION MEASURE - None

XIII. NOISE.

ENVIRONMENTAL SETTING

Noise is defined as unwanted sound and is known to have several adverse effects on people, including hearing loss, speech and sleep interference, physiological responses, and annoyance. Based on these known adverse effects of noise, the federal government, the State of California, and many local governments have established criteria to protect public health and safety and to prevent disruption of certain activities. The health effects of noise on people are the primary consideration of assessing potential noise impacts from a project. The effect of noise on humans can be placed in three categories:

- Subjective effects of annoyance, nuisance, and dissatisfaction
- Interference with activities such as speech, sleep, and learning
- Physiological effects such as hearing loss or sudden startling

Environmental noise (such as noise measured in conjunction with a proposed new development) generally produces effects in the first two categories. Workers in industrial plants can experience noise in the last category, although project-related noise can infrequently be associated with the third category. There is no completely satisfactory way to measure the subjective effects of noise or the corresponding reactions of an individual or community to noise, but tolerance levels tend to be based on an individual's experiences with noise. Therefore, an important way of predicting human reaction to a new noise environment (i.e., post-project) is to compare it with the existing environment (pre-project) to which the community has adapted—the ambient noise level. In general, the more a new noise exceeds the previously existing noise level, the less acceptable the new noise will be judged by those hearing it. CSP does not maintain a standard for noise, typically deferring to the requirements of the local jurisdiction in which the park unit is located.

Mendocino County General Plan

Mendocino County has a zoning ordinance that controls potential nuisances such as noise and vibration. The noise zoning ordinances states that the L_{max} for any activity over a one hour period shall not exceed 60 dBA between 7:00 a.m. to 10 p.m. or 55 dBA between 10 p.m. to 7:00 a.m. for single family residential land use (MCGP, Noise Policies, Policy DE-100). Maximum noise exposure limits are applicable beyond any property lines of the property containing the noise.

MacKerricher State Park General Plan

CSP does not maintain a standard for noise, typically deferring to the requirements of the local jurisdiction in which the park unit is located. The General Plan requires evaluation of noise impacts for new developments that may add increased noise levels during normal operation. It is CSP policy that projects with noise impacts are subject to timing constraints to avoid negative impacts to park visitors, neighbors, and sensitive wildlife identified as occurring in the vicinity. At MacKerricher SP, the predominant noise sources are the highway and the ocean

surf. The projected 2030 Noise Contour (CNEL) North of Fort Bragg City limits are 70 dBA at 70 feet away from the State Route-1 (SR-1) centerline (MCGP, Development Element, 2009).

Airports

The Mendocino County Comprehensive Airport Land Use Plan (MCACALUP) includes five public use airports within the county. MacKerricher SP is not within the boundary of the MCACALUP. The Fort Bragg airport is located within proximity to the project location. However, this is a private use airport located approximately .9 mile southeast (straight line distance) of the project location and not included in the MCACALUP (Airnav 2020).

WOULD THE PROJECT:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

DISCUSSION

a) **Less Than Significant Impact** - Construction related noise levels at the project site could fluctuate depending on the type and use of heavy equipment. Short-term increases in ambient noise levels could result in speech interference near the project sites. Due to the temporary duration of exposure and with implementation of standard project requirement **Noise-1**, and Specific Project Requirement **Noise-2**, noise impacts to sensitive receptors will have a less than significant impact. After the project is complete, noise levels will return to pre-construction levels and will not result in a permanent increase in ambient noise.

b) **Less Than Significant Impact** - The project will by necessity, generate ground borne vibrations and higher ground borne noise levels. Modest and temporary vibration may occur as a result of construction activities potentially including heavy equipment such as drilling equipment, backhoes, heavy trucks, and other equipment that are known to produce notable noise and ground borne vibrations. Due to the temporary duration of construction,

and with implementation of Standard Project Requirement **Noise-1** and Standard Project Requirement **Noise-2**, impacts resulting from ground borne vibrations or ground borne noise levels will be less than significant.

c) **No Impact** - The project area is not located within an airport land use plan or within two (2) miles of a public use airport. Therefore, the proposed project would not expose people residing or working in the project area to excessive noise levels.

STANDARD OR SPECIFIC PROJECT REQUIREMENT

Noise	
STANDARD PROJECT REQUIREMENT NOISE-1: NOISE EXPOSURE	• Internal combustion engines used for any purpose in the project areas 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., engine enclosures, acoustically attenuating shields or shrouds, intake silencers, ducts, etc.) whenever feasible and necessary. • Stationary noise sources and staging areas will be located as far from visitors as possible. If they must be located near visitors, stationary noise sources will be muffled to the extent feasible, and/or where practicable, enclosed within temporary sheds.
SPECIFIC PROJECT REQUIREMENT NOISE-2: WORK HOURS	• Project related activities will generally be limited to the daylight hours, Monday through Friday. However, weekend work may be implemented to accelerate construction or address emergency or unforeseen circumstances. No work shall occur before 8:00 am or after 6:00 pm.

MITIGATION MEASURE - NONE

XIV. POPULATION AND HOUSING

ENVIRONMENTAL SETTING

MacKerricher SP is bordered on the north by the Ten Mile River, to the east by a census designated community (Cleone) and to the south by the City of Fort Bragg. The Park has no permanent residents as it is a recreational facility. Development of permanent housing is not a planned use of the Park. The Park is zoned as Open Space under the Mendocino County Coastal Element and General Plan.

WOULD THE PROJECT:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

DISCUSSION

a, b,) **No Impact** – The project is within a State Park. The project does not involve any increase or reduction in available housing, or infrastructure that will lead to population growth, or the displacement of people. The proposed project has no housing component and all work will take place within the confines of the park boundaries. It will neither modify nor displace existing housing, either temporarily or permanently.

STANDARD OR SPECIFIC PROJECT REQUIREMENT - NONE

MITIGATION MEASURE – NONE

XV. PUBLIC SERVICES.

ENVIRONMENTAL SETTING

MacKerricher SP is bordered on the north by the Ten Mile River, to the east by a census designated community (Cleone) and to the south by the City of Fort Bragg. The Park has no permanent residents as it is a recreational facility. Development of permanent housing is not a planned use of the Park. The Park is zoned as Open Space under the Mendocino County General Plan. The project location is immediately north of the Fort Bragg City limits. Emergency access to the project site is via State Route-1 (SR-1), a two-lane highway.

Fire Protection
MacKerricher SP is designate as a State Responsibility Area. In the event of a fire, protection is provided by the California Department of Forestry and Fire Protection (CalFire); as outlined in a Cooperative Fire Protection Agreement with CSP. CalFire are supported by the Mendocino Fire Protection Department and the Fort Bragg Fire Department.

Police Services
State Park Peace Officers (Rangers) are trained law enforcement officers. They provide immediate police protection within the park boundaries, with backup provided by both the Fort Bragg Police and the Mendocino County Sheriff's Departments. Both departments have stations within 10 miles of the proposed project location.

Schools
There are no existing or proposed schools within one-quarter mile of the project location.

WOULD THE PROJECT:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	☐	☐	☐	☒
i. Fire protection?	☐	☐	☐	☒
ii. Police protection?	☐	☐	☐	☒
iii. Schools?	☐	☐	☐	☒

iv.	Parks?	☐	☐	☐	☒
v.	Other public facilities?	☐	☐	☐	☒

DISCUSSION

a) **No Impact** - The project will have no impact on the Wildfire Management at for MacKerricher State Park. The proposed project will not create an increase in public service requirements, impact police services provided by CSP Park Rangers or disrupt school services. Additionally, the proposed project is CSP approved and will not result in an impact to the park or other surrounding public facilities.

Access to the Park would remain open to the public except in the immediate project area. None of the project elements would interrupt normal activities at the Park or contribute to significant increase in visitation. The level of required services within the park is expected to remain relatively static, subject only to seasonal fluctuations in visitor use.

STANDARD OR SPECIFIC PROJECT REQUIREMENT - Hazmat-2

MITIGATION MEASURE - NONE

XVI. RECREATION.

ENVIRONMENTAL SETTING

MacKerricher SP is a 2,463-acre semi-rural, coastal recreation area, emphasizing the importance of the marine and shore environments, sand dunes, marine terraces, wetland areas, geology, plant and animal life, and numerous cultural sites within and adjacent to the park. The purpose of the park is to make beach access and the rest of these features available, in an essentially natural condition, for visitor enjoyment, while protecting the resources for future generations.

Nearly half a million people enjoy MacKerricher SP annually (CDPR statistics for Fiscal Year 2015/16). Visitation is heaviest during the summer months but continues throughout the entire year. People come to the park for camping, picnicking, freshwater and surf fishing, beachcombing, nature observation, walking on the park's boardwalk, horseback riding, and hiking, biking, or jogging on the historic Haul Road. The old Haul Road spans most of the southern portion of MacKerricher State Park and is part of the Coastal Trail. With the exception of a short detour at Lake Cleone due to a washout, visitors can walk or bicycle the old haul road route from Glass Beach across the Pudding Creek Trestle and continue north for over 3 miles (4.8 km) to Ward Avenue.

MacKerricher SP Recreational Facilities
MacKerricher SP is a destination park with overnight facilities as well as facilities for day use visitors. Current park facilities include formalized parking (paved and dirt lots), restrooms/showers, hiking and bike trails, picnic areas, interpretive exhibits, and an environmental learning/visitor center (CDPR 2017).

Overnight Facilities

- Family Campsites
- Group Campsites
- Hike or Bike Campsites
- RV Dump Station
- RV Access

Day Use Facilities

- Trails
- Environmental Learning/Visitor Center
- Interpretive Exhibits
- Paved and Dirt Parking Lots
- Restrooms
- Picnic Areas at Lake Cleone and Laguna Point
- Seal Watching Station at Laguna Point

MacKerricher SP Accessible Facilities

The park also provides the following accessible overnight and day use facilities.

- Six accessible campsites
- Two generally accessible campground restrooms with showers
- Two accessible picnic areas, an accessible vault restroom, and one accessible water station at Laguna Point
- Accessible trails
  - Laguna Point Interpretive Trail
  - Haul Road Trail
- One van-accessible parking space at the park visitor center
- Accessible exhibits in the park visitor center

MacKerricher SP Recreational Activities

- Hiking
- Biking
- Horseback Riding
- Boating
- Scuba Diving/Snorkeling
- Nature & Wildlife Viewing
- Windsurfing/Surfing
- Beach Activities

MacKerricher SP Attendance Figures (CDPR 2017)

Total attendance figures for SYRSP in Fiscal Year 2015/2016 are**:**

Free day Use – 379,430

Camping – 80,821

Note, data on visitor attendance reflects an estimate of the number of individual visits (not the number of individual visitors) to the park unit during the fiscal year.

Public Lands and Parks in Mendocino County (within 20-mile radius of MacKerricher SP)

There are nine state parks within 20 miles of the project area:

- *Westport Union Landing State Beach* (91 acres) – Family Campsites, Primitive Camping, RV Access, Restrooms, Parking, Hiking, Boating Fishing, Biking, Scuba Diving/Snorkeling, Nature & Wildlife Viewing, Windsurfing/Surfing

- *Jug Handle State Natural Reserve* (776 acres) – Hiking, Boating, Fishing, Scuba Diving/Snorkeling, Nature & Wildlife Viewing, Windsurfing/Surfing, Parking, Restroom

- *Caspar Headlands State Natural Reserve* (3 acres) – Boating, Hiking, Fishing, Scuba Diving/Snorkeling, Nature & Wildlife Viewing, Windsurfing/Surfing

- *Caspar Headlands State Beach* (130 acres) – Boating, Fishing, Scuba Diving/Snorkeling, Windsurfing/Surfing

- *Point Cabrillo Light Station State Historic Park* (383 acres) – Lodging, Hiking, Environmental Learning/Visitor Center, Exhibits and Programs, Guided Tours, Interpretive Exhibits, Nature & Wildlife Viewing, Museums, Parking, Restrooms

- *Mendocino Headlands State Park* (7709 acres) – Hiking, Horseback Riding Boating, Boat Ramps, Fishing, Scuba Diving/Snorkeling, Nature & Wildlife Viewing, Parking, Restrooms, Environmental Learning/Visitor Center

- *Mendocino Woodlands State Park* (646 acres) – Lodging, Alternative Camping, Restrooms/Showers, Hiking, Fishing, Nature & Wildlife Viewing, Family Programs

- *Russian Gulch State Park* (1305 acres) – Family Campsites, Group Campsites, Hike or Bike Campsites, RV Access, Picnic Areas, Hiking, Horseback Riding, Boating, Nature & Wildlife Viewing, Windsurfing/Surfing, Family Programs, Fishing, Interpretive Exhibits, Scuba Diving/Snorkeling, Parking, Restrooms/Showers, Outdoor Showers

- *Van Damme State Park* (2336 acres) – Family Campsites, Group Campsites, Enroute Campsites, Environmental Campsites, Hike or Bike Campsites, RV Access, RV Dump Station, Hiking, Boating, Boat Rentals, Picnic Areas Nature & Wildlife Viewing, Windsurfing/Surfing, Family Programs, Fishing, Interpretive Exhibits, Scuba Diving/Snorkeling, Parking, Restrooms/Showers, Outdoor Showers, Parking, Restrooms, Environmental Learning/Visitor Center

Other public parks (within 20-mile radius of MacKerricher SP)

- *Jackson Demonstration State Forest* (48,652 acres) – Camping, Horse Campground, Hiking, Mushroom Collecting

- *City of Fort Bragg* – various city parks, including:

  Otis R Johnson Wilderness Park – seven-acre park offers with shady walking trails adjacent to Pudding Creek

  Pomo Bluffs Park – 25 acres of land on the southern bluffs above Noyo Bay

  Noyo Headlands Fort Bragg Coastal Trail – hiking along rugged clifftops and the beaches of Glass Beach.

WOULD THE PROJECT:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Would the 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?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☐	☐	☐	☒

Criteria for Determining Significance

The analysis of determining the significance of impacts of the Proposed Action to Recreation is based on criteria **XIV** a-b, described in the environmental checklist above.

DISCUSSION

a) **No Impact** - The primary park entrance would be closed to visitors during construction to ensure public safety. However, implementation of Standard Project Requirement **Rec-1** will ensure the public are informed of road closures. State Parks would provide local notifications via park postings prior to and during all construction activities that would result in closures. Alternative options would be publicized, and visitors would be redirected to the Mill Creek Avenue park road for access to park campgrounds and Laguna Point facilities.

Access to the Park would remain open to the public except in the immediate project area. The park water system would continue to operate off the existing water storage tank during the installation of new water treatment equipment. None of the project elements would interrupt normal activities at the Park or contribute to significant increase in visitation. The level of required services within the park is expected to remain relatively static, subject only to seasonal fluctuations in visitor use. No other park facilities and access locations, such as the Pudding Creek trestle and Silver gate parking lot at the south end of the park, would be affected by project activities.

Access to certain areas of MacKerricher SP is routinely restricted or closed temporarily in winter due to storms, flooding, high tides or unsafe conditions. Seasonal and temporary closures to park access in the interest of public safety or resource protection are a standard practice of park management and park policy. Such closures have not resulted in the increased use or the deterioration of other recreational parks or facilities nearby or in the region. The project would not cause increased use of other parks or recreational facilities

nor would the project lead to physical deterioration of any known facilities. The project would have no impact.

b) **No Impact** - The purpose of the Water System Improvements Project is to improve the drinking water collection and treatment equipment and to provide a supplemental water source from Mill Creek to augment the existing Lake Cleone source. Additionally, this project would increase the park's drinking water storage capacity. The proposed project would not include the construction or expansion of any recreational facilities within the Park. The project would have no impact.

STANDARD OR SPECIFIC PROJECT REQUIREMENT – REC-1 SIGNAGE

STANDARD PROJECT REQUIREMENT REC-1:	• During construction, bike and pedestrian access to adjacent trails will be clearly delineated and signed. Periodic road closures will be posted and alternative routes, if available will be identified.

MITIGATION MEASURE - NONE

XVII.TRANSPORTATION.

ENVIRONMENTAL SETTING

MacKerricher SP is bordered on the north by the Ten Mile River, to the east by the community of Cleone and to the south by the City of Fort Bragg. The Park is zoned as Open Space under the Mendocino County Coastal Element (MCGP, Coastal Element, 2009).

The main transportation route along the Mendocino Coast is State Route 1 (SR-1), also known as the Pacific Coast Highway (PCH). The section of SR-1 adjacent to MacKerricher State Park is a two-lane, state-maintained highway and has been designated as a National Scenic Byway. Due to the limited number of transportation routes along the coast, SR-1 is also a designated truck route and vehicle traffic includes local as well as regional delivery trucks. Traffic volumes vary seasonally, with increased traffic in the spring and summer months, including tour buses and recreational vehicles. SR-1 is the main thoroughfare through the town of Fort Bragg and seasonal traffic can cause congestion in the downtown area. Traveling bicycle tourists use SR-1 as the designated bicycle route along the Mendocino Coast, especially during the summer months. A scenic alternative allows bicyclists to access MacKerricher SP at Mill Creek Drive, where riders can continue south along the coast on the old Haul Road and over the Pudding Creek trestle into the town of Fort Bragg. North of MacKerricher SP, the Coast Trail is part of SR-1. Hikers exploring the Coast Trail within the Preserve follow a route along the beach between the Ten Mile River and Ward Avenue.

Traffic

MacKerricher SP is bordered by SR-1 to the east. The traffic profile for this portion of SR-1 is described by table 5, below. The table below shows provides a traffic profile of SR-1, immediately back (South) and ahead (North) of postmile R 64.858, which is located at MacKerricher SP. The Annual Average Daily Traffic (AADT) is the total traffic volume for the year divided by 365 days. The AADT is necessary for presenting a statewide picture of traffic flow, evaluating traffic trends, computing accident rates, planning and designing highways and other purposes (Caltrans, 2015).

Table 5 - 2015 Traffic Volumes on California State Highway 1 (SR-1) at MacKerricher SP

Postmile	*Description*	*Back Peak hour*	*Back Peak Month*	*Back AADT*	*Ahead Peak Hour*	*Ahead Peak Month*	*Ahead AADT*
R 64.858	MacKerricher State Park	870	6100	4600	300	2150	1500

Peak Month ADT is the average daily traffic for the month of heaviest traffic flow. This data is obtained because on many routes, high traffic volumes which occur during a certain season of the year are more representative of traffic conditions than the annual ADT. The Peak Hour

value shows how near to capacity the highway is operating. Unless otherwise indicated, peak hour values indicate the volume in both directions (Caltrans, 2015).

Mendocino County Coastal Element - Transportation

The Coastal Act's requirement that the highway "in rural areas of the coastal zone remain a scenic two-lane road" (Section 30254) imposes definite, but not easily determined, restraints on development. At present, the highway has only two lanes, except for a short, four-lane segment through Mendocino Town and a continuous left-turn lane between Fort Bragg and Boice Lane north of Jug Handle Creek and partially through the town of Fort Bragg. SR-1 is the major existing or potential route serving most trips made along the Mendocino coast by residents, visitors, and local commerce and industry (MCGP, Transportation, Utilities and Public Services, 2009).

Most Mendocino County commuters use the automobile, which is typical of the rest of California. Public transportation use is significantly lower than the statewide percentage. However, bicycling, walking, and working at home percentages are higher than those for the remainder of the state. While spreading demand among the various modes can lessen the demand on the highway system, the county's small population, rural nature, and distances between population centers often limit the availability and efficiency of transportation modes, other than the automobile, outside of the county's urban areas.

Table 6 – Modes of Transportation in California and Mendocino County

Transportation Mode	*California*	*California*	*Mendocino County*	*Mendocino County*	*Unincorporated Mendocino County*	*Unincorporated Mendocino County*
	Workers	Percent	Workers	Percent	Workers	Percent
Drive alone	10,432,462	71.8	26,959	71.6	18,542	72
Carpool	2,113,313	14.5	5,302	14.1	3,520	13.7
Public transportation	736,037	5.1	218	0.6	144	0.6
Bicycle or walk	535,148	3.7	2,238	5.9	1,245	4.8

Note: summary of transportation modes to work for both California and Mendocino County, based on 2000 U.S. Census data (MCGP, Development Element, 2009).

Public Transit

The Mendocino Transit Authority (MTA) provides public transportation services to residents of Mendocino County and its incorporated cities. The MTA offers fixed route and demand responsive service to residents of the county. As of August 2007, MTA operated 12 fixed routes, serving areas along SR 128 from SR 1 to Ukiah, the Ukiah Valley area, the U.S. 101 corridor between Hopland and Laytonville, and along SR 1 between SR 128 and Fort Bragg, as well as limited connections on the South Coast from SR 128 to Gualala. Other routes extend from SR 1 and U.S. 101 to Bodega Bay and Santa Rosa in Sonoma County. Demand responsive service is available in the Willits, Fort Bragg, and Ukiah areas. The MTA has consistently made efforts to coordinate with private transportation in Mendocino County.

Through this arrangement, service is provided between the North Coast and inland areas. A contract with Sonoma County Transit provides a transit link between the South Coast area and Santa Rosa. MTA also provides services to individuals with special needs, such as the elderly, disabled, or others who cannot drive. Greyhound, a private company, provides interregional bus service (MCGP, Development Element, 2009). There are no public transportation routes to MacKerricher SP.

Airports

Mendocino County has a Comprehensive Airport Land Use Plan (MCACALUP) that includes five public use airports within the county. MacKerricher SP is not within the boundary of the MCACALUP. The Fort Bragg airport is located within proximity to the project location. However, this is a private use airport located approximately .9 mile southeast (straight line distance) of the project location and not included in the MCACALUP (Airnav 2020).

WOULD THE PROJECT:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☐	☒
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)(1)?	☐	☐	☒	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
d) Result in inadequate emergency access?	☐	☐	☒	☐

DISCUSSION

a) **No Impact** - All construction activities associated with the project would occur within the boundaries of the Park. None of the activities proposed as part of this project would have the potential to cause traffic delays on a public road or result in an increase in Vehicle Miles Travelled (VMT). The traffic count at MacKerricher SP is expected to remain relatively static, except for seasonal variation. Traffic resulting from construction personnel and debris removal will have a negligible contribution on the amount of traffic traversing SR-1.

b) **Less Than Significant Impact** - CEQA Guidelines section 15064.3, subdivision (b)(1) lists criteria for analyzing transportation impact related to land use projects. Generally, projects

within one-half (.50) mile of either an existing major transit stop or a stop along an existing high quality transit corridor should be presumed to cause a less than significant transportation impact [14 CCR Section 15064.3 (b)(1)]. The proposed project is approximately over 2 miles away from the closest transit stop in the city of Fort Bragg.

c) **No Impact** - The proposed project is located at MacKerricher SP. Alteration of transportation features such as highways or County roads are not within the scope of this project. Although the project sites will be closed to the public, heavy equipment has the potential to create conflict with recreation users within the Park. Strict adherence to **SPR-Traffic-1** will reduce potential impacts.

d) **Less Than Significant Impact** - Emergency access would remain intact, vehicle access by park rangers, staff or emergency medical services is currently allowed in the event of an emergency. In the event of life-threatening emergencies, the California Shock Trauma Air Rescue (CALSTAR Area 4) service helicopters, based at Ukiah Municipal Airport, provide air ambulance service for Mendocino County, available for medical emergencies, search and rescue, and fire support. Response time is generally under 30 minutes. Therefore, the impact of this project on emergency access or response would be less than significant (Calstar, 2020).

STANDARD OR SPECIFIC PROJECT REQUIREMENT: TRAFFIC-1

STANDARD PROJECT REQUIREMENT TRAFFIC-1: TRAFFIC CONTROL PLAN	• Prior to commencing construction, the Contractor shall prepare a traffic control plan that includes the following components: Exclusionary fencing will be placed along the project limits, as necessary, to exclude non-construction personnel from the construction area. Speed limits shall be set for heavy equipment traveling to and from the project site by the State's Representative.

MITIGATION MEASURE - None

XVIII.TRIBAL CULTURAL RESOURCES.

ENVIRONMENTAL SETTING

The project area lies within the nuclear territory of the Coast Yuki and the Northern Pomo and are the applicable tribal authorities for lands encompassing the study area. Section V. *Cultural Resources* describes the ethnographic context of the project area. All state agencies including CSP are required to consult with Native American tribes regarding projects that may impact tribal cultural resources under California Assembly Bill (AB) 52 [PRC 21080.3.1(b)(d)]. Native American consultation pursuant to CEQA guidelines and AB 52 mandates, include a sacred lands file search with the Native American Heritage Commission (NAHC) and outreach to tribes that have requested formal consultation with the department for projects on their tribal land.

CSP contacted the NAHC for this project on two occasions (December 2016 and January 2020) requesting a sacred lands file search, a list of tribes requesting formal outreach pursuant to AB 52, and for a contact list of other tribes affiliated with the area. Additionally, CSP consulted their database of tribes that have requested formal consultation under AB 52 [PRC 21080.3.1(b)(d)] for departmental projects. The search of the CSP database and by the NAHC of tribes requesting formal consultation for the project area proved negative; however, the NAHC did provide a contact list of five tribes affiliated with the area: Coyote Valley Band of the Pomo Indians, Noyo River Indian Community, Pinoleville Pomo Nation, Redwood Valley Little River Band of Pomo Indians, and Sherwood Valley Band of Pomo Indians. The NAHC search did not identify any Native American cultural resources or sacred sites in in 2016 or 2020 in the immediate area and archaeological studies (archival and field) of the project area by CSP proved negative for the presence of Native American archaeological sites.

Only two tribes responded to numerous outreach attempts by CSP for the project. The Redwood Valley Little River Band of the Pomo Indians and the Sherwood Valley responded to CSP's outreach for the project. Redwood Valley Little River Band of Pomo Indians wrote a letter stating the project was not within their immediate cultural territory and had no concerns with the project. CSP met with a representative of the Sherwood Valley Band of the Pomo Indians in 2017 at MacKerricher SP to discuss the water improvements project. During the meeting, no tribal cultural resources were identified in the project area by the tribal representative and they had little concern with the proposed project.

WOULD THE PROJECT:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	☐	☐	☐	☒
i. Listed or eligible for listing in the California Register of Historical	☐	☐	☐	☒

	Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or				
ii.	A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☐	☒

DISCUSSION

b) **NO IMPACT – TRIBAL CULTURAL RESOURCES**

No tribal cultural resources present within the project area. MacKerricher SP locality, situated on the coast is important to both the Coast Yuki and the Northern Pomo for its “sense of place” and the rich and diverse resources available there, including plants and animals (terrestrial and marine); however, tribal cultural resources within the project area were not identified during CSP’s cultural studies or though consultation efforts for this project. By Implementing **Project Requirements CULT-1 through CULT-5** outlined in the Cultural Resources section, will ensure work will not impact previously unidentified tribal cultural resources.

XIX. UTILITIES AND SERVICE SYSTEMS.

ENVIRONMENTAL SETTING

MacKerricher SP borders the City of Fort Bragg to the south. The City of Fort Bragg provides sewer service to MacKerricher SP. Sewage for the park is transported from the park to Fort Bragg via an underground line to a lift station. Solid waste disposal service is provided under contract with Fort Bragg Waste Management. Most residents and businesses in Mendocino County, except those in Ukiah, receive electric service from Pacific Gas and Electric (MCGP, Development Element - Utilities, 2009). The park supplies its own water from a single water source located along the western edge of Lake Cleone.

WOULD THE PROJECT:	POTENTIALLY SIGNIFICANT IMPACT	LES S THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Require or result in the relocation or construction of new or expanded water, or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c) 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?	☐	☐	☒	☐
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

DISCUSSION

a) **Less Than Significant Impact** - As noted above, water for the park is supplied by CSP owned and controlled water supplies. No new facilities are proposed, just rehabilitation and replacement of existing infrastructure. New waterlines will be installed to retrofit existing infrastructure.

d) **Less Than Significant Impact** - It is anticipated that additional waste will be generated as part of this project. However, the proposed project will not significantly increase the park's waste generation or solid waste disposal needs.

e) **No Impact** - Waste generated by the project will be stored in appropriate receptacles and removed daily or as needed.

STANDARD OR SPECIFIC PROJECT REQUIREMENT - NONE

MITIGATION MEASURE - None

XX. WILDFIRE.

ENVIRONMENTAL SETTING

Fire Hazards

The California Department of Forestry and Fire Protection (CalFire) has a legal responsibility to provide fire protection on all State Responsibility Area lands, which are defined based on land ownership, population density and land use. MacKerricher State Park is within a State Responsibility Area. CalFire categorizes fire hazard severity for parts of MacKerricher State Park as "Moderate" and "High" (CalFire 2018).

The southern portion of MacKerricher SP consists of a coastal terrace dissected by small to medium sized drainages and terminating in steep, rock bluffs and isolated beaches. A relatively gentle topography, highlighted by Lake Cleone and surrounding wetlands and coniferous forests, characterizes the central portion of MacKerricher SP. Most of the park acreage occurs north of Lake Cleone, consisting primarily of an extensive dune system punctuated by small seasonal wetlands and two large wetland complexes, including a very rare coastal fen. A continuous stretch of beach extends from Laguna Point north to the Ten Mile River.

Fire protection is provided by the California Department of Forestry and Fire Protection (CAL FIRE), as outlined in a Cooperative Fire Protection Agreement with CSP. They are supported by the Mendocino Fire Protection Department and the Fort Bragg Fire Department, as necessary. The CAL FIRE Fort Bragg Fire Station is approximately 5-9 miles (8-14 km) from the project site. Additional assistance is available from Parlin Fork Conservation Camp (California Department of Corrections). CAL FIRE also maintains an Air Attack Base at the Ukiah Municipal Airport, approximately 65 miles (105 km) and 15-20 minutes flight time away. The CAL FIRE Helitack Base is located in Willits, about 35 miles (56 km) to the east of Fort Bragg.

WOULD THE PROJECT:	POTENTIALLY SIGNIFICANT IMPACT	LES S THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water	☐	☐	☒	☐

	sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				
d)	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

DISCUSSION

a) **No Impact** - The project will have no impact on the Wildfire Management MacKerricher SP. Implementation of **Hazmat-2** during construction will be in accordance with CSPs' cooperative fire protection agreement.

b) **Less Than Significant Impact** - The project will have no impact on wildfire risks. Implementation of **Hazmat-2** during construction will ensure a Fire Safety Plan will be developed and approved by a CSP-approved forester prior to the start of construction.

c) **Less Than Significant Impact** - The project will keep a vehicle pullout and turnaround near the creek crossing for creek water drafting access. Additionally, implementation of **Hazmat-2** during construction will be in accordance with CSPs' cooperative fire protection agreement.

d) **No Impact** - The project will have no effect on potential wildfire intensity or fire effects. Implementation of **Hazmat-2** during construction will be in accordance with CSPs' cooperative fire protection agreement.

STANDARD OR SPECIFIC PROJECT REQUIREMENT

STANDARD PROJECT REQUIREMENT HAZMAT-2: WILDFIRE AVOIDANCE AND RESPONSE	• A Fire Safety Plan will be developed by a CSP-approved forester, prior to the start of construction. • Spark arrestors or turbo-charging (which eliminates sparks in exhaust) and fire extinguishers will be required for all heavy equipment. • Construction crews will be required to park vehicles away from flammable material, such as dry grass or brush. At the end of each workday, heavy equipment will be parked on roads or staging areas to reduce the chance of fire.

MITIGATION MEASURE - NONE

CHAPTER 4
MANDATORY FINDINGS OF SIGNIFICANCE

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

DISCUSSION

a) **Less Than Significant Impact** - As discussed in Section IV of this document, all potential biological related impacts will be less than significant with implementation of the biological resource project requirements. As identified in Section V of this document, State Parks evaluated the existing water treatment system at the Park and determined this project will not impact any eligible Historic resources. Although cultural resource inventories confirm that the park has a high degree of archaeological sensitivity, no archaeological sites were identified within the project area. To ensure that there are no impacts to these historic resources see Specific Project Requirement Cult-2 in the Archeological Resources Section (see Chapter 2). In the event archaeological artifacts are found, project requirements would stop work until the resource could be evaluated.

b) **Less Than Significant Impact** - The project does not have impacts that are individually limited, but cumulatively considerable. Potential air quality, greenhouse gas emissions, hydrology, and traffic impacts are discussed in the respective sections above. The project will not increase the demands for public services, increase traffic, air pollutions, or contribute to cumulative effects with respect to future developments in Mendocino County.

c) **Less Than Significant Impact** - All impacts identified in this ND are less than significant, with project requirements, and do not require mitigation. Therefore, the proposed project would not result in environmental effects that cause substantial adverse effects on human beings either directly or indirectly.

CHAPTER 5
SUMMARY OF MITIGATION MEASURES

There are no mitigation measures associated with this project.

AESTHETICS

MITIGATION MEASURES

- **NO MITIGATION REQUIRED**

AGRICULTURAL RESOURCES

MITIGATION MEASURES

- **NO MITIGATION REQUIRED**

AIR QUALITY

MITIGATION MEASURES

- **NO MITIGATION REQUIRED**

BIOLOGICAL RESOURCES

MITIGATION MEASURES

- **NO MITIGATION REQUIRED**

CULTURAL RESOURCES
MITIGATION MEASURES

- **NO MITIGATION REQUIRED**

ENERGY
MITIGATION MEASURES

- **NO MITIGATION REQUIRED**

GEOLOGY AND SOILS
MITIGATION MEASURES

- **NO MITIGATION REQUIRED**

GREENHOUSE GAS EMISSIONS

MITIGATION MEASURES

- **NO MITIGATION REQUIRED**

HAZARDS AND HAZARDOUS MATERIALS
MITIGATION MEASURES

- **NO MITIGATION REQUIRED**

HYDROLOGY AND WATER QUALITY

MITIGATION MEASURES

- **NO MITIGATION REQUIRED**

LAND USE AND PLANNING

MITIGATION MEASURES

- **NO MITIGATION REQUIRED**

MINERAL RESOURCES

MITIGATION MEASURES

- **NO MITIGATION REQUIRED**

NOISE
MITIGATION MEASURES

- **NO MITIGATION REQUIRED**

POPULATION AND HOUSING

MITIGATION MEASURES

- **NO MITIGATION REQUIRED**

PUBLIC SERVICES

MITIGATION MEASURES

- **NO MITIGATION REQUIRED**

RECREATION

MITIGATION MEASURES

- **NO MITIGATION REQUIRED**

TRANSPORTATION

MITIGATION MEASURES

- **NO MITIGATION REQUIRED**

TRIBAL CULTURAL RESOURCES

MITIGATION MEASURES

- **NO MITIGATION REQUIRED**

UTILITIES AND SERVICE SYSTEMS

MITIGATION MEASURES

- **NO MITIGATION REQUIRED**

WILDFIRE

MITIGATION MEASURES

- **NO MITIGATION REQUIRED**

CHAPTER 6
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CHAPTER 7
REPORT PREPARATION

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Appendix A

Design Drawings

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Appendix B

Acronyms and Definitions

ADA – Americans with Disability Act

ADI - Area of Direct Impact

ALS - Advanced Life Support

amsl - Above Mean Sea Level

APCD - Air Pollution Control District

APE - Area of Potential Effect

APEFZ - Alquist-Priolo Earthquake Fault Zone

ARB - Air Resources Board

BGEPA - Bald and Golden Eagle Protection Act

BMP – Best Management Practice

CAAQS - California Ambient Air Quality Standards

CalEPA – CA Environmental Protection Agency

CalFire – CA Dept. of Forestry and Fire Protection

California Register – California Register of Historical Resources

CARB – California Air Resources Board

CCR – California Code of Regulations

CDFW – California Department of Fish and Wildlife

CEQA - California Environmental Quality Act

CHP - California Highway Patrol

CNDDB - California Natural Diversity Database

CNPA - California Native Plant Society

CSP - California State Parks

CSQA – California Stormwater Quality Association

CVSR - Central Valley Spring-run Chinook Salmon

CWA - Clean Water Act

DPS - NMFS Distinct Population Segment

DTSC - Department of Toxic Substances Control

EIR – Environmental Impact Report

FEMA – Federal Emergency Management Agency

FIRM - FEMA publishes Flood Insurance Rate Maps

FP, P - Fully Protected or Protected

GHGs - Greenhouse Gases

HABS – Historic American Buildings Survey

HAER – Historic American Engineering Record

IS/ND - Initial Study/ Negative Declaration

MBTA - Migratory Bird Treaty Act

MCAQMD - Mendocino County Air Quality Management District

NAAQS - National Ambient Air Quality Standards

NMFS - National Marine Fisheries Service

NRHP – National Register of Historic Places

OHWM - Ordinary High Water Mark

$PM_{2.5}$ – Fine Particulate Matter

PM_{10} – Suspended Particulate Matter

POST - Peace Officer Standards and Training

PRC – Public Resources Code

PSR - Project Specific Requirements

RWQCBs - Regional Water Quality Control Boards

SHPO – State Historic Preservation Officer

SPR – Standard Project Requirements

SPRP - Spill Prevention and Response Plan

SR - State Route

SRA - State Responsibility Areas

SSC - Species of Special Concern

SWRCB - The State Water Resource Control Board

USACE - U.S. Army Corps of Engineers

USFS – U.S. Forest Service

USEPA - U.S. Environmental Protection Agency

USFWS - U.S. Fish and Wildlife Service

USGS – U.S. Geological Survey

VRPs - Visibility Reducing Particle

Appendix C

Comments and Responses

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