Fort Bragg
Coastal Restoration and Trail Project
Phase II

MENDOCINO COUNTY, CALIFORNIA
City of Fort Bragg

Subsequent Environmental Impact Report (EIR)

Prepared by

Marie Jones
Community Development Director

City of Fort Bragg
November 2014

Fort Bragg

Coastal Restoration and Trail Project: Phase II

Draft Subsequent Environmental Impact Report

(EIR SCH No 2009112071)

Prepared by:
Marie Jones
City of Fort Bragg
416 N Franklin Street
Fort Bragg, CA 95437
707-961-2827

November, 2014

Table of Contents

List of Tables

List of Figures

List of Technical Studies

Project Plans

Engineering Geologic Reconnaissance Report

Data Collection Plan – available to qualified individuals

Historic Properties Survey Report – available to qualified individuals

Historical Resources Evaluation Report

Paleontological Resources Assessment Report

Project Final and Draft Environmental Impact Report (Certified August 2011)

Site Drainage Analysis, Rau Engineering

Soil Management Plan

Technical Memo Site Drainage

Acronyms

The following acronyms are used extensively in the EIR. The acronyms are spelled out the first time they are used in a section or chapter, but are also provided in Table 1-2 below.

Table 1-1 Acronyms and Abbreviations

Acronym/ Abbreviation	Term
A	absent
AB 32	Assembly Bill 32
ac	Acre
ACHP	Advisory Council on Historic Preservation
ADI	Area of Direct Impact
APE	Area of Potential Affect
APN	Assessor's Parcel Number
BA	Biological Assessment
BMPs	Best Management Practices
BP	before present
BSA	Biological Study Area
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBSC	California Building Standards Code
CCA	California Coastal Act of 1976
CCC	California Coastal Commission
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife

Acronym/ Abbreviation	Term
CDP	Coastal Development Permit
CEQA	California Environmental Quality Act of 1970
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980
CERFA	Community Environmental Response Facilitation Act of 1992
CESA	California Endangered Species Act of 1984
CFR	Code of Federal Regulations
City	City of Fort Bragg
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
Coastal Trail	Fort Bragg Coastal Restoration and Trail Project
CRHR	California Register of Historical Resources
CWA	Clean Water Act
cy	cubic yards
DPR / State Parks	California Department of Parks and Recreation
DTSC	Department of Toxic Substances Control
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
ESA	Environmentally Sensitive Area
ESHA	Environmentally Sensitive Habitat Area
FESA	Federal Endangered Species Act of 1973
ft	Feet
ft^2	square feet

Acronym/ Abbreviation	Term
GHG	greenhouse gas
H	horizontal
HMMP	Habitat Mitigation and Monitoring Plan
HPSR	Historic Properties Survey Report
HRER	Historic Resources Evaluation Report
RAP	Remedial Action Plan and Feasibility Study
in	Inches
Inventory	GHG Emissions Inventory
IS	Initial Study
IT	Timber Resources Industrial land use designation
lbs	Pounds
lbs/ac	pounds per acre
LCP	Local Coastal Program
LOS	levels of service
MCAQMD	Mendocino County Air Quality Management District
mi	miles
Mill Site	Georgia-Pacific lumber mill site
MMPA	Marine Mammal Protection Act of 1972
MOA	Memorandum of Agreement
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCAB	North Coast Air Basin

Acronym/ Abbreviation	Term
NCBS	Northern Coastal Bluff Scrub
NHPA	National Historic Preservation Act of 1966
NO_2	nitrogen dioxide
NOAA Fisheries	National Marine Fisheries Service
NOP	Notice of Preparation
NOx	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act of 1977
NPS	National Park Service
NRHP	National Register of Historic Places
NRLF	Northern red-legged frog
O_3	ozone
OHWM	ordinary high water mark
OSHA	Occupational Safety and Health Act
P	present
Pb	lead
PCBs	Polychlorinated Biphenyls
PFCs	perfluorocarbons
PM	particulate matter
PM-10	particulate matter less than 10 microns in size
PM-2.5	particulate matter less than 2.5 microns in size
PRAR	Paleontological Resources Assessment Report

Acronym/ Abbreviation	Term
PRC	Public Resources Code
proposed project	Fort Bragg Coastal Restoration and Trail Project
RAC	Russian American Company
RAP	Remedial Action Plan
RCRA	Resource Conservation and Recovery Act of 1976
ROW	public right-of-way
RSP	rock slope protection
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SF_6	sulfur hexafluoride
SHPO	State Historic Preservation Officers
SO_2	sulfur dioxide
SR-1	State Route 1
SSC	California Species of Special Concern
SWMP	Stormwater Management Program
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TMP	Transportation Management Plans
UBC	Uniform Building Code
UNIPCC	United Nations Intergovernmental Panel on Climate Change
URBEMIS	urban emissions software
USACE	United States Army Corps of Engineers

Acronym/ Abbreviation	Term
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
V	vertical
VOCs	volatile organic compounds
WDRs	waste discharge requirements

Chapter 1 – Executive Summary

1.1 Purpose of the Subsequent EIR

The purpose of this Subsequent Environmental Impact Report (EIR) is to identify the potential significant impacts of Phase II of the Fort Bragg Coastal Restoration and Trail Project (proposed project or Coastal Trail) on the environment, indicate the manner in which such significant impacts will be mitigated or avoided, and identify alternatives to the proposed project that avoid or reduce these impacts.

An EIR was originally certified for this project in 2011, the project was redesigned through a consultation process between the City of Fort Bragg and Sherwood Valley Rancheria to minimize impacts to cultural resources and a subsequent EIR was prepared for the project and Certified in January of 2014. This project is currently under construction.

The City of Fort Bragg is both the "applicant" for this project as well as the lead agency for the project under CEQA. This Subsequent EIR analyzes the impacts of constructing the trail through the 24 acre Mill Pond area, which is central to the Mill Site, and thereby connecting the north and south alignments of the trail which were analyzed in the 2011 EIR and the 2014 subsequent EIR described above. This EIR also analyzes the addition of two small spur trails to the project, which are proposed for Johnson Point, which is part of the South Coastal Trail alignment. This Subsequent EIR is intended to serve as an informational document for use by the City of Fort Bragg (City), the California Environmental Quality Act (CEQA) lead agency; the other responsible agencies; and the general public in their consideration and evaluation of the environmental consequences associated with the implementation of the proposed redesigned project. The EIR addresses potentially significant impacts to Aesthetics, Air Quality, Biological Resources, Climate Change and Energy, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Transportation and Circulation, and Water Quality and Stormwater. Significant impacts identified and the measures recommended to avoid them are shown in Table ES-1.

1.2 Project Location & Description

The project is located on the Mendocino Coast, within the city of Fort Bragg (refer to Figure ES-1). The project site includes a 24 acre site on the Georgia-Pacific Mill site adjacent to Fort Bragg Landing and known informally as the Mill Pond Complex or the "lowland area" as well as a 4 acre parcel known as Johnson Point, located just south of the Mill Pond Complex area. The Phase II project site consists of five primary features: the Beach Berm and upland area, the Mill Pond (aka Pond 8), the lowland area and Soldier's Point. Due to historic industrial uses the majority of the site was heavily disturbed and graded in the past to create the beach berm, pond and lowland area. The lowland area was occupied by the Georgia-Pacific Mill Site powerhouse for many years. The site is characterized by a combination of impervious surfaces and ruderal and wetland habitats. Only Johnson Point is relatively pristine and includes some excellent coastal and near shore habitat. Each area is described in more detail below.

1.2.1 The Beach Berm & Associated Upland Area

The Beach Berm is a ten acre site that stretches to the east of the shoreline at Fort Bragg Landing. It is characterized by heavy coastal armoring on the west, comprised primarily of concrete rip rap and is at about 22 feet above sea level along its length. There is a ten foot

wide gravel access road that runs South to North along the top of the berm. There is a small culvert (24 inch) that traverses the beach berm and empties Pond 6 water into the ocean. Water from Pond 8 goes over a dam spillway and falls to the ocean at the northwestern edge of the pond. The spillway is located under a "bridge" that is part of the beach berm. To the south of the beach berm there is an approximately 5 acre area of heavily compacted and graveled former industrial log deck. See images below.

1.2.2 Lowland Area

This 25 acre area is composed primarily of fill and was the past location for a cogeneration powerhouse associated with the operation of the Mill Site. The powerhouse was removed in 2005. The site is characterized by extensive wetland features including Coastal Act and USACE Jurisdictional wetlands. There are two old roads traversing the site and remnant features of the powerhouse operations including concrete foundations on the site. The northern and eastern edge of the area are paved with asphalt.

1.2.3 Mill Pond

The eight acre Mill Pond (Pond 8) is a US Army Corps of Engineers (USACE) jurisdictional wetland and a Coastal Act wetland. The Pond is a human made impoundment that captures surface waters from the Mill Site and the City of Fort Bragg before releasing it over the spillway onto the beach below the Mill Pond dam and impoundment. The facility is almost entirely filled with sediment that is 30 feet deep in places. Georgia-Pacific Corporation is preparing a remediation strategy for Pond 8 under the regulatory authority of the Department of Toxics and Substances Control (DTSC). That remediation may take place sometime within the next five years. A paved asphalt road circumambulates the entire southern side of Pond 8.

1.2.4 Johnson Point (AKA Soldier Point)

The four acre Johnson Point is an upland area that is relatively untouched by past industrial activity. There is one old dirt road that traverses that point and did provide vehicular access as recently as 2009. However the road has since become overgrown and is primarily accessible as a foot path. The site has a future sea mount aka Johnson Rock which rises above the surrounding bluff top by an additional 21 feet.


9/29/2014
2013
Rip Rap Wall
Beach Berm
Mill Pond Dam Spillway
Mill Pond


Mill Pond
Upland area to be restored

1.3 Project Background

In 2002, the City initiated a community-based planning process that identified the Coastal Trail as the most important community goal for the re-use of the Mill Site. Subsequently, the State Coastal Conservancy awarded a $4.165 million grant to the City to purchase approximately 35 ac of parkland on the Mill Site. As part of the acquisition, Georgia Pacific donated a 110-ft wide "Coastal Trail corridor." The City acquired the property, totaling approximately 82 acres, in January of 2010. As part of the donation, Georgia-Pacific recorded an irrevocable offer to dedicate a 10 acre parcel that connects the 82 acre north and south trail alignments over the beach berm. The offer to dedicate also recorded an alternate alignment for a parcel that would travel around Pond 8 and the lowland area in the event that this alignment is preferred for public access to this area.

In 2006, the Fort Bragg community participated in a three-day design charrette to create a cohesive plan for the joint parkland areas. The results of this community process and three subsequent City Council workshops form the basis for the Draft Coastal Trail Master Plan (City of Fort Bragg et al. 2008), the preliminary design plans, and the project description for the 2011 certified EIR.

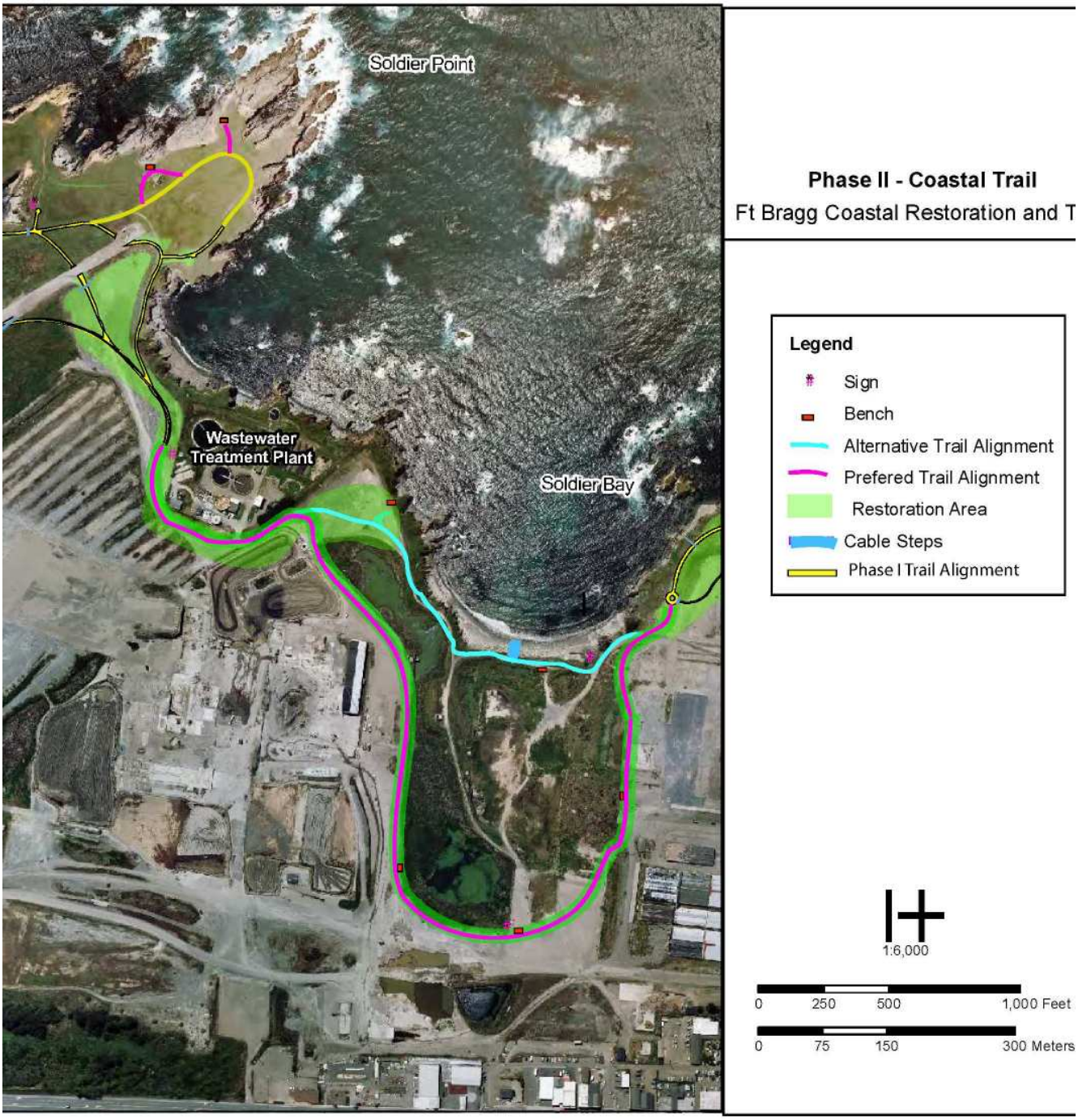
In 2013 the City acquired the four acre Johnson Property (adjacent to the South Parkland parcel) with Coastal Conservancy funding for public access.

In the summer of 2014, the City received notification from State Parks OGALS office that the $450,000 Prop 84 grant that has been awarded to fund the construction of Phase II of the project (described below) in 2013, would not be appropriated unless the City completed the CEQA analysis of Phase II of the project. Staff subsequently determined that this Subsequent EIR could be prepared to explore the only two feasible alignments for the trail, as one of these alignments would be selected without regard for the remediation process for the Mill Pond (Pond 8).

Figure ES-1. Project Vicinity Map

Figure ES-2. Phase II Project Site Map

-



1.4 Proposed Project

The project has four components: site restoration, construction of a multi-use trail, installation of pedestrian-only side trails, and installation of related improvements, which include benches, stairs to the beach and interpretive panels. The proposed project is summarized below and shown in Figure ES-2.

1.4.1 Site Restoration

Restoration would encompass approximately five acres between the bluff edge and the City's property line on the north side of the Waste Water Treatment Plant. Restoration would involve creating locally appropriate native habitats and include the importation of approximately 5,000 cubic yards of a mix of sand, soil and composted grain/woodchips for restoration purposes. This material would be placed in a 12 inch thick layer and function as a restoration substrate. Additionally, site restoration will include some removal of invasive vegetation along the top of the beach berm and restoration with locally adapted native plants.

1.4.2 Construction of Multi-Use Trail

The multi-use trail would be approximately 0.8 miles in length. The trail would be 8 ft. wide and include a 4-ft wide gravel shoulder on its western edge. The multi-use trail will be constructed on top of existing developed areas throughout the length of the project site.

1.4.3 Installation of Pedestrian Only Side Trails

Pedestrian only side trails will be installed on Johnson point. Two short spurs of 200 and 140 feet each will connect with a dirt loop through the Johnson Point site (already reviewed in a previous EIR) and would provide visitors with an opportunity to sit on a bench half way up Johnson Rock and an opportunity to sit on a bench at the tip of Johnson Point. All of these trails will be fenced on either side with habitat protective fencing to keep people from entering rare plant areas.

1.4.4 Installation of Related Improvements

This component would also include the installation of five benches, two interpretive signs, and a number of rare plant/keep out signs along the trail and construction of a set of stairs to the beach from the top of the beach berm. This project will not require stormwater improvements as the net impervious surfaces will be reduced by the project and stormwater will spread and infiltrate on site.

There will be no vehicular access to Phase II of the Coastal Trail project. Visitors to the site will have to park at either the Elm Street parking lot or the Cypress Street parking lot and walk 1.5 miles to reach the trail head for the Phase II trail.

The boundary between the parkland parcel and the rest of the GP site would include construction of a five foot high T stake fence with five strands of wire. Some habitat protective fencing will also be installed to limit access to sensitive species along the bluff top and face.

1.5 Scoping and Notice of Preparation Process

In compliance with CEQA Guidelines, the City has taken steps to maximize opportunities to participate in the environmental process. Federal, state, regional, tribal and local governmental agencies and other interested parties were contacted to solicit comments and inform the public of the proposed project. The Notice of Preparation (NOP) and the Initial Study (IS) for the Subsequent EIR was distributed on October 3, 2014. The proposed project was described, the scope of the environmental review was identified, and agencies and the public were invited to review and comment on the NOP. A public scoping session was held for the project on October 16, 2014, which was well attended with twenty plus participants. The close of the NOP review period was November 3, 2014. The Draft Subsequent EIR was circulated on November 14, 2014.

1.6 Significant Environmental Impacts Identified

Table ES-1 shows each impact identified and all mitigation measures recommended to reduce or avoid impacts. The most significant impacts identified in the EIR include:

- Biological Resource impacts to Environmentally Sensitive Habitat Areas (ESHA), jurisdictional features including sensitive wildlife and plant species.
- Public Safety impacts related to the geotechnical structure of the Dam and the contamination associated with the Mill Pond and lowland areas of the project.
- Water Quality and Stormwater impacts related to some potential for erosion and sedimentation. It should be noted that the proposed improvements would potentially have a beneficial impact to the long-term stormwater management within the Mill Site.

The EIR determined that all impacts identified can be reduced to a level of insignificance with mitigation.

1.7 Project Alternatives

Two alternatives to the proposed project were brought forward for substantial review and comparison in the EIR:

1. No Project Alternative
2. Alternative Trail Alignment

Neither of the proposed project nor any of the alternatives would result in significant, unavoidable impacts. The Alternative Trail Alignment would reduce potential impacts associated with the structural integrity of the dam. There is no difference in impacts to biological, botanical of cultural resources. Minimal mitigation for each of these resources would still be required.

The “No Project” alternative could result in some impacts, primarily related to opening a disturbed site to public access without public improvements, established trails, signage and restoration. The no project alternative would have none of the beneficial effects of the project which include 5 acres of restoration, re-establishment of native plant populations,

and various protective measures for cultural resources. The no project alternative would result in reuse of the existing road surfaces as a trail surface. As much of these surfaces are deteriorated or consist of gravel road improvements, the surface would not provide an ideal recreational feature for bicyclists or pedestrians.

Based strictly on an analysis of the relative environmental impacts, neither the proposed project nor the alternatives is clearly the environmentally superior alternative. However, by default, the proposed project would most effectively meet all of the project objectives. As a result, the proposed project is considered the Environmentally Superior Alternative.

1.8 Impact Summary Table

The table on the following pages provides a summary of the potential impacts of the proposed project. Also summarized in these tables are the mitigation measures associated with each impact that are to be implemented by the project applicant in order to reduce the environmental impacts to a level of insignificance. In accordance with CEQA, the Summary Tables identify the following types of potential impacts associated with the proposed development:

Significant, but Mitigable Impacts—Significant environmental impacts that can be feasibly mitigated or avoided. The decision maker must issue "Findings" under CEQA Guidelines §15091(a) if the project is approved.

Less Than Significant Impacts—Environmental impacts that are adverse but not significant and for which the decision maker does not have to adopt "Findings" under CEQA.

Beneficial Effect—An effect that would be beneficial, and would reduce existing environmental impacts or hazards. These have not been quantified in the following table. However, potential Beneficial Effects have been described qualitatively in the applicable issue area discussion in the EIR.

Table ES-1-1: Significant Environmental Impacts that can be Feasibly Mitigated or Avoided

(Decision-maker must issue "Findings" under CEQA Guidelines §15091(a) if the project is approved)

Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
Land Use			
The construction of the project may limit the adjacent property owner access to the Mill Pond dam for maintenance purposes	Long-term	**Mitigation Measure 1:** Prior to approval of the Building Permit, the applicant shall record an access easement providing access for on-going maintenance of the Mill Pond Dam, for as long as the dam is in operation.	Less than Significant
Cultural Resources			
The construction of the project could potentially impact cultural resources.	Long-term	**Mitigation Measure 2:** To protect cultural resources the City of Fort Bragg shall implement this Environmentally Sensitive Area (ESA) action plan prior to, during and after construction, as applicable. Including the following measures: Prior to Construction 1. Prior to final design, an archaeologist and Tribal Monitor shall collaborate to complete a comprehensive survey of the Johnson Parcel/Solider Point, including shovel test pits, as the archaeological sites across this landscape are poorly understood. The work plan for this archaeological survey will be reviewed by both the City of Fort Bragg and Sherwood Valley Band of Pomo's Tribal Council and finalized prior to the commencement of this work. Based on this recognizance, the City shall work with the Sherwood Valley Band of Pomo Tribal Council to determine the exact placement of the trail spur and bench locations in order to minimize and/or eliminate impacts to cultural resources. Also, as the landscape is currently covered in vegetation, the area proposed for the main trail alignment and spurs shall be mowed prior to the archaeological survey to allow for a thorough investigation of this area. The City will work with the SVBP Tribal Council to develop a capping strategy for the trail and	Less than Significant

Table ES-1-1: Significant Environmental Impacts that can be Feasibly Mitigated or Avoided

(Decision-maker must issue "Findings" under CEQA Guidelines §15091(a) if the project is approved)

Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
		trail spurs if one is necessary to cover archaeological resources. The concrete pad for the bench shall be designed so that it can be placed on top of ground, without soil disturbance. Fill will be added around the concrete pad to meet grade. 2. Cultural resources sites will be noted in the construction drawings as Zone 1 areas. Ground disturbance will not be permitted in these areas during construction. The City will consult with SVR at the 90% design stage to ensure that this mitigation measure is carried out. 3. Tribal monitors shall attend relevant hand-off meetings with construction contractors to ensure that ESA commitments are addressed. 4. The importance of ESA action plans will be discussed with construction personnel and it will be stressed that no native soil disturbing construction activity should occur within the ESA. Additionally, construction personnel will be informed of historic preservation laws that protect archaeological sites against any disturbance or removal of artifacts. 5. The tribal monitors will be notified at least three weeks in advance of ground disturbing construction activities within ESA to ensure they will be available to monitor/review installation of ESA protection fencing. 6. One week prior to initiating any native soils disturbance in non-fill areas, SVR and Native American Monitors will be notified. During Construction 7. Native American monitors will be required where ground disturbing activities occur in areas with undisturbed soils including the area adjacent to the crib wall, pond spill way and bluff top adjacent to the Wastewater Treatment Plant. Areas of extensive fill, such as the beach berm and filled former log pond area will not require	

Table ES-1-1: Significant Environmental Impacts that can be Feasibly Mitigated or Avoided

(Decision-maker must issue "Findings" under CEQA Guidelines §15091(a) if the project is approved)

Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
		monitoring. 8. The Community Development Director will notify the State Historic Preservation Officer within 48 hours of any ESA violation or unanticipated discovery to determine how it will be addressed. Consultation with Native Americans shall also be included. After Construction 9. The Native American Monitor shall supervise removal of the temporary fencing after construction. 10. The project will be monitored on an annual basis for five years upon complete of construction to ensure that sites are not disturbed or impacted by visitors to the site or trail operations. Corrective measures shall be taken if any impacts are noted.	
Project construction and restoration activities have the potential to impact unknown cultural resources.	Short-term	**Mitigation Measure 3:** The project will follow the "Post Review Discovery" agreement with SVBP if cultural materials or human remains are discovered during construction.	Less than Significant
Physical Environment: Water Quality and Stormwater Runoff			
The proposed project has the potential to impact human health of visitors during high surf conditions.	Long-term	**Mitigation Measure 4:** The City shall install signage to warn people of high surf conditions during storm events along all improvements on the Beach Berm. **Mitigation Measure 5:** The City shall temporarily close the berm section of the trail and access to the beach in high surf conditions.	Less than Significant Less than Significant
The proposed project has the potential to impact human	Short-term	**Mitigation Measure 6:** Construction of the Preferred Trail Alignment may proceed prior to the stabilization of the Mill Pond Dam and crib wall. Construction	Less than Significant

Table ES-1-1: Significant Environmental Impacts that can be Feasibly Mitigated or Avoided

(Decision-maker must issue "Findings" under CEQA Guidelines §15091(a) if the project is approved)

Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
health of visitors during a seismic event.		of Alternative Trail Alignment may be undertaken after the seismic risk of the dam is reduced to the satisfaction of the appropriate regulatory authority.	
Hazardous Materials			
The proposed project has the potential to impact human health of visitors if construction proceeds prior to environmental remediation of the site (operable Unit E)	Short-term	**Mitigation Measure 7:** The components of the proposed project that are located within the Mill Pond Complex area shall be constructed after implementation of the Remedial Action Plan for Operable Unit E in order to ensure that the site is remediated to a level that reduces risks to human health to a less than significant level for passive recreation users and construction works.	Less than Significant
The proposed project has the potential to impact human health of construction workers.	Short-term	**Mitigation Measure 8:** DTSC may require, through its CEQA document for the RAP for Operable Unit E, that construction projects which include grading must comply with a Soil Management Plan (SMP) prepared for the site. Compliance with the SMP will also be a condition of approval for the grading permit for the site.	Less than Significant
Air Quality			
The proposed project has the potential to impact air quality compliance with regard to PM-10.	Short-term	**Mitigation Measure 9:** The project contractor, on behalf of the project applicant, shall prepare a dust control plan for construction activities at the project site pursuant to the requirements of the MCAQMD. The project contractor shall be responsible for ensuring that all adequate dust control measures are implemented in a timely manner during all phases of construction and maintenance activities at the project site. The dust control plan shall include, at minimum, the following	

Table ES-1-1: Significant Environmental Impacts that can be Feasibly Mitigated or Avoided

(Decision-maker must issue "Findings" under CEQA Guidelines §15091(a) if the project is approved)

Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
		measures: a. Water shall be applied by means of truck(s), hoses, and/or sprinklers as needed prior to any land clearing or earth movement to minimize dust emissions. b. All material excavated, stockpiled, or graded shall be sufficiently watered to prevent fugitive dust from leaving the property boundaries or causing a public nuisance of an ambient air standard. Watering should occur at least twice daily, however frequency of watering shall be based on the type of operation, soil, and wind exposure. c. All on-site vehicle traffic shall be limited to a speed of 15 miles per hour (mph) on unpaved roads. d. All trucks hauling soil, sand, or other loose materials on public roads will be covered or required to maintain at least 2 ft. of freeboard. e. Excavation and grading activities shall be suspended when sustained winds exceed 25 mph, instantaneous gusts exceed 35 mph, or dust from construction might obscure driver visibility on public roads. f. All inactive portions of the construction site, including soil stockpiles, shall be covered, seeded, or watered until a suitable cover is established. g. Paved areas adjacent to construction sites (e.g. the abandoned runway) shall be swept or washed as required to remove excess accumulations of silt and/or mud, which may have resulted from grading and construction activities at the project site.	

Table ES-1-1: Significant Environmental Impacts that can be Feasibly Mitigated or Avoided

(Decision-maker must issue "Findings" under CEQA Guidelines §15091(a) if the project is approved)

Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
		h. The applicant shall re-establish ground cover on all disturbed portions of the project site through seeding and watering in accordance with the City of Fort Bragg Grading Ordinance and Local Coastal Program, which requires the application of native seed or terminal seed. i. A publicly visible sign shall be posted with the telephone number and person to contact regarding dust complaints. This person shall respond and take corrective action within 24-hours. The telephone number of the MCAQMD shall also be visible to ensure compliance with the Fugitive Dust Emissions requirements. j. Construction workers shall park in designated parking area(s) to help reduce dust emissions.	
Biological Resources			
ESHA natural communities could be temporarily impacted during construction and restoration activities.	Long-term	**Mitigation Measure 10:** During construction, permanent and temporary impacts to ESHA natural communities shall be avoided/minimized to the extent feasible. The ESHA natural communities which have the potential to be disturbed by the project shall be shown on site plans. Areas in which grading or other disturbance is to occur shall be defined on-site by readily identifiable barriers that will protect the surrounding native habitat areas. Construction equipment and other vehicles shall be prevented from entering ESHA natural communities to be avoided through the use of exclusion zones or other barriers. **Mitigation Measure 11:** The trail alignment through Johnson point shall be installed to avoid rare plants. Prior to mowing for the trail and installation of the habitat protection fencing, which will define the trail alignment, a botanical survey will be completed and the trail alignment and benches will be placed in areas that	Less than Significant

Table ES-1-1: Significant Environmental Impacts that can be Feasibly Mitigated or Avoided

(Decision-maker must issue "Findings" under CEQA Guidelines §15091(a) if the project is approved)

Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
		avoid rare plants. **Mitigation Measure 12:** During and following construction, drainage control methods shall be incorporated into the project in a manner that minimizes erosion, sedimentation, and the discharge of harmful substances into aquatic habitats during and after construction. **Mitigation Measure 13:** Prior to construction, the applicant will prepare a Hazardous Materials Response Plan or equivalent to allow for a prompt and effective response to any accidental spills. All workers will be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur. All project-related hazardous materials spills within the project site will be cleaned up immediately by the contractor. Spill prevention and cleanup materials will be on-site at all times during construction. **Mitigation Measure 14:** During construction, to control erosion during and after project implementation, the applicant and contractors will implement standard Best Management Practices (BMPs) **Mitigation Measure 15:** During construction, the cleaning and refueling of equipment will occur only within a designated staging area and at least 65 ft. from wetlands, other waters, or other aquatic areas. This staging area will conform to BMPs applicable to attaining zero discharge of stormwater runoff. At a minimum, all equipment and vehicles will be checked and maintained on a daily basis to ensure proper operation and avoid potential leaks or spills. **Mitigation Measure 16:** During construction, trash will be contained, removed from the work site, and disposed of regularly by the contractor. Following construction, all trash and construction debris will be removed from work areas.	

Table ES-1-1: Significant Environmental Impacts that can be Feasibly Mitigated or Avoided

(Decision-maker must issue "Findings" under CEQA Guidelines §15091(a) if the project is approved)

Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
Construction of trails could permanently impact ESHA.	Short-term	**Mitigation Measure 17:** To limit unauthorized access into ESHA communities, prior to and after construction, the City of Fort Bragg shall incorporate an ESHA protection fencing plan in the final Design and Bid Packet. The fencing plan shall focus on those areas of the project where ESHA communities would most likely be subject to unauthorized access.	Less than Significant
Construction of the trail along could result in temporary impacts to wetlands.	Short-term	**Mitigation Measure 18:** After construction the area located between the trail and adjacent wetlands within the property owned by the City of Fort Bragg shall be restored with appropriate native California habitat.	Less than Significant
Implementation of the proposed project could directly and/or indirectly significantly impact non-listed, special-status plant species Blasdale's bentgrass, Mendocino paintbrush, and short-leaved evax.	Long-term	**Mitigation Measure 19:** Prior to construction, the applicant shall implement planning to avoid impacts to special-status plant species to the extent feasible. Specific areas with special-status plant species to be avoided shall be mapped and marked with fencing, flagging, or exclusion zones to minimize the potential for unnecessarily impacting plants. **Mitigation Measure 20:** Prior to construction, if special-status plants cannot be avoided and must be impacted, seed of special-status plants onsite shall be gathered from areas to be impacted for eventual reseeding after ground disturbance has been completed. If feasible, special-status plants in areas proposed for ground disturbance may be salvaged by digging up individual plants (including roots/rhizomes) for immediate transplanting and/or planting in containers for eventual replanting. Revegetation success criteria/goals for special-status plants shall be at a minimum 2:1 ratio (i.e., two plants established for each plant lost or two acres of absolute cover established for each acre of absolute cover lost) or a ratio negotiated between the City and permitting agencies based on City proposals. **Mitigation Measure 21:** Prior to and during construction, a component including special-status plants and conservation shall be integrated into an environmental	Less than Significant

Table ES-1-1: Significant Environmental Impacts that can be Feasibly Mitigated or Avoided

(Decision-maker must issue "Findings" under CEQA Guidelines §15091(a) if the project is approved)

Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
		training session for construction personnel working on the project, to be conducted by a qualified biologist. Topics covered shall include site-specific environmental issues and sensitive natural resources, avoidance of disturbance, relevant environmental regulations, and standard BMPs identified for the project. All construction personnel shall be required to attend the environmental training session for sensitive biological resources and sign an attendance sheet indicating their agreement to comply with all applicable environmental regulations. **Mitigation Measure 22:** After construction, mitigation for impacts to special-status plant taxa and/or the restoration component of the proposed project shall be accompanied by a monitoring program. Monitoring shall be conducted at least twice a year (once in the spring and once in the summer) for a minimum of four years.	
Construction of the proposed project has the potential to impact shoulderband snails, and Northern Red Legged Frogs (NRLF)	Short-term	**Mitigation Measure 23:** If any native shoulderband snails are observed during ground disturbance activities in suitable habitat, such snails shall be relocated by a qualified biologist to suitable habitat outside of the area of disturbance to avoid/minimize injury or mortality.	Less than Significant
Construction during the double-crested cormorant and black oyster catcher nesting seasons could impact nesting birds.	Short Term	**Mitigation Measure 24:** Prior to construction, nest surveys for double-crested cormorant and oyster catchers shall be conducted by a qualified biologist in areas where construction is proposed to occur within 200 ft. of tidal and bluff habitats. **Mitigation Measure 25:** Prior to and during construction, if active double-crested cormorant nests are observed, a minimum 200-ft (61-m) buffer/exclusion zone delineated by highly visible flagging/stakes shall be established by a qualified biologist around each active nest until all young have fledged; a 100-ft (30.5-m) exclusion zone is required for active black oystercatcher nests. During	Less than Significant

Table ES-1-1: Significant Environmental Impacts that can be Feasibly Mitigated or Avoided

(Decision-maker must issue "Findings" under CEQA Guidelines §15091(a) if the project is approved)

Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
		construction within 200 ft. of tidal and bluff habitats, a qualified biologist shall conduct weekly monitoring visits to assess the present status of double-crested cormorant breeding activity and establish exclusion zones as needed (these monitoring visits must be conducted for construction within 100 ft. of tidal and bluff habitats for black oystercatcher).	
Construction of the proposed project could impact protected bird species such as the northern harrier, Bryant's savannah sparrow, white-tailed kite, and other migratory birds which utilize the project site.	Short term	**Mitigation Measure 26:** Prior to and during construction, if project activities cannot feasibly avoid the typical nesting bird season (defined as occurring from March 15 to July 31 for most bird species), weekly bird surveys of the project areas that will be under construction shall be conducted by a qualified biologist with experience in conducting breeding bird surveys, beginning 30 days prior to the disturbance of suitable nesting habitat. If a protected native bird nest is found, clearance/construction will not occur within an appropriate buffer/exclusion zone (determined by a qualified biologist) delineated by highly visible flagging/stakes until August 1, or until any active nests are vacated and there is no evidence of a second attempt at nesting. **Mitigation Measure 27:** Prior to and during construction, if active northern harrier nests are observed, a minimum 300-ft buffer/exclusion zone delineated by highly visible flagging/stakes shall be established by a qualified biologist around each active nest until all young have fledged. During construction within 300 ft. of grassland and freshwater marsh habitats during the northern harrier breeding season, a qualified biologist shall conduct weekly monitoring visits to assess the present status of breeding activity and establish exclusion zones as needed. **Mitigation Measure 28:** Prior to and during construction, if active white-tailed kite	Less than Significant

Table ES-1-1: Significant Environmental Impacts that can be Feasibly Mitigated or Avoided

(Decision-maker must issue "Findings" under CEQA Guidelines §15091(a) if the project is approved)

Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
		nests are observed, a minimum 300-ft buffer/exclusion zone delineated by highly visible flagging/stakes shall be established by a qualified biologist around each active nest until all young have fledged. **Mitigation Measure 29:** Prior to and during construction, a training component regarding general nesting bird protection and conservation shall be integrated into an environmental training session for construction personnel working on the project, to be conducted by a qualified biologist. Topics covered shall include site specific environmental issues and sensitive natural resources, avoidance of disturbance, relevant environmental regulations, and BMPs identified for the project. All construction personnel shall be required to attend the environmental training session for sensitive biological resources and sign an attendance sheet indicating their agreement to comply with all applicable environmental regulations.	
Construction of the proposed project has the potential to disrupt/disturb a sensitive marine mammal species during pupping season.	Short Term	**Mitigation Measure 30:** Prior to construction, a component including general marine mammal protection and conservation shall be integrated into an environmental training session for construction personnel working on the project, to be conducted by a qualified biologist. Topics covered shall include site specific environmental issues and sensitive natural resources, avoidance of disturbance, relevant environmental regulations, and BMPs identified for the project. All construction personnel shall be required to attend the environmental training session for sensitive biological resources and sign an attendance sheet indicating their agreement to comply with all applicable environmental regulations. **Mitigation Measure 31:** Prior to construction, a qualified biologist shall conduct surveys to identify potential marine mammal haul-out sites in the vicinity of the BSA. Binoculars or a spotting scope shall be used for surveying potential haul-out locations, with implementation of exclusion zones as appropriate by a qualified biologist. If project activities will occur within designated exclusion zones, the	Less than Significant

Table ES-1-1: Significant Environmental Impacts that can be Feasibly Mitigated or Avoided

(Decision-maker must issue "Findings" under CEQA Guidelines §15091(a) if the project is approved)

Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
		qualified biologist shall survey potentially affected beach areas for presence of marine mammals. The surveys shall occur the day before work activities are scheduled to commence, with both a morning and afternoon count. If a marine mammal is found to be hauled out within a defined exclusion zone, project construction utilizing heavy equipment shall not occur within that exclusion zone until the marine mammal has departed. The condition of any marine mammal observed shall be noted. Marine Mammal Center personnel shall be contacted if the animal appears to be injured or in distress. **Mitigation Measure 32:** During construction, monitoring by a qualified biologist shall occur every morning work with heavy equipment is scheduled to occur for the proposed project within designated exclusion zones. The qualified biologist shall have the authority to halt work if it is determined that project activities are impacting marine mammals.	

Chapter 2 – Proposed Project

2.1 Introduction

The Fort Bragg Coastal Restoration and Trail Project (project or Coastal Trail) is located on the western edge of the City of Fort Bragg, in Mendocino County, California. The project includes construction of approximately 4 miles (mi) of new multi-use and pedestrian only trails stretching from Pudding Creek Trestle Bridge south to Soldier Bay, and from the City of Fort Bragg (City) wastewater treatment facility to the Noyo Bridge and Highway 1. Two new parking facilities at the end of Elm Street and the southern end of the "runway" would be constructed to support the project. Asphalt and packed gravel would be removed and habitat restored on approximately 20 ac of the former Georgia-Pacific Mill Site (Mill Site).

In 2002, the City initiated a community-based planning process that identified the Coastal Trail as the most important community goal for the re-use of the Mill Site. Subsequently, the State Coastal Conservancy awarded a $4.165 million grant to the City to purchase 35 ac of parkland on the Mill Site. As part of the acquisition, Georgia-Pacific donated a 47 acre, 110-ft wide, "Coastal Trail corridor" along the length of the Mill Site.

In 2006, the Fort Bragg community participated in a three-day design charrette to create a cohesive plan for the parkland area. The results of this community process form the basis for the subsequent Draft North Coastal Trail Master Plan (City of Fort Bragg et al. 2008), the preliminary design plans, and the project description.

In 2009 and 2010, the Fort Bragg community participated in a variety of planning activities for the South Parkland parcel, including: three walking workshops (attended by over 300 people), a three-hour community design workshop, an open-house, and a community survey returned by 94 residents.

In 2012 and 2013, the City of Fort Bragg, Caltrans and the Sherwood Valley Rancheria reviewed and discussed the project and as a result of these discussions the City revised the project in order to minimize impacts to cultural resources and Traditional Cultural Properties. Most of the proposed changes to the project description have resulted from input from the tribe. In September of 2013, the City Council considered the proposed changes and authorized the completion of a CEQA document to address the proposed changes.

The community input and priorities expressed through these meetings, workshops, survey and dialogues form the basis for the design for the North and South Parkland parcels and the project descriptions in this supplemental EIR.

In September of 2013, the City prepared a Subsequent EIR for the City's project. A Subsequent EIR was chosen for this project because:

1. 15162 (a) 1. Substantial changes are proposed in the project which will require major revisions to the previous EIR due to the involvement of significant new environmental effects.

2. 15162 (a3B) changes to the project or its circumstances occur after adoption of the EIR. Specifically, State's Park's improvements to Glass Beach Headlands, which were analyzed in the Final EIR, have been implemented.

This Subsequent EIR provides a clearer CEQA analysis as it does not include the portions of the project which have been completed or are under construction, and it analyzes a new phase of the project which was not previously analyzed and which has new potentially significant environmental impacts (hazardous waste, tsunami, storm surge) which require new mitigation measures not previously contemplated.

2.2 Project Location & Description

The project is located on the Mendocino Coast, within the city of Fort Bragg (refer to Figure ES-1). The project site includes a 24 acre site on the Georgia-Pacific Mill Site adjacent to Fort Bragg Landing and known informally as the Mill Pond Complex or the "lowland area" as well as a 4 acre parcel known as Johnson Point, located just south of the Mill Pond Complex area. The Phase II project site consists of five primary features: the Beach Berm and upland area, the Mill Pond (aka Pond 8), the lowland area and Soldiers Point. Due to historic industrial uses the majority of the site was heavily disturbed and graded in the past to create the beach berm, pond and lowland area. The lowland area was occupied by the Georgia-Pacific Mill Site powerhouse for many years. The site is characterized by a combination of impervious surfaces and ruderal and wetland habitats. Only Johnson Point is relatively pristine and includes some excellent coastal and near shore habitat. Each area is described in more detail below.

2.2.1 The Beach Berm & Associated Upland Area

The Beach Berm is a ten acre site that stretches to the east of the shoreline at Fort Bragg Landing. It is characterized by heavy coastal armoring on the west, comprised primarily of concrete rip rap and is at about 22 feet above sea level along its length. There is a ten foot wide gravel access road that runs South to North along the top of the berm. There is a small culvert (24 inch) that traverses the beach berm and empties Pond 6 water into the ocean. Water from Pond 8 goes over a dam spillway and falls to the ocean at the northwestern edge of the pond. The spillway is located under a "bridge" that is part of the beach berm. To the south of the beach berm there is an approximately 5 acre area of heavily compacted and graveled former industrial log deck. See images below.

2.2.2 Lowland Area

This 25 acre area is composed primarily of fill and was the past location for a cogeneration powerhouse associated with the operation of the Mill Site. The powerhouse was removed in 2005. The site is characterized by extensive wetland features including Coastal Act and USACE Jurisdictional wetlands. There are two old roads traversing the site and remnant features of the powerhouse operations including concrete foundations on the site. The northern and eastern edge of the area are paved with asphalt.

2.2.3 Mill Pond

The eight acre Mill Pond (Pond 8) is a US Army Corps of Engineers (USACE) jurisdictional wetland and a Coastal Act wetland. The Pond is a human made impoundment that captures surface waters from the Mill Site and the City of Fort Bragg before releasing it over the spillway onto the beach below the Mill Pond dam and impoundment. The facility is almost entirely filled with sediment that is 30 feet deep in places. Georgia-Pacific Corporation is preparing a remediation strategy for Pond 8 under the regulatory authority of the Department of Toxics and

Substances Control (DTSC). That remediation may take place sometime within the next five years. A paved asphalt road circumambulates the entire southern side of Pond 8.

2.2.4 Johnson Point (AKA Soldier Point)

The four acre Johnson Point is an upland area that is relatively untouched by past industrial activity. There is one old dirt road that traverses that point and did provide vehicular access as recently as 2009. However the road has since become overgrown and is primarily accessible as a foot path. The site has a future sea mount aka Johnson Rock which rises above the surrounding bluff top by an additional 21 feet.

2.3 Project Background

In 2002, the City initiated a community-based planning process that identified the Coastal Trail as the most important community goal for the re-use of the Mill Site. Subsequently, the State Coastal Conservancy awarded a $4.165 million grant to the City to purchase approximately 35 ac of parkland on the Mill Site. As part of the acquisition, Georgia Pacific donated a 110-ft wide "Coastal Trail corridor." The City acquired the property, totaling approximately 82 acres, in January of 2010. As part of the donation, Georgia-Pacific recorded an irrevocable offer to dedicate a 10 acre parcel that connects the 82 acre north and south trail alignments over the beach berm. The offer to dedicate also recorded an alternate alignment for a parcel that would

travel around Pond 8 and the lowland area in the event that this alignment is preferred for public access to this area.

In 2006, the Fort Bragg community participated in a three-day design charrette to create a cohesive plan for the joint parkland areas. The results of this community process and three subsequent City Council workshops form the basis for the Draft Coastal Trail Master Plan (City of Fort Bragg et al. 2008), the preliminary design plans, and the project description for the 2011 certified EIR.

In 2013 the City acquired the four acre Johnson Property (adjacent to the South Parkland parcel) with Coastal Conservancy funding for public access as this parcel was incorporated into the project description and analyzed in the January 2014 Subsequent EIR.

In the summer of 2014, the City received notification from State Parks OGALS office that the $450,000 Prop 84 grant that has been awarded to fund the construction of Phase II of the project (described below) in 2013, would not be appropriated unless the City completed the CEQA analysis of Phase II of the project. Staff subsequently determined that this Subsequent EIR could be prepared to explore the only two feasible alignments for the trail, as one of these alignments would be selected without regard for the remediation process for the Mill Pond (Pond 8).

Figure ES-1. Project Vicinity Map

Figure 1: Phase II Project Site Map

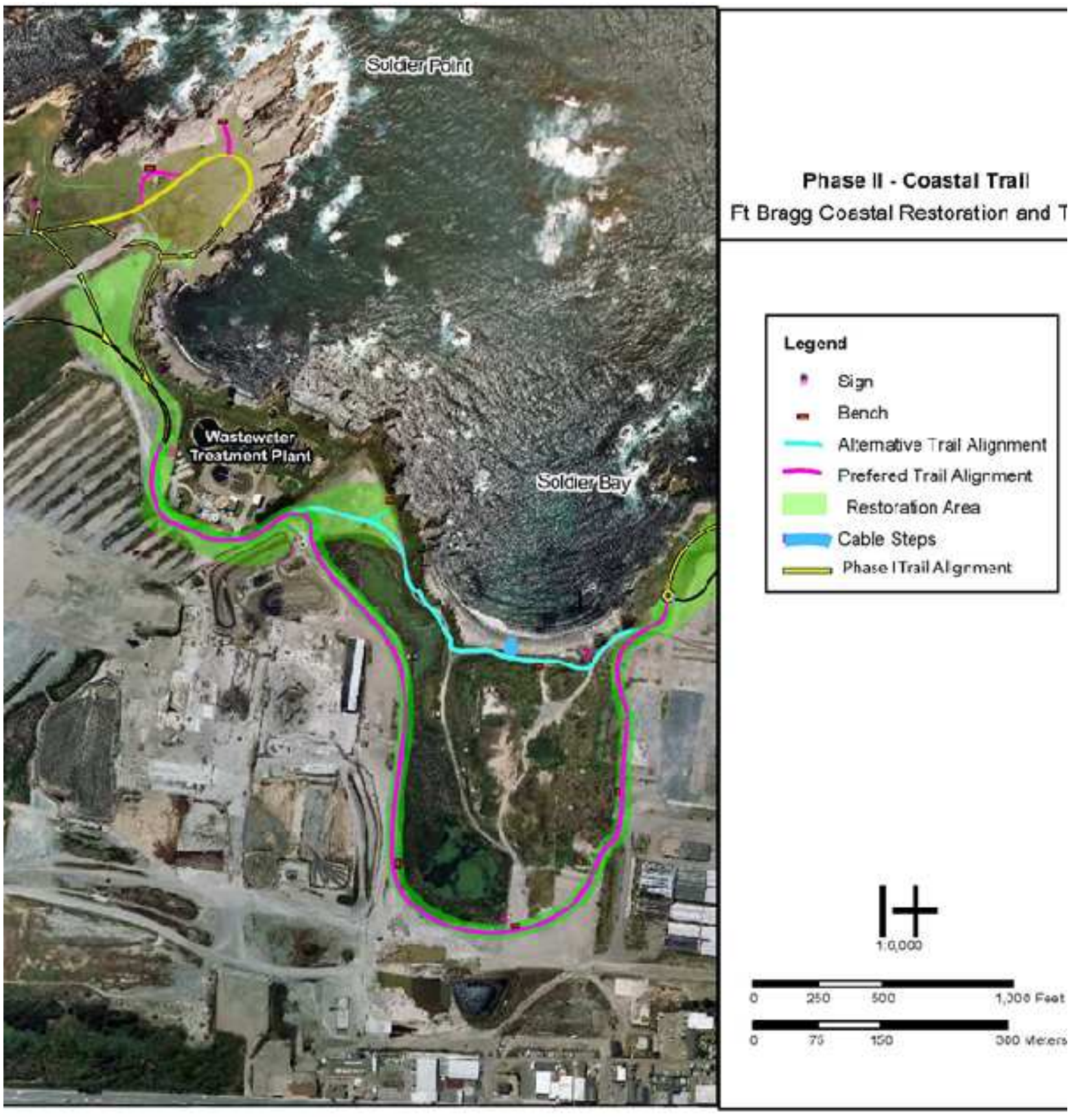


Figure 2: Phase II Site Map of Johnson Point

Figure 3: Phase II Site Map of Mill Pond Area

2.4 Proposed Project

The project has four feature components: site restoration, construction of a multi-use trail, implementation of a pedestrian only trail, and installation of related improvements, which include benches, stairs to the beach and interpretive panels. The proposed project is summarized below and shown in Figure ES-2.

2.4.1 Site Restoration

Restoration would encompass approximately 5 acres between the bluff edge and the City's property line on the north side of the Waste Water Treatment Plant. Restoration would involve creating locally appropriate native habitats and include the importation of approximately 5,000 cubic yards of a mix of sand, soil and composted grain/woodchips for restoration purposes. This material would be placed in a 12 inch thick layer and function as a restoration substrate. Additionally, site restoration will include some removal of invasive vegetation along the top of the beach berm and restoration with locally adapted native plants.

2.4.2 Construction of Multi-Use Trail

The multi-use trail would be approximately 0.8 miles in length. The trail would be 8 ft wide and include a 4-ft wide gravel shoulder on its western edge. The Multi-Use trail will be constructed on top of a disturbed industrial site along its entire length.

2.4.3 Installation of Pedestrian Only Side Trails

Pedestrian only side trails will be installed on Johnson point. Two short spurs of 200 and 140 feet each will connect to an existing dirt path (approved through a previous EIR) and provide visitors with an opportunity to sit on a bench half way up Johnson Rock and an opportunity to sit on a bench at the tip of Johnson Point. All of these trails will be fenced on either side with habitat protective fencing to keep people from entering rare plant areas.

2.4.4 Installation of Related Improvements

This component would also include the installation of eight benches, two interpretive signs along the trail and construction of a set of stairs to the beach from the top of the beach berm. This project will not require stormwater improvements as the net impervious surfaces will be reduced by the project and stormwater will spread and infiltrate on site.

There will be no vehicular access to Phase II of the Coastal Trail project. Visitors to the site will have to park at either the Elm Street parking lot or the Cypress Street parking lot and walk 1.5 miles to reach the trail head for the Phase II trail.

The boundary between the parkland parcel and the rest of the GP site would include construction of a five foot high T stake fence with five strands of wire. Some habitat protective fencing will also be installed to limit access to sensitive species along the bluff top and face.

2.5 Purpose and Need

The purpose of the project is to:

- Restore native habitats throughout the proposed parkland;
- Establish a permanent trail system and a connection between the north and south alignments of the Fort Bragg Coastal Trail. This was the single most important goal for the reuse of the Mill Site in a 2003 community survey, and has been identified during over 30 community and City Council meetings as a priority project for the City of Fort Bragg;
- Establish public access to the site, a condition of Coastal Conservancy funding for the acquisition of the site in 2010; and
- Establish amenities to accommodate public access to this portion of the California Coastal Trail.

The need arises from:

- Limited public access to the entire 3.5 mile Fort Bragg coast along the Mill Site;
- State goals to establish a California Coastal Trail, along the entire coast of Fort Bragg, of which this is a segment of the California Coastal Trail;
- Acquisition of the site with Coastal Conservancy funding for public access and as part of the California Coastal Trail;
- The historical, and now abandoned, use of the site as a lumber mill, which resulted in extensive site disturbance, grading and coverage of the site in asphalt and heavily compacted gravel surfaces which now must be restored in order to provide for public access and reduce stormwater induced erosion of the site; and
- Demand for increased coastal access and passive recreational opportunities in Mendocino County.

Due to damage caused by current and historic uses of the project site, habitat restoration is an important component of the project. Nearly 5 acres are paved with asphalt or heavily compacted gravel surfaces.

2.5.1 Project Objectives

The project objectives include:

1. Restore and protect the site's physical and ecological resources through:
    a. The removal of invasive plants, asphalt, and compacted gravel surfaces;
    b. Installation of a one foot depth of soil/sand as a restoration substrate, stormwater infiltration layer, and protective layer in areas where existing gravel should not be removed or disturbed in order to protect sub-surface cultural resources;
    c. Re-vegetation of impacted areas with native plant species;

d. Establishment of a designated trail system that maximizes the user's contact with the coastline and ocean views while avoiding or minimizing impacts to sensitive natural and cultural resources;

e. Use of appropriate trail surfaces to encourage visitors to stay on designated trails; and

f. Installation of interpretive signage to educate visitors about the natural and historic resources of the site.

2. Protect the site's cultural resources by:

   a. Restoring the site with native appropriate species, including those that have cultural uses;

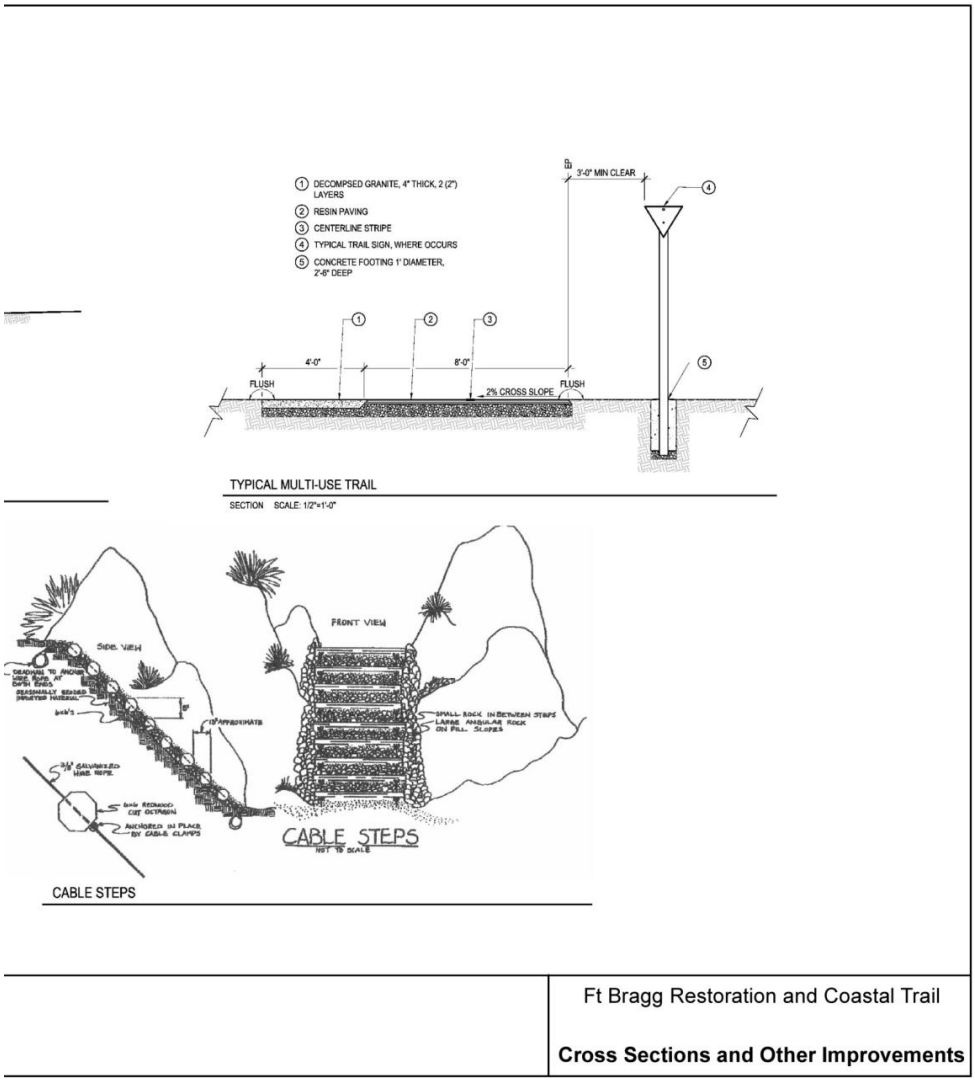
   b. Designing and constructing a designated trail system that maximizes the user's contact with the coastline and ocean views while minimizing impacts to natural and cultural resources; and,

   c. Educating visitors about the cultural history and current cultural uses of the site, where appropriate.

3. Provide for a safe, accessible, and scenic pedestrian and bicycle trail with accessible beaches along the route; and

4. Incorporate the trail design and comments from over 30 workshops held by the City between 2006 and 2011.

Figure 4. Cross Sections and Other Improvements



It is estimated that up to 5,000 cubic yards (CY) of sand/soil would be required to cap the cultural resource deposits and provide topsoil for re-vegetation. The City may acquire sand and/or soil from the following projects/locations: the Noyo Harbor Dredge Spoils Site, various Caltrans road projects and the construction of the Newman Gulch Reservoir. The City will obtain clearance from the Regional Water Quality Control Board to reuse dredge sands from the Noyo Harbor for beneficial re-use on the site. This material has been extensively tested in the past and level of metals and other contaminants is well below the clean-up levels (existing contaminants on the Coastal Trail property) for the Site as approved by the DTSC.

A mix of commercial native seed and wild hand-collected seed will be hydro-sprayed onto the restoration soil/cap. The seed mix will be applied at a rate of 20 to 35 pounds per acre (lbs./ac) depending on the final species make-up of the seed mix. Rice straw mulch will be applied at a rate of 2,000 lbs/ac over all seeded areas. A low nitrogen fertilizer, spent grain and wood bark compost may be applied in soil cap areas depending on the cap soil.

Some woody plant material may also be planted, in areas without cultural resources and areas that are not culturally sensitive, including shore pine and other appropriate low growing bushes and trees, to provide visual interest, wind protection, and bird habitat.

The concept of adaptive management will play a strong role in all phases of this restoration project. Each year, the successes of the previous year will be analyzed and improved upon. Target species for supplemental seed collection may change each year in response to “what worked” and abundance of local seed crops. The degree of infestation from exotic species would drive the level of required maintenance each year. A Site Management Plan would be crafted for maximum flexibility and will include a monitoring program staffed by knowledgeable local volunteers.

2.5.1.1 Trail Development

The multi-use trail would consist of a primary trail of approximately 0.8 miles. The trail would be 8-ft wide and made of asphalt. It would also include a 4-ft wide gravel shoulder on its western edge. This alignment would have a small spur extending over a small portion of the northern side of the beach berm to provide access to the beach below via constructed stairs to the beach. The project would also include the installation of six benches and two interpretive signs along the trail.

The pedestrian only trails will not be developed in a tradition sense. The trail alignment will be mowed and then demarcated with habitat protection fencing on either side of the trail. Additionally habitat protective fencing will be placed around both bench installations that are included in the pedestrian only improvements.

2.5.1.2 Signage

Two interpretive panels would be located on the site. The interpretive signs would consist of 48-in wide × 24-in high low profile exhibits and cover the following topics:

1. Fort Bragg Landing, it’s history and natural resources;
2. Restoration activities to transform the Old Mill Site into a re-used and restored landscape;

The project would also include a variety of safety signage including:

- Tsunami zone signs, 20 in × 24 in;
- High Surf signs, 20 in × 24 in;
- Ocean Safety: 20 in × 24 in;
- Trail Signs: 3.5 in × 12 in, and Directional Arrows: 3.5 in × 3.5 in;
- Danger! Bluffs Crumble!: 7 in × 7 in;
- Rare Plant Area, Stay on Trails: 15 in × 10 in;
- Area Closed For Plant Rehabilitation: 15 in x 10 in.

2.5.1.3 Stormwater Management

The proposed stormwater management improvements to the project include:

1. Restoration of 5 acres of impervious surface into pervious native landscape.
2. Utilization of infiltration to handle stormwater flows from the project.

2.5.2 Construction Access and Staging

All equipment will access work sites from areas of existing disturbance to the maximum extent feasible. Construction access to the project site would be from the Cypress Street Gate and out the runway to the site.

2.5.3 Construction Equipment and Materials

Restoration work will require heavy machinery including dump trucks, backhoes, large loaders, pavers, etc. Smaller machinery such as flatbed and Bobcat® loaders will likely be required for the trail construction.

2.5.4 Project Timing and Phasing

The City certified a Final EIR for the Fort Bragg Coastal Trail and Restoration project in August 2011. The City of Fort Bragg issued a Coastal Development Permit for that project in August of 2011. A subsequent Final EIR and a Coastal Development Permit Amendment were approved by the City of Fort Bragg in January of 2014. Phase I of the project is currently under construction and will be completed in summer of 2015.

This subsequent EIR analyzes Phase II of this project. Detailed construction drawings will need to be prepared for the project. If the project receives approval by the City of Fort Bragg City Council, detailed drawings will be prepared in 2015/16 and the project would be constructed in 2017 or 2018 as mitigation measures allow. Restoration activities would continue throughout 2019.

2.6 Alternatives

Potential alternatives to the proposed project are limited due to the relatively narrow corridor available for development for both Alternative Trail Alignment (a 100 foot corridor) and Preferred Trail Alignment (a 25 foot corridor) in the irrevocable offer to dedicate to the City of

Foot Bragg (see Figure 5). Due to the configuration of the irrevocable offer to dedicate, there are only three possible trail alignments on the site:

1. Over the beach berm (Alternative Trail Alignment);

2. Around the Mill Pond area (Preferred Trail Alignment also known as the preferred project); and

3. No project.

Both alternatives A and B avoid and minimize impacts to Environmentally Sensitive Habitat Areas (ESHA), wetlands and cultural resources. Ultimately, only two feasible CEQA alternatives to the preferred trail alignment over the beach berm are: Trail Alignment A and the No Project Alternative. They are described in more detail below.

Preferred Alternative. The locally preferred alternative for the project is the proposed mitigated project.

2.6.1 No Project Alternative

The No Project Alternative would include none of the components of the proposed project, except for the property line fencing. The No Project Alternative would open the site to public access, as required by Coastal Conservancy funding, but without any developed facilities. Only the east side of the parcel would be fenced to keep visitors from accessing the remainder of the Mill Site.

The no project alternative would result in visitors utilizing the existing dirt/gravel/paved road for access. However as the project would not include a designated trail or signage it would likely offer limited utility to people on bicycles, in wheelchairs or on roller skates. This project alternative would also not include any restoration activities. If the no project alternative is selected, the City would have to return $450,000 in State funding to California State Parks for the construction of the project.

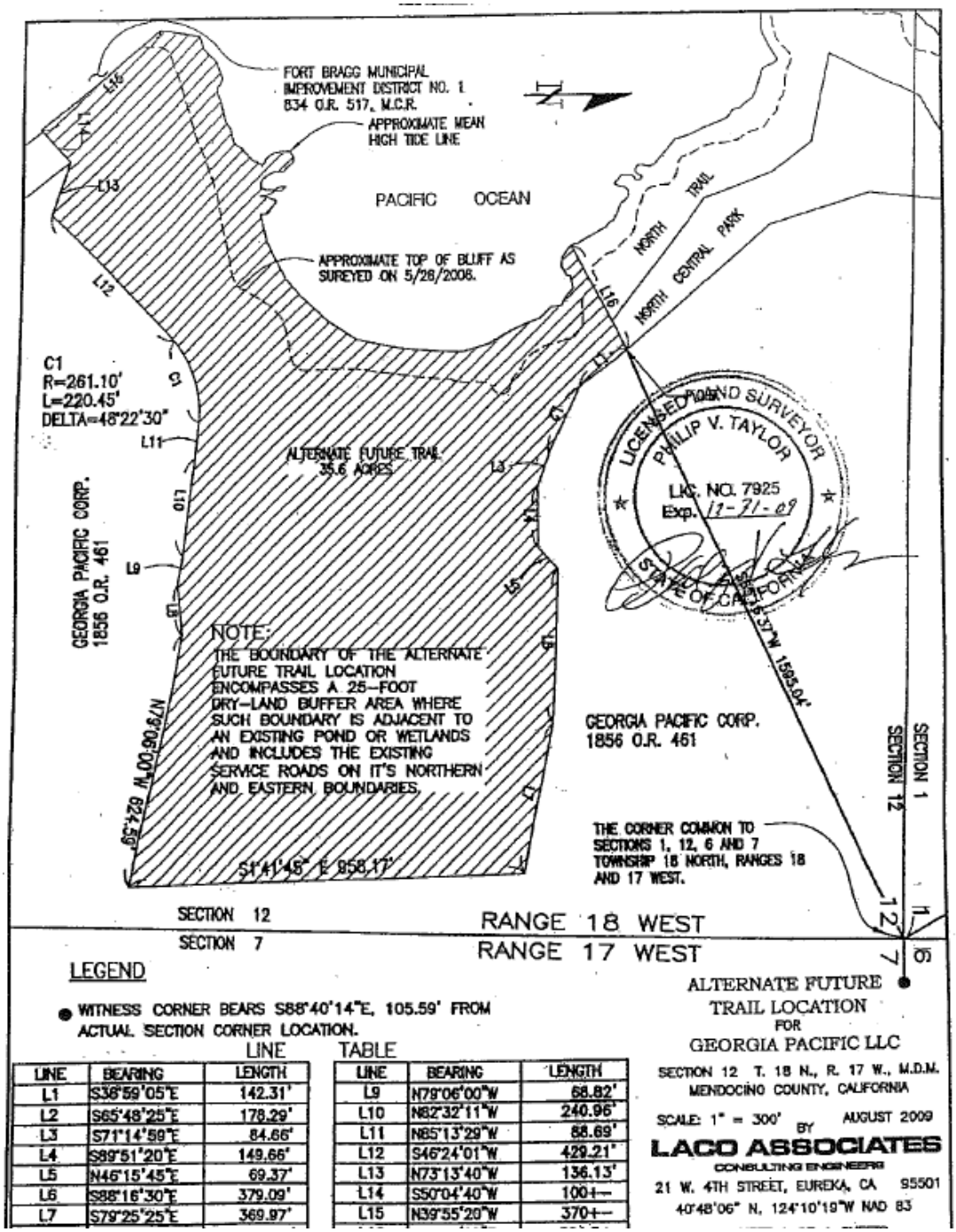
2.6.2 Alternative Trail Alignment - Trail Alignment

The Alternative Trail Alignment would locate the proposed multi-use trail entirely within the existing paved portion of the site along the Beach Berm. The proposed cable stairs to the beach would remain in the project, although they would be located in a different area. This alignment would include less trail constructed adjacent to wetlands, however impacts on these wetlands would be minimal as the trail would be located where an access road is currently located.

2.6.2.1 Earthwork and Areas of Disturbance

Due to the considerably shorter distance for this trail alignment, the earthwork required to construct the Alternative Trail Alignment is less than the proposed project. The areas of permanent disturbance would be less compared to the proposed project as the multiuse trail would be 0.5 miles in length.

Figure 5: Irrevocable Offer to Dedicate



LINE TABLE

LINE	BEARING	LENGTH
L1	S36°59'05"E	142.31'
L2	S65°48'25"E	178.29'
L3	S71°14'59"E	84.66'
L4	S89°51'20"E	149.66'
L5	N46°15'45"E	69.37'
L6	S88°16'30"E	379.09'
L7	S79°25'25"E	369.97'

LINE	BEARING	LENGTH
L9	N79°06'00"W	68.82'
L10	N62°32'11"W	240.96'
L11	N85°13'29"W	88.69'
L12	S46°24'01"W	429.21'
L13	N73°13'40"W	136.13'
L14	S50°04'40"W	100+-
L15	N39°55'20"W	370+-

2.7 Permit Requirements

The proposed project is located within the city limits and the California Coastal Zone. Within the City, all projects in the Coastal Zone must comply with the City's Certified Local Coastal Program, which consists of the Coastal General Plan, Coastal Land Use and Development Code, and zoning map. The Coastal Land Use and Development Code Section 17.71.045

requires Coastal Development Permit review, and Section 17.71.050 requires Design Review for this project.

Table 2-1 includes the permits and responsible agencies for the proposed project. Coastal Development Permit approval would only be required by the California Coastal Commission (CCC) in the event that the project is appealed to or by the CCC. All of the agencies listed below have been contacted regarding the proposed project and received copies of the Draft Subsequent EIR prepared by the City.

Table 2-1. Responsible Agencies and Associated Permits

Agency	Permit/Approval	Status
SWRCB/RWCB	General Waste Discharge Requirement (WDR)	No application filed
City of Fort Bragg	Coastal Development Permit, Design Review	Issued August 2011, CDP Amendment required.
CCC	Coastal Development Permit (if project appealed)	Pending

Chapter 3 – Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures

As part of the scoping and environmental analysis conducted for the project, the following environmental issues were considered but no adverse impacts were identified. Consequently, there is no further discussion regarding these issues in this document.

Aesthetics – The project site is located on a former lumber mill (Mill Site). The Mill Site has been heavily impacted by past industrial use and about 20% of the project site is paved and much of the remainder is covered in ruderal vegetation or compacted gravel. Views to the west from the project site are scenic and include the Pacific Ocean, beaches, monuments and coastal bluffs. Views to the east are scenic and include ruderal and wetland habitat, including the Mill Pond. Beyond the Mill Site, the views are dominated by the urbanized City of Fort Bragg and the scenic coastal ranges beyond. The site is visible from the ocean; views to the east from the ocean would be dominated by the bluff edges and monuments, the urbanized City of Fort Bragg, and the coastal ranges. The proposed improvements are relatively limited, and given the industrial nature of the Mill Site and the proposed restoration, the proposed project would have beneficial impacts to visual resources.

Agricultural Resources – The site is not in agricultural use or zoned for agricultural use. No important farmland or agricultural operations are onsite or adjacent to the site.

Climate Change – The proposed project will not have a significant impact on Climate Change. Construction activities will consist of grading an area of approximately 5 acres in total, trucking new soil materials (5,000n cubic yards) from a local source, and installing 0.5 miles of asphalt paving that is 8 feet in width. These activities will contribute a relatively small amount of Green House Gas emissions, however the amount is not significant. Operationally there is no parking associated with the multi-use trail project, so it will not result in additional vehicular trips. Additionally as the trail head to this facility is more than 1.5 miles from either the north or south parking lots on the associated Phase I Fort Bragg Coastal Trail project, the addition of this trail segment is not likely to lead to additional vehicular trips to either parking lot. Rather it may result in a different use pattern of both facilities, where visitors stay longer and walk further. Finally the addition of this middle segment to the project will result in the completion of a continuous class 1 bike facility which may be utilized by bike commuters and thereby take a few vehicular trips off the road. Overall the impact on climate change for the construction and operation of the Fort Bragg Coastal Trail and Restoration Project - Phase II will be less than significant.

Community Impacts – The proposed project would include open space and recreational amenities for the public. There are no residences within the vicinity of the project. The nearest residences are located 0.41 miles to the east of the project site. Issues associated with the historical and current use of the Mill Site by Native Americans is considered in the Cultural Resource, botanical resources, and land use sections of this EIR.

Growth – The proposed project is identified in local government and the Coastal Commission's existing planning documents. The project would result in short-term construction jobs, but would not result in direct long-term employment opportunities. The project is unlikely to foster significant growth in the tourism sector as there are many similar recreational facilities throughout Mendocino County. The proposed project would not

remove obstacles to growth or facilitate other activities that would significantly affect the environment.

Mineral Resources – The proposed project would not result in the loss of known mineral resources nor conflict with existing or potential future mineral resource recovery or processing facilities.

Noise – Ambient noise levels at the project site are relatively low and associated with ocean wave action. Land uses are currently industrial, although the site has been vacant for over ten years. The adjacent WWTF does not produce excessive amounts of noise and so will not bother people visiting the trail. Noise generated by the proposed project would be short-term and construction-related (paving, haul trucks for restoration materials, etc.). Construction will not include pile driving or use of explosives for demolition, activities which are most likely to exceed noise thresholds and result in intensive vibration. No long term noise impacts would result from the proposed project, and no mitigation measures are required.

Paleontological Resources – A Paleontological Resources Survey Report (SWCA 2010) prepared for the project area concluded that due to the underlying geologic formations and lack of fossils identified, the proposed project would not encounter paleontological resources.

Population and Housing – The proposed project would not induce growth, displace housing or require construction of new housing.

Public Services – The proposed project would not require utility infrastructure. No sewer or water service connections are proposed for the project. A number of safety measures have been incorporated into the design to ensure the safety of trail users and minimize trespassing onto the remainder of the Mill Site which may not be open to the public at the time the proposed project is constructed. Because the trail may attract more visitors to the project site, emergency response requirements may be increased, although not significantly. No impacts to public services or facilities would result from the proposed project and no mitigation measures are required. As the project is a park, it may lesson visitation to adjacent coastal parks and thereby reduce impacts to these parks.

Recreation – The proposed project is a recreational facility which would potentially have a physical impact on the environment.

Timberland – The proposed project is an urbanized area and not located within or adjacent to lands designated for timber production or processing (the Mill Site is being decommissioned).

Utilities and Service Systems – The proposed project would not include water or sewer hookups. No solid waste impacts would result from the proposed project and no mitigation measures are required.

Wild and Scenic Rivers – The proposed project is not within the vicinity of designated Wild and Scenic Rivers.

3.1 Human Environment

3.1.1 Land Use

3.1.1.1 Affected Environment

The project is located on the western edge of the City, in Mendocino County, California. The project site is a ten acre stretch of land along the bluff tops and over the beach berm adjacent to Fort Bragg Landing, and located between the North Fort Bragg Coastal Trail alignment and the South Fort Bragg Coastal Trail Alignment.

3.1.1.2 Existing Land Uses

The site is currently utilized as an access road to the Mill Pond spillway and dam. The site has no public access and is part of a former industrial lumber mill, however the lumber mill has been closed since 2002 and almost all buildings on the larger lumber mill site were demolished in 2012. The adjacent Mill Pond feature is part of a larger stormwater system that offers limited water polishing to stormwater that passes through it.

3.1.1.3 Surrounding Land Uses

The project site is a relatively long narrow corridor stretching from the Waste Water Treatment Facility to the end of the North Coastal Trail Alignment. It is bounded on the west by the Pacific Ocean and Fort Bragg Landing, to the south by the Waste Water Treatment facility and to the north and east by the vacant mill site. Urban areas of the city are located 0.4 miles to the east of the project and are composed of the City's Central Business District and highway commercial zones. However access from these areas to the proposed site is currently not feasible as the intervening lands are owned by Georgia-Pacific and still require environmental remediation.

3.1.1.4 Future Land Uses

Future land uses within the city are most affected due to the potential future redevelopment of the Mill Site. The Mill Site is immediately adjacent to the proposed project, covers an approximately 360-ac area, and is the location where the majority of new development could potentially occur within the city over the next 30 years if a Specific Plan and LCP amendment are approved for the rezoning of the site. The City began processing a Specific Plan for the site in 2008, however the property owner, Georgia-Pacific, withdrew that application in 2012. It is unclear whether or not the City, or some future property owner of the site, may proceed with a Specific Plan at a future date. As the current plan has been withdrawn, it is also uncertain what future rezoning for this site might entail.

3.1.1.5 Consistency with State, Regional, and Local Plans

Several land use plans are applicable within the land use study area for the proposed project. A brief description of these planning documents follows. Table 3-1 includes a list of plans and policies relevant to the proposed project. A determination of the consistency of the project alternatives is not included specifically in the table. However, because both alternatives are reduced versions of the proposed project, the consistency determination for the proposed project is applicable to the alternatives as well.

Coastal Zone

The proposed project is within the State Coastal Zone. The Coastal Zone Management Act of 1972 (CZMA) is the primary federal law enacted to preserve and protect coastal resources. The CZMA sets up a program under which coastal states are encouraged to develop coastal management programs. States with an approved coastal management plan are able to review federal permits and activities to determine if they are consistent with the state's management plan.

California has developed a coastal zone management plan and has enacted its own law, the California Coastal Act of 1976, to protect the coastline. The policies established by the California Coastal Act are similar to those for the CZMA; they include the protection and expansion of public access and recreation, the protection, enhancement and restoration of environmentally sensitive areas, protection of agricultural lands, the protection of scenic beauty, and the protection of property and life from coastal hazards. The California Coastal Commission is responsible for implementation and oversight under the California Coastal Act.

Just as the federal CZMA delegates power to coastal states to develop their own coastal management plans, the California Coastal Act delegates power to local governments (15 coastal counties and 58 cities) to enact their own local coastal programs (LCPs). This project is subject to the City's local coastal program. The LCP determines the short- and long-term use of coastal resources in the City's jurisdiction consistent with the California Coastal Act goals. The City's Local Coastal Program includes the Coastal Land Use and Development Code, the Coastal General Plan, and the zoning map.

City of Fort Bragg Coastal General Plan

Every city and county in California is required by State law to have a General Plan. A General Plan is a legal document that serves as the community's "constitution" for land use, development and conservation. A General Plan must be comprehensive and long term, outlining proposals for the physical development of the city and any land outside its boundaries which in the City's judgment bears relation to its planning. The Coastal General Plan achieves these goals for the Coastal Zone in the City of Fort Bragg. All of the City's land use regulations for the Coastal Zone, including zoning and subdivision regulations, specific plans, and redevelopment plans must conform to the Coastal General Plan. Relevant policies from the City's Coastal General Plan have been included in Table 3-1.

Mendocino County Regional Transportation Plan

Regional Transportation Plans (RTP) are planning documents required by State legislation and are developed by regional transportation planning agencies (in this case the Mendocino County Council of Governments) in cooperation with Caltrans and other stakeholders. RTPs are developed to provide a clear vision of the regional transportation goals, policies, objectives, and strategies. The Mendocino County RTP planning process is a long-range (one to 20 year) planning effort that involves federal, state, regional, local, and tribal governments, public and private organizations, and individuals working together to plan how future regional transportation needs can be met. The most recent update was in 2005. The proposed project is identified in the RTP as the Fort Bragg Coastal Trail.

3.1.1.6 Avoidance, Minimization, and/or Mitigation Measures

The proposed project would not result in significant adverse impacts to current use of the site, as that use is limited to maintenance and inspection of the Mill Pond dam. However, in order to facilitate access for on-going maintenance of the Mill Pond dam Mitigation Measure 1 would reduce the potential for adverse impacts to less than significant.

> Mitigation Measure 1: Prior to approval of the Building Permit, the applicant shall record an access easement providing access for on-going maintenance of the Mill Pond Dam, for as long as the dam is in operation.

3.1.1.7 Cumulative Impacts

Potential cumulative adverse impacts would be avoided by complying with applicable local and state land use regulations and policies.

Table 3-1. Consistency with Plans and Policies

Goals, Policies, Plans, Programs and Standards	Proposed Action	Determination
Land Use Element of the Fort Bragg Coastal General Plan (July 2008)		
Goal LU-5. Maximize public recreational opportunities in the Coastal Zone consistent with sound resource conservation principles and the constitutionally protected rights of property owners.	The proposed project seeks to maximize recreational uses along coastal bluffs of the City of Fort Bragg. Mitigation measures are proposed in the EIR to minimize impacts on sensitive resources, consistent with this policy.	Consistent
Policy LU-5.3. Lower Cost Facilities. Protect, encourage, and, where feasible, provide lower-cost visitor and recreational facilities for persons and families of low and moderate income.	Access to the trails, recreational areas, informational plazas and natural habitat areas associated with the proposed project will be available to visitors at no charge, consistent with this policy.	Consistent
Policy LU-5.4. Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.	The project proposes various recreational uses, as well as sensitive habitat restoration, preservation, and educational awareness along the City's oceanfront lands, consistent with this policy.	Consistent
Policy LU-5.5. Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred.	Access to the trails will be available to visitors at no charge, consistent with this policy.	Consistent
Policy LU-5.7. Adequate parking should be provided to serve coastal access and recreation uses to the extent feasible. Existing parking areas serving recreational uses shall not be displaced unless a comparable replacement area is provided.	The Fort Bragg Coastal Trail project will provide adequate parking for this Phase II extension of the trail. No additional parking is required or feasible.	Consistent
Policy LU-10.4. Ensure Adequate Services and Infrastructure for New Development. Development shall only be approved when it has been demonstrated that the development will be served with adequate water and wastewater treatment. Lack of adequate services to serve the proposed development shall be grounds for denial of the development.	The project would require no water or sewer service.	Consistent
Policy LU-10.5. Minimize Impacts on Air Quality and Green House Gasses. New development shall: (1) be consistent with the requirements imposed by an air pollution control district or the State Air Resources Control Board as to each particular development, and (2) minimize	Minimal impacts to air quality are expected to result from the proposed project. Additionally, mitigation measures, including preparation of a dust control plan and Best Management Practices for reducing PM10 are proposed in	Consistent

Goals, Policies, Plans, Programs and Standards	Proposed Action	Determination
energy consumption and vehicle miles traveled.	the EIR, consistent with this policy.	
Conservation, Open Space, Energy, and Parks Element of the Fort Bragg Coastal General Plan (July 2008)		
Goal OS-1. Preserve and Enhance the City's Environmentally Sensitive Habitat Areas.	A primary objective of the proposed project is to enhance and protect the sensitive habitats that comprise the project location through native habitat restoration and education of users to sensitive habitat within and adjacent to the project site.	Consistent
Policy OS-1.1. Definition of ESHA. "Environmentally sensitive habitat area" means any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments. Fort Bragg has several environmentally sensitive habitat areas including, but not limited to, portions of coastal bluffs, biologically rich tide pools, nesting grounds, kelp beds, wetlands, riparian habitats, and rare, threatened, or endangered plants or plant communities. Areas that may contain environmentally sensitive habitat areas include, but are not limited to, areas indicated by Map 0S-1: Open Space and Environmentally Sensitive Habitat Areas.	Portions of the project area are indicated by Map OS-1: Open Space and Environmentally Sensitive Habitat Areas, and the project is located in an area where rare and especially valuable plant and animal habitats are present. A primary objective of the proposed project is to enhance and protect the sensitive habitats that comprise the project location through native habitat restoration and education of users to sensitive habitat within and adjacent to the project site.	Consistent
Policy OS-1.3. Development in ESHA Wetlands. Diking, filling, and dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following uses: a. New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities. b. Maintaining existing or restoring previously dredged depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps. c. New or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities. d. Incidental public service purposes, including but not limited to	The proposed multi-use trail will not encroach on ESHA wetlands. No diking, filling, or dredging activities are proposed within wetland areas, consistent with this policy. Additionally, mitigation measures in the Biological Resources section have been proposed to minimize impacts to ESHA.	Consistent

Goals, Policies, Plans, Programs and Standards	Proposed Action	Determination
burying cables and pipes or inspection of piers and maintenance of existing intake and outfall pipelines. e. Restoration purposes. f. Nature study, aquaculture, or similar resource dependent activities.		
Policy OS-1.6. Development within Other Types of ESHA shall protect ESHA against any significant disruption of habitat values and shall be limited to the following uses: a. Resource Dependent Uses. Public nature trails within riparian ESHA are considered a resource dependent use provided that: (1) the length of the trail within the riparian corridor shall be minimized; (2) the trail crosses the stream at right angles to the maximum extent feasible; (3) the trail is kept as far up slope from the stream as possible; (4) trail development involves a minimum of slope disturbance and vegetation clearing; and (5) the trail is the minimum width necessary. Interpretive signage may be used along permissible nature trails accessible to the public to provide information about the value and need to protect sensitive resources. b. Restoration projects where the primary purpose is restoration of the habitat. c. Invasive plant eradication projects if they are designed to protect and enhance habitat.	The proposed project's restoration activities, invasive plant eradication projects, and public nature trails fall within the specifically numerated developments allowed within ESHA areas under this policy. Restoration and removal of exotics is proposed.	Consistent
Policy OS-1.7. Development in areas adjacent to Environmentally Sensitive Habitat Areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas.	The primary objectives of the proposed project are to restore degraded habitat areas in the area through native habitat restoration, invasive plant eradication, development of trails to provide recreational opportunities and keep visitors on designated paths, and education of users to sensitive plant and animal species within the area. Mitigation measures proposed in the EIR will minimize project-related impacts to the greatest extent feasible, consistent with this policy.	Consistent

Goals, Policies, Plans, Programs and Standards	Proposed Action	Determination
Policy OS-1.10. Policy OS-1.10: Permitted Uses within ESHA Buffers. Development within an Environmentally Sensitive Habitat Area buffer shall be limited to the following uses: a. Wetland Buffer. i. Uses allowed within the adjacent Wetland ESHA pursuant to Policy OS-1.3. ii. Nature trails and interpretive signage designed to provide information about the value and protection of the resources iii. Invasive plant eradication projects if they are designed to protect and enhance habitat values. b. Riparian Buffer. i. Uses allowed within the adjacent River and Stream ESHA pursuant to Policy OS-1.5. ii. Uses allowed within the adjacent ESHA pursuant to Policy OS-1.6. iii. Buried pipelines and utility lines. iv. Bridges. v. Drainage and flood control facilities. c. Other types of ESHA Buffer. i. Uses allowed within the adjacent ESHA pursuant to Policy OS-1.6. ii. Buried pipelines and utility lines. iii. Bridges. iv. Drainage and flood control facilities.	The proposed project would be located within ESHA buffers. However, the impacts are associated with trails, invasive plant eradication, and drainage facilities, which are all permissible activities within ESHAs.	Consistent
Policy OS-1.12. Drainage and Erosion Control Plan. Permissible development on all properties containing environmentally sensitive habitat, including but not limited to those areas identified as ESHA Habitat Areas on Map OS-1, shall prepare a drainage and erosion control plan for approval by the City. The plan shall include measures to minimize erosion during project construction, and to minimize erosive runoff from the site after the project is completed. Any changes in runoff volume, velocity, or duration that may affect sensitive plant and animal populations, habitats, or buffer areas for those populations or habitats,	Federal, state, and local regulations, required by the City and the RWQCB, require the City to prepare an erosion control plan and SWPPP prior to initiation of project activities. The Best Management Practices (BMPs) in these plans include measures such as sandbag barriers, straw bale barriers, sediment traps, and fiber rolls to stabilize soils; hydraulic mulch, hydro seeding, and geotextiles to control sediments; portable water and straw mulch for wind erosion control; street sweeping and entrance/outlet tire washing; and vehicle	Consistent

Goals, Policies, Plans, Programs and Standards	Proposed Action	Determination
shall be reviewed by a qualified biologist to ensure that there will not be adverse hydrologic or, erosion, or sedimentation impacts on sensitive species or habitats. Mitigation measures shall be identified and adopted to minimize potential adverse runoff impacts. All projects resulting in new runoff to any streams in the City or to the ocean shall be designed to minimize the transport of pollutants from roads, parking lots, and other impermeable surfaces of the project.	and equipment cleaning, concrete waste management, and contaminated soil management.	
Policy OS-1.14. Vegetation Removal in ESHA. Prohibit vegetation removal in Environmentally Sensitive Habitat Areas and buffer areas except for: a. Vegetation removal authorized through coastal development permit approval to accommodate permissible development, b. Removal of trees for disease control, c. Vegetation removal for public safety purposes to abate a nuisance consistent with Coastal Act Section 30005, or d. Removal of firewood for the personal use of the property owner at his or her residence to the extent that such removal does not constitute development pursuant to Coastal Act Section 30106. Such activities shall be subject to restrictions to protect sensitive habitat values.	The project must receive a Coastal Development Permit Amendment in order to proceed and so shall meet the requirements of this Policy under item a.	Consistent
Policy OS-1.16. Biological Report Required. a) Permit applications for development within or adjacent to Environmentally Sensitive Habitat Areas including areas identified in Map OS-1 or other sites identified by City Staff which have the possibility of containing environmentally sensitive habitat shall include a biological report prepared by a qualified biologist which identifies the resources and provides recommended measures to ensure that the requirements of the Coastal Act and the City of Fort Bragg's Local Coastal Program are fully met. The required content of the biological report is specified in the Coastal Land Use and Development Code.	Numerous Biological Resources reports have been prepared for the project and and/or sites. Refer to the Biological Resources section for more information. The reports were prepared by qualified biologists and meet City and Coastal Act requirements.	Consistent
Policy OS-2.1. Riparian Habitat. Prevent development from destroying riparian habitat to the maximum feasible extent. Preserve, enhance, and restore existing riparian habitat in new development unless the preservation will prevent the establishment of all permitted uses on the property.	A primary objective of the proposed project is to preserve, enhance, and restore existing degraded riparian habitat through native habitat restoration, invasive species eradication, and education about sensitive species and habitats, consistent with this policy. In addition, mitigation	Consistent

Goals, Policies, Plans, Programs and Standards	Proposed Action	Determination
	measures proposed in the Biological Resources section have been proposed to minimize potential impacts to the greatest extent feasible.	
Policy OS-3.1. Soil Erosion. Minimize soil erosion to prevent loss of productive soils, prevent landslides, and maintain infiltration capacity and soil structure.	The proposed project would include limited topographic alteration. Cut and fill slopes would generally be no greater than a few feet, with maximum slopes of 2H:1V or flatter. The restoration activities would include importing fill to create soil for re-vegetation efforts while protecting cultural resources. Paved areas will be restored with native habitat and a stormwater system has been designed to address stormwater runoff in a manner that would reduce erosion and bluff retreat.	Consistent
Policy OS-4.1. Preserve Archaeological Resources. New development shall be located and/or designed to avoid archaeological and paleontological resources where feasible, and where new development would adversely affect archaeological or paleontological resources, reasonable mitigation measures shall be required.	Project objectives include the protection of the site's cultural resources, and the establishment of a designated trail system and stormwater management system to minimize/reduce impacts to cultural resources. The trail has been situated to avoid known cultural resource sites. However, unknown subsurface cultural resources may be present on site. To minimize impacts to unknown resources Native American monitoring will be required during native ground disturbing activities and a "capping system" has been proposed whereby a layer of culturally sterile soil would be laid down above the areas where resources might exist. This soil will support the proposed re-vegetation efforts. Refer to the Cultural Resources section for more information.	Consistent
Policy OS-5.1. Native Species. Preserve native plant and animal species and their habitat.	A primary objective of the proposed project is the enhancement, recovery, and preservation of native plant and animal species. The proposed project proposes to achieve this objective through native habitat restoration, invasive species eradication, and education about sensitive species and habitats, consistent with this policy. In addition, mitigation measures in the Biological Resources section have been proposed to minimize potential impacts to the greatest extent feasible.	Consistent
Policy OS-7.1. Participate in Regional Planning to Improve Air	Operational emissions were not quantified as the proposed	Consistent

Goals, Policies, Plans, Programs and Standards	Proposed Action	Determination
Quality. Continue to cooperate with the Mendocino County Air Quality Management District (MCAQMD) in implementing the Regional Clean Air Plan.	project is a trail system and is considerably smaller than a recreational project that would typically exceed operational emissions thresholds established by the MCAQMD. Regardless, mitigation measures proposed in the EIR include preparation of a dust control plan for construction activities at the project site pursuant to the requirements of the MCAQMD.	
Policy OS-7.2. Air Quality Standards. Seek to comply with State and Federal standards for air quality.	Minimal impacts to air quality are expected to result from the proposed project. Additionally, mitigation measures, including preparation of a dust control plan and Best Management Practices for reducing PM10, which the county is currently in non-attainment, are proposed in the EIR, consistent with this policy.	Consistent
Policy OS-9.1. Minimize Increases of Pollutants. Development shall be designed and managed to minimize the introduction of pollutants into coastal waters (including the ocean, estuaries, wetlands, rivers, streams, and lakes) to the extent feasible.	Primary pollutants associated with the proposed project include stormwater and erosion, and hazardous materials utilized during construction and waste handling. The use of hazardous materials would be subject to federal, state, and local health and safety requirements; consequently, no substantial adverse impacts are anticipated. Further, the proposed project does not include use of potentially hazardous materials.	Consistent
Policy OS-9.2. Minimize Increases in Stormwater Runoff. Development shall be designed and managed to minimize post-project increases in stormwater runoff volume and peak runoff rate, to the extent feasible, to avoid adverse impacts to coastal waters.	The project will result in a net loss of impervious surfaces. After construction the ability of the project site to infiltrate stormwater will be much improved over current conditions.	Consistent
Policy OS-10.1. Construction-phase Stormwater Runoff Plan. All development that requires a grading permit shall submit a construction-phase erosion, sedimentation, and polluted runoff control plan. This plan shall evaluate potential construction-phase impacts to water quality and coastal waters, and shall specify temporary Best Management Practices (BMPs) that will be implemented to minimize erosion and sedimentation during construction, and prevent contamination of runoff by construction chemicals and materials.	Federal, state, and local regulations, required by the City and the RWQCB, require the City to prepare an erosion control plan and SWPPP prior to initiation of project activities. Mitigation measures have also been recommended to ensure the coordination of the restoration activities with the agency-required erosion control plan/SWPPP. These measures would mitigate any potential adverse water quality and stormwater effects resulting from construction activities.	Consistent
Policy OS-11.2. Preserve Functions of Natural Drainage Systems.	The proposed project would not affect the hydrology of the	Consistent

Goals, Policies, Plans, Programs and Standards	Proposed Action	Determination
Development shall be sited and designed to preserve the infiltration, purification, detention, and retention functions of natural drainage systems that exist on the site, where appropriate and feasible. Drainage shall be conveyed from the developed area of the site in a non-erosive manner.	Mill Pond. Natural drainage conditions would not be changed. Stormwater would be accommodated onsite as it is currently, and runoff would occur within natural drainage features, over the bluff edge as sheet flow, or by percolation. In addition, proposed native habitat revegetation would allow for more natural treatment of stormwater. Impervious surfaces will be removed by the project, and stormwater will be infiltrated close to its source to reduce the alteration of the site's natural flow regime.	
Policy OS-11.3: Minimize Impervious Surfaces. Development shall minimize the creation of impervious surfaces (including pavement, sidewalks, driveways, patios, parking areas, streets, and roof-tops), especially directly connected impervious areas, where feasible. Redevelopment shall reduce the impervious surface site coverage, where feasible. Directly connected impervious areas include areas covered by a building, impermeable pavement, and/or other impervious surfaces, which drain directly into the storm drain system without first flowing across permeable land areas (e.g., lawns).	The project will result in a net reduction of impervious surfaces.	Consistent
Policy OS-11.7. Avoid Steep Slopes with Highly Erodible Soil. Where feasible, development shall be sited and designed to avoid areas on steep slopes (i.e., 12% or greater) with highly erodible soil.	The project site does not generally include any steep slopes, except for the very steep, highly erodible coastal bluffs along the western boundary of the project site. The project has incorporated a recommended setback from the steep, erodible coastal bluffs that would allow for the safe use and maintenance of a blufftop trail for up to 30 years.	Consistent
Policy OS-16.1. Coastal Access. Maximum access and recreational opportunities shall be provided consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse. Provide public open space and shoreline access in the Coastal Zone. Acquisitions for coastal access shall not preclude the potential development of necessary infrastructure to support coastal-dependent uses.	The objectives of the proposed project are consistent with this policy in that it will provide coastal access and recreational opportunities to the public, protect coastal habitats and provide educational opportunities related to the special plant and animal habitats in the area.	Consistent
Policy OS-16.17. Coastal Trails. Develop a continuous trail system throughout the City which connects to the California Coastal Trail system.	The trail is considered a portion of the California Coastal Trail. The Phase II multi-use trail would connect the north trail, which connects to the Pudding Creek Trestle and the Haul Road which continues north through MacKerricher	Consistent

Goals, Policies, Plans, Programs and Standards	Proposed Action	Determination
	State Park, and the south trail, which connects to the Noyo Bridge sidewalk and Pomo Bluffs Park which is the southern portion of the California Coastal Trail within the City of Fort Bragg.	
Policy OS-17.3. Recreational Facilities. Provide recreational facilities to meet the needs of all Fort Bragg citizens, especially children and teenagers.	A major project objective is to provide enhanced recreational opportunities along the bluffs from Noyo Bay to Pudding Creek. The project includes construction of 0.5 miles of new multi-use and pedestrian-only trails stretching along Fort Bragg Landing.	Consistent
Policy OS-18.3. Public Participation. Actively solicit public participation in the selection, design, and facilities planning for existing and future park sites.	In 2002, the City initiated a community-based planning process that identified the Coastal Trail as the most important community goal for the re-use of the Mill Site. In 2006, the Fort Bragg community participated in a three-day design charrette to create a cohesive plan for the North Parkland. In 2010, Fort Bragg's community participated in a variety of planning activities for the South Parkland parcel, including, three walking workshops (attended by over 300 people), a three-hour community design Charrette workshop, an open-house, and a community survey returned by 94 residents. The results of these community processes and over 30 subsequent City Council workshops form the basis of the project design, and the project description for this EIR.	Consistent
Circulation Element of the Fort Bragg Coastal General Plan (July 2008)		
Policy C-9.5. Pedestrian Paths. Develop a series of continuous pedestrian walkways throughout the commercial districts and residential neighborhoods.	The proposed project would result in a substantial increase in the number of multi-use and pedestrian trails in the City of Fort Bragg. The added size of the trail system and increased connectivity resulting from the proposed project would increase Alternative Trail Alignmentnd recreational transportation options within the City of Fort Bragg.	Consistent
Policy C-9.6. Ensure that pedestrian paths are sited to avoid wetlands and other environmentally sensitive areas.	The trail has been aligned around wetlands. Environmentally Sensitive Habitat Areas have been avoided. Impacts to cultural resources area have been minimized by routing the trail away from these areas.	Consistent

Goals, Policies, Plans, Programs and Standards	Proposed Action	Determination
Policy C-10.1. Comprehensive Bikeway System. Establish a comprehensive and safe system of bikeways connecting all parts of Fort Bragg.	The proposed project includes a safe multi-use trail system which will accommodate bicycles and increase connectivity from MacKerricher State Park to Pomo Bluffs Park.	Consistent
Policy C-11.2. Handicapped Access. In conformance with State and Federal regulations, continue to review all projects for handicapped access and require the installation of curb cuts, ramps, and other improvements facilitating handicapped access.	The Multi-Use trail will be handicapped accessible along most of its length. However a small portion of its length will not be handicapped accessible due to the configuration of the Mill Pond impoundment. This feature cannot be modified to allow for handicapped accessibility unless significant new deposits of fill are made to the beach berm, which is not permitted by the Coastal Act (as this would be considered armoring the shore). However the remainder of the trail improvements will be handicapped accessible.	Consistent
Community Design Element of the Fort Bragg Coastal General Plan (July 2008)		
Policy CD-1.1. Visual Resources. Permitted development shall be designed and sited to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural landforms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance scenic views in visually degraded areas. **Policy CD-1.4.** New development shall be sited and designed to minimize adverse impacts on scenic areas visible from scenic roads or public viewing areas to the maximum feasible extent.	The project is located in an area with numerous high quality visual resources; however, it has been designed to protect views and scenic vistas along the ocean. The proposed improvements are generally limited to restoration, trail building activities, minimum drainage improvements, and limited signage. No structures are proposed. Signage and fencing improvements have been minimized and are generally 48-inches tall or less. Given that the project would include 5 acres of ecological restoration, the proposed project would have a beneficial effect on the onsite visual character.	Consistent
Policy CD-1.5. All new development shall be sited and designed to minimize alteration of natural landforms by: 1. Conforming to the natural topography. 2. Preventing substantial grading or reconfiguration of the project site. 3. Minimizing flat building pads on slopes. Building pads on sloping sites shall utilize split level or stepped-pad designs. 4. Requiring that man-made contours mimic the natural contours. 5. Ensuring that graded slopes blend with the existing terrain of the site and surrounding area.	The project has been designed to protect views and scenic vistas along the ocean. The project components will conform to the natural topography of the site to the greatest extent feasible. Minimal grading and fill activities will be required.	Consistent

Goals, Policies, Plans, Programs and Standards	Proposed Action	Determination
6. Minimizing grading permitted outside of the building footprint. 7. Clustering structures to minimize site disturbance and to minimize development area. 8. Minimizing height and length of cut and fill slopes. 9. Minimizing the height and length of retaining walls.		
Policy CD-1.7. Bluff Face and Bluff Retreat Setback Development. Development on the bluff face and within the bluff retreat setback shall be limited to the following uses with a conditional use permit where there is no feasible less environmentally damaging alternative, feasible mitigation measures have been provided to minimize all adverse environmental impacts, and allowable structures are designed be visually compatible with the surrounding area to the maximum extent feasible. a. Engineered accessways or staircases to beaches, boardwalks, viewing platforms, and trail alignments for public access purposes, b. Pipelines to serve coastal dependent industry, c. Habitat restoration, d. Hazardous materials remediation, and e. Landform alterations where such alterations re-establish natural landforms and drainage patterns that have been eliminated by previous development activities.	The proposed project includes components for a beach access way and staircase, trail alignments for public access purposes, and habitat restoration, consistent with this policy. Additionally, the project has been designed to protect visual resources as discussed above.	Consistent
Safety Element of the Fort Bragg Coastal General Plan (July 2008)		
Policy SF-1.1. Minimize Hazards. New development shall: (a) Minimize risks to life and property in areas of high geologic, flood, and fire hazard; and (b) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.	Improvements include the construction of multi-use trails and cable stairs to the beach. No structures are proposed. In general, due to the type and limited scale of the improvements proposed, the flat topographic conditions, and relatively shallow depth to bedrock, geologic and seismic hazards will be avoided or minimized by employing sound engineering practice in the final design and construction. However the alignment of the trail over the dam impoundment and spillway, would result in risks to life if an earthquake occurs, therefore mitigation measures have been incorporated into the project to ensure that the seismic risk to the dam is eliminated prior to the construction or opening of	Consistent

Goals, Policies, Plans, Programs and Standards	Proposed Action	Determination
	the trail. No protective devices or alterations to natural landforms or bluffs and cliffs will be required, consistent with this policy.	
Policy SF-1.2. All ocean-front and blufftop development shall be sized, sited, and designed to minimize risk from wave run-up, flooding, and beach and bluff erosion hazards, and avoid the need for a shoreline protective structure at any time during the life of the development.	The project has incorporated a recommended setback from the steep, erodible coastal bluffs that would allow for the safe use and maintenance of a blufftop trail for up to 30 years, assuming bluff retreat continues at current rates.	Consistent
Policy SF-1.4. Blufftop Setback. All development located on a blufftop shall be setback from the bluff edge a sufficient distance to ensure that it will be stable for a projected 100-year economic life. Stability shall be defined as maintaining a minimum factor of safety against sliding of 1.5 (static) or 1.1 (pseudostatic), as described in Section 18.54.040(F) of the Coastal Land Use and Development Code. This requirement shall apply to the principal structure and accessory or ancillary structures. Slope stability analyses and erosion rate estimates shall be performed by a licensed Certified Engineering Geologist or Geotechnical Engineer. ***Policy SF-1.5.*** Siting and design of new blufftop development and shoreline protective devices shall take into account anticipated future changes in sea level. In particular, an acceleration of the historic rate of sea level rise shall be considered. Development shall be set back a sufficient distance landward and elevated to a sufficient foundation height to eliminate or minimize to the maximum extent feasible hazards associated with anticipated sea level rise over the expected 100-year economic life of the structure.	The project has incorporated a recommended setback from the steep, erodible coastal bluffs that would allow for the safe use and maintenance of a blufftop trail for up to 30 years, assuming bluff retreat continues at current rates. The trail is not development in the usual sense in that it does not include buildings or infrastructure and the typical useful economic life for a trail of this type is 30 years. Due to rising sea levels, the likely useful life of this trail alignment is estimated at 30 to 50 years.	Consistent
Policy SF-1.7. Alterations to Landforms. Minimize, to the maximum feasible extent, alterations to cliffs, bluff tops, faces, or bases, and other natural land forms in the Coastal Zone. Permit alteration in landforms only if erosion/runoff is controlled and if there is no other feasible environmentally superior alternative or where such alterations re-establish natural landforms and drainage patterns that have been eliminated by previous development activities.	Alterations to natural landforms associated with the proposed project are minimal and the project has been designed to preserve natural drainage patterns. Additionally, mitigation measures have been proposed in the EIR that minimize the threat of erosion and stormwater pollution to the greatest extent feasible, consistent with this policy.	Consistent
Policy SF-1.8. Floodplain Development. Limit new development in floodplains in the Coastal Zone, including but not limited to those floodplain areas shown on Map SF-2, to those uses allowed in the Open	No project components are located within the 100-year Flood Zone. Pocket beaches, located on the down bluff portion of the site are located within the 100-year flood zone and in	Consistent

Goals, Policies, Plans, Programs and Standards	Proposed Action	Determination
Space land use designation consistent with all other applicable requirements of the LCP.	high surf areas. The Timber Resources Industrial Land Use permits passive and active recreational features and supportive structures. Proposed development activities associated with the proposed project are consistent with these uses, and include habitat restoration, recreational trail development, and rehabilitation of degraded coastal bluffs, interpretive natural resource signage, and stormwater improvements. These developments are in support of recreational uses.	
Policy SF-1.9. Bluff Face and Bluff Retreat Setback. Prohibit development on the bluff face and within the bluff retreat setback because of the fragility of this environment and the potential for resultant increase in bluff and beach erosion due to poorly-sited development except that the following uses may be allowed with a conditional use permit: a. Engineered accessways or staircases to beaches, boardwalks, viewing platforms, and trail alignments for public access purposes; b. Habitat restoration; c. Hazardous materials remediation.	The project proposes development of a staircase to the beach, beach accessways, and trail alignments for public access purposes, as well as habitat restoration, are consistent with this policy.	Consistent
Policy SF-2.1. Seismic Hazards. Reduce the risk of loss of life, personal injury, and damage to property resulting from seismic hazards.	No habitable structures are proposed. However the Mill Pond impoundment may represent a seismic hazard and mitigation measures have been included to minimize this risk to a less than significant extent.	Consistent with mitigation
Policy SF-2.2. Require professional inspection of foundations and excavations, earthwork, and other geotechnical aspects of site development during construction on those sites specified in soils, geologic, and geotechnical studies as being prone to moderate or high levels of seismic hazard.	A geotechnical study has been completed on the site. Recommendations from the geotechnical study will be followed in the engineering, design and timing of construction for the project.	Consistent
Policy SF-3.1. Flood Hazards. Ensure adequate standards for development in the 100-year floodplain.	Very limited portions of the project area are located within the 100-year flood zone. Some passive recreational uses would potentially occur within the flood zone along the Fort Bragg landing beach, however no development is proposed for this area other than the construction of a set of stairs to the	Consistent

Goals, Policies, Plans, Programs and Standards	Proposed Action	Determination
	beach.	
Policy SF-3.2. Storm Drainage. Continue to maintain effective flood drainage systems and regulate construction to minimize flood hazards.	The proposed project will not interfere with the stormwater management features of the Mill Pond or of any other stormwater treatment system proposed to replace the Mill Pond.	Consistent
Policy SF-8.1. Protection from Hazardous Waste and Materials. Provide measures to protect the public health from the hazards associated with the transportation, storage, and disposal of hazardous wastes (TSD Facilities).	The proposed project does not include use of potentially hazardous materials. Potentially hazardous materials exist on portions of the site. Significant work has been done to date characterizing and assessing the extent of the contamination. Both heavy metal contamination and dioxins have been identified within the project area. The site is currently under a clean-up order by the Department of Toxic Substances Control (DTSC), and the property owner (Georgia-Pacific) is currently in the process of completing a Remedial Action Plan for the site, which will be implemented within the next three years. A proposed mitigation measure limits access to the site until the remediation plan is implemented and the site is cleaned up to a passive recreation standard.	Consistent

3.1.2 Traffic and Transportation / Pedestrian and Bicycle Facilities

Please see the traffic transportation discussion in the Fort Bragg Coastal Trail Subsequent EIR Certified January 2014.

The project would connect existing bicycle facilities at the Haul Road and the North Coastal Trail alignment with the South Coastal Trail alignment and Pomo Bluffs Park. Access to the trail could be by foot or bicycle via the North and South Coastal Trail alignments. There is no direct automobile access or parking proposed for the project. Automobiles would park at either the Elm Street parking lot or the runway parking lot on the southern parcel of Phase I. Phase I of the Fort Bragg Coastal Trail project includes construction of two formal off-street parking lots totaling 82 spaces (35 spaces at the Elm Street parking lot and 47 spaces at the Cypress Street lot at the end of the runway). Additionally, there are 18 formal parking places at the north end of Glass Beach Drive. Room for parallel parking exists along approximately 3,000 feet of Glass Beach Drive, and additional parallel parking opportunities exist along Elm Street, east of Glass Beach Drive.

Impacts

Short-term (construction) Impacts

Construction of the proposed project would occur over one construction season. Construction traffic would primarily use the Cypress Street entrance of the Mill Site. Heavy equipment would be necessary to construct the project. The majority of truck trips made to and from the site would be those for removal of existing pavement and gravel.

Construction of the project is anticipated to take place in 2016 or 2017, with some restoration activities extending into the 2018 timeframe. The project would require importation of up to 5,000 CY of imported fill (primarily for restoration activities), and would require the removal of up to 5,000 CY of asphalt and gravel. Some of the asphalt will be reused on site for base materials for the trails and as stormwater management checks on the project site. Much of the gravel will be reused as base-rock for project trails. Total earthwork required for the project would be approximately 10,000 CY.

The import and export of material would be the largest construction-related trip producing activity. At 18 CY per truck, hauling the imported and exported fill, gravel and asphalt (15,000 CY) would require approximately 833 round trips. Major earth work will be completed in two summer months. This activity would generate an average of 18 one way trips per day. There would also be additional employee trips to the site during this time. It should be noted however that the majority of the fill material would likely come from the Noyo Harbor dredge spoils pile, which is located immediately adjacent to the site and is accessible by a private road from the site. In order to minimize impacts to neighboring residential and commercial uses, the truck trips will be limited to the hours of 8:00 am to 5:00 pm each day. This increase in the number of trips added to the City's circulation network would be temporary and would not significantly impact the LOS.

Long-term Operational Impacts

<u>Pedestrian and Bicycle Network</u>

The proposed project would result in a substantial connectivity between existing multi-use and pedestrian trails in the city. The added size of the trail system and increased connectivity resulting from the proposed project would increase Alternative Trail Alignmentnd recreational transportation options within the city. This may reduce the number

of trips made by auto to the Noyo Headlands Parkland, although any benefits cannot be quantified at this time. The project would not adversely affect any existing bicycle or pedestrian facilities.

Vehicular Intersections

- Highway 1/Elm Street Intersection would be used to access the North Parkland parking lot and the intersection operates at LOS A/A.
- Highway 1/Cypress Street Intersection would be used to access the South Parkland parking lot and operates at LOS B in the AM peak hour and Loss C in the PM peak hour. Total volume at the intersection onto and off of the western approach (which provides access to the Coastal Trail Parking Lot) is extremely low at 16 turns per hour in the morning (all geometries) and 24 turns in the PM peak hour (all directions). This intersection is extremely underutilized especially given that it has dedicated left and right turn lanes on every approach to the intersection.

The previous EIR illustrated that the LOS at either intersection would not be significantly impacted by the Phase I project. Additionally, the proposed project does not include additional parking, so in order to access Phase I, visitors would have to park in either the north or south parking lot and travel 1.5 miles by foot or bicycle to reach Phase II. As such the proposed project is unlikely to significantly increase the number of trips to the parking lots, rather visitors will likely stay longer. Additionally, as the usefulness of the overall facility for bicycle travel will be improved, Phase II may actually result in fewer automobile trips to the facility. No additional mitigation measures are required.

Parking

Phase I of the project will provide 82 parking spaces. The previous EIR found that the Phase I parking would serve the projected user population. As noted above Phase II will not generate additional visits, just longer visits of those who do choose to visit the site.

ADA Compliance

The hard surface trail of Preferred Trail Alignment of Phase II will be ADA compliant with an asphalt surface of 8 feet in width and a grade of less than 5% slope. Alternative Trail Alignment would not be ADA compliant and cannot be made ADA compliant due to Coastal Act limitation on creating ocean berms and the topography of the site.

Vehicular/Pedestrian/Bicyclist Safety

The Phase II trail alignments are accessible only from the Phase I trail alignments. Safety from vehicles is not an issue as there is no vehicular access to this area.

3.1.2.1 No Project Alternative

This alternative would not include construction activities, and therefore would not include short-term impacts. The No Build Alternative would not change existing traffic volumes or distribution. No adverse impacts would result. It would also not include the beneficial impacts associated with the expansion of the alternative transportation network in Fort Bragg. This alternative would not include new improvements or alter existing parking capacities.

3.1.2.2 Alternative Trail Alignment

Because this alternative would not include as much trail construction, it may result in marginally fewer employee trips and construction activity. Additionally this alternative would not be ADA accessible. No adverse effects would result.

3.1.2.3 Avoidance, Minimization, and/or Mitigation Measures

No mitigation measures are required.

3.1.2.4 Cumulative Impacts

The proposed project would not result in an adverse effect that would be considered cumulatively considerable, in light of the plans for future development in the vicinity of the project or the Phase I component of the project.

3.1.3 Visual / Aesthetics

This previous EIR analyzed potential visual impacts of Phase I of the project. Phase II does not include improvements that would be visible from a public right of way.

3.1.3.1 Regulatory Setting

City of Fort Bragg Coastal General Plan Community Design Element

The Community Design Element of the Coastal General Plan includes a number of policies relevant to the proposed project. For a list of specific policies and a consistency determination please refer to the Land Use section.

3.1.3.2 Affected Environment

Project Vicinity

The city is located in an area with numerous high quality visual resources. These include the coastal mountains, rivers, redwood forests, the marine terrace, bluffs, and the rocky coastline of the Pacific Ocean. Uninterrupted views of these resources from public places and roads are common and expansive. Urban development has been relatively limited in Mendocino County; the area, including the City of Fort Bragg, is a highly popular tourist destination due in large part to its visual resources. The project site is not located near an officially designated scenic highway and does not have any potential to affect an officially designated scenic highway.

Visual Character

The Phase II area is a bowl shaped area of approximately 40 acres on the edge of Soldiers Bay (AKA Fort Bragg Landing). The parcel is predominantly composed of wetlands (former industrial ponds), ruderal vegetation and asphalt and packed gravel. Generally onsite aesthetic resources are low quality due to the Mill Site's former use (refer to photographs below). The western bluff edge is the exception. The scenic quality of the bluff edge, rocky shoreline, and beaches below is high.

Johnson Point has very high quality visual features, however the proposed development is minimal. The proposed benches will be visible from much of the south trail alignment.

Scenic Vistas

The edge of the site offers expansive views of the Pacific Ocean, rocky shoreline, and the coastline to the north, south, and west. There are no obstructions that block these vistas (refer to photographs below). Because the Mill Site was historically private property, the vistas have not been public; and the existing number of viewers is quite low. It should be noted that the site is well known in the community, and despite the lack of access, there is an expectation of high quality views and high sensitivity to changes of any form. From the water, scenic vistas include views of the rocky shoreline and bluff.

The views to the east are generally of low quality and consist of extensive asphalt paving. Distant views of the town and the mountains are also available to the east. Scenic vistas to the west are high quality and include Soldier Bay (refer to Photograph 3–), the rocky shoreline and distant views of ridgelines and the coast.

Photograph 3–1. Looking south to Fort Bragg Landing.

Photograph 3–2. Looking east into Lowland Area

Photograph 3–3 Looking South across the beach berm.

Photograph 3–4 Looking South – Beach Berm, beach and rip rap wall

Photograph 3–5. Mill Pond

Photograph 3–6. Looking east at lowland area with town buildings behind

Photograph 3–7. Looking northeast at beach berm and rip rap wall from the ocean.

Photograph 3-8

Looking west from Johnson Point

Photograph 3-9

Looking north at Johnson Rock

Photograph 3-10

Looking west at Johnson Point

3.1.3.3 Environmental Consequences

Methodology

Representative photos of the project site were taken and the preliminary plans were reviewed to identify the location and scale of the proposed improvements, as well as the topographic changes which may be necessary to accommodate these improvements.

To determine potential impacts to the existing aesthetic resources, the proposed project components were considered in relation to how they would affect the onsite resources and scenic vistas generally, and how they might affect specific resources, as applicable. Due to the importance of coastal visual resources, and the community's expectations for the project site, this analysis is conservative and evaluates the potential adverse effects as if the resources are currently available to the public. In general, due to the nature of the project, potential significant impacts are limited.

Potential impacts considered in this section include effects to: 1) scenic vistas, and other scenic resources, 2) degradation of the existing visual character or quality of the site and its surroundings, 3) creation of a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Lighting has not been proposed; therefore the evaluation focuses on two potential consequences, adverse effects to scenic vistas, and adverse impacts to the onsite visual character. Because these sites are generally not visible from offsite, the analysis focuses on changes as viewed from the project site.

Impacts

Visual Character

Phase II Area: Onsite visual resources are located on the extreme western edge of the parcel and include the Mill Pond. The project avoids affecting these resources primarily due to the location of the trail alignment, which is set back from the bluff edge and pond. Proposed improvements include the trail, stairs to the beach, limited signage, and six benches. Five acres of the site would be restored with native vegetation, resulting in substantial beneficial effects to the visual character.

Johnson Point: Onsite visual resources are located throughout Johnson Point and include Johnson Rock, various rocky features and the bluff tops. The project avoids affecting these resources primarily due to the location of the trail alignment, which is set back from the bluff edge and is composed of a soft unimproved dirt surface. Proposed improvements include the trail, limited signage, and two benches. One of the benches would be located on the western side of Johnson Point. The bench will have a low character and will blend into the environment. Furthermore because the bench is on the western side of Johnson Rock it will not be visible from the south, west or north of the rock. It will be visible from the ocean but would be very distant. A bench is also proposed for the westernmost tip of Johnson Point. This bench will be visible from all areas of Johnson Point. The proposed bench is artistic in character and emphasizes the four directions that are visible from this location. The bench will not blend into the scenery but will instead emphasize the views available from this location.

Large construction machinery would be required and the construction activities would occur during one dry season. Further, the site would not be open to the public until construction is complete. The visual character would not be adversely affected by construction activities.

The proposed improvements, including the trail and other improvements, would contribute to a developed look of the area post construction. However, considering that (1) the proposed improvements are located in an area developed for industrial uses that is heavily degraded, and (2) the fact the project includes substantial restoration of native habitats, post construction, no significant impacts would result.

Scenic Vistas

The project offers numerous scenic vistas to the north, south, and west of the site. Expansive views of the ocean, coastline, coastal terrace, and distant ridgelines can be seen from nearly the entire site. The proposed trail system does not require significant topographic alteration and would not adversely affect these scenic vistas to the north, south, and west. Other improvements such as benches, signage, and interpretive panels are limited in number and size and would not alter, obstruct, or significantly affect scenic vistas as seen from the trail.

No Build Alternative

Under the No Build Alternative, no physical improvements would occur, including restoration actions. This alternative would not result in significant impacts; however it would also not result in the beneficial effects which include increased access to scenic vistas and enhancement of the onsite aesthetic resources.

Alternative Trail Alignment

From a visual resources perspective, this alternative would result in similar effects as the proposed project.

3.1.3.4 Avoidance, Minimization, and/or Mitigation Measures

No significant impacts would result and no measures are required.

3.1.3.5 Cumulative Impacts

Potential future development to the east of the project site would not obstruct views of scenic resources which lie north, south, and west of the project site. Potential future development could substantially alter the existing visual setting, however and change the aesthetics of the site from a former industrial property to an urbanized area with additional public owned space.

The proposed project would include restoration and would provide open space. Therefore it would not contribute to any cumulative significant impacts which could result in redevelopment of the remainder of the Mill Site. The proposed project will have a beneficial cumulative impact because it preserves open space, and improves the character and visual quality of the area.

3.1.4 Cultural Resources

"Cultural resources" as used in this document refers to all historical and archaeological resources, regardless of significance. Laws and regulations dealing with cultural resources include:

The National Historic Preservation Act of 1966, as amended, (NHPA) sets forth national policy and procedures regarding historic properties, defined as districts, sites, buildings, structures, and objects included in or eligible for the National Register of Historic Places. 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.

This section includes a discussion of cultural resource regulations, a brief overview of the studies completed for this analysis, a description of the individuals and tribes that were consulted regarding this project and a discussion of the project mitigation. The section is based primarily on the findings and recommendations of a variety of confidential reports, which are available for review by qualified individuals.

Many significant portions of the project site have been investigated by professional archaeologists and architectural historians. The investigations included inventory, monitoring, test excavations, and evaluations of significance at numerous locations within the project area. The confidential reports summarize those investigations, identify potential impacts of the proposed project, and recommend a number of measures that should be implemented to avoid and/or mitigate potential significant impacts.

State law requires that resource locations are kept confidential. The prepared archaeological reports are available for review by qualified persons at the City's Community Development Department at 419 North Franklin Street, Fort Bragg, CA 95437. Qualified persons may contact the Community Development Director (Marie Jones) to access this confidential information.

3.1.4.1 Regulatory Setting

Federal Policies and Regulations

The National Register of Historic Places

The NRHP administered by the National Park Service (NPS), under the Department of the Interior, is the nation's official list of historically significant cultural resources. It is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect our historic and archaeological resources. Properties listed in the NRHP include districts, sites, buildings, structures, and objects that are important in American history, architecture, archaeology, engineering, and culture, and that retain integrity. For the purposes of Section 106, properties are evaluated to determine if they meet the criteria for listing in the NRHP.

National Register Criteria for Evaluation

The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

A. That are associated with events that have made a significant contribution to the broad patterns of our history; or

B. That are associated with the lives of significant persons in our past; or

C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or,

D. That have yielded or may be likely to yield, information important in history or prehistory.

State Policies and Regulations

CEQA requires a lead agency to determine whether a project may have a significant effect on historical resources. If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts to be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (Section 21083.2[a], [b], and [c]). Section 21083.2(g) describes a *unique archaeological resource* as an archaeological artifact, object, or site about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.

2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.

3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

A *historical resource* is a resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources (CRHR; Section 21084.1), a resource included in a local register of historical resources (Section 15064.5[a][2]), or any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant (Section 15064.5[a][3]).

According to Section 15064.5(a)(3)(A-D) of the revised CEQA Guidelines (Association of Environmental Professionals [AEP] 2009), a resource is considered historically *significant* if it meets at least one of the following criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

2. Is associated with the lives of persons important in our past;

3. Embodies the distinctive characteristics of a type, period, region or method of installation, or represents the work of an important creative individual, or possesses high artistic values; or,

4. Has yielded, or may be likely to yield, information important in prehistory or history.

The criteria for listing resources on the CRHR (1-4) were expressly developed to be in accordance with previously established criteria developed for listing on the NRHP (A through D) described above.

Additionally CEQA requires the following steps be undertaken to mitigate impacts to archaeological resources if any would be significantly impacted by a proposed project.

> "CEQA requires the Lead Agency to examine and impose mitigation measures or feasible project alternatives that would avoid or minimize any impacts or potential impacts identified in an EIR or a mitigated Negative Declaration.
>
> When archaeological resources are involved, avoidance, or preservation in an undisturbed state is the preferable course of action. Section 21083.2 provides that preservation methods may include:
>
> - Planning construction to avoid archaeological sites.
> - Deeding sites into permanent conservation easements.
> - Capping or covering sites with a layer of soil before building on the sites.
> - Planning parks, greenspace, or other open space to incorporate archaeological sites.
>
> Actual preservation measures may vary, depending upon the specific situation. For instance, capping or covering sites with soil may not be a practical solution where it might interfere with later carbon-14 or pollen dating procedures.
>
> When avoidance is not possible, excavation may be the only feasible alternative or mitigation measure**. Section 21083.2 limits excavation to those parts of the site which would otherwise be damaged or destroyed by the project**. Excavation is not required if the Lead Agency determines that testing or studies already completed have adequately recovered the scientifically consequential information from and about the resource. This information must be documented in the EIR."

Local Policies and Regulations

The City Coastal General Plan Open Space Element includes policies addressing cultural resources (see Table 2-2 Policy OS-4.1). Relevant policies and a consistency analysis can be found in the Land Use section of this subsequent EIR.

3.1.4.2 Affected Environment

The project site and vicinity have been inhabited for at least 13 millennia based on cross dating of cultural resources (projectile points) found at locally-investigated sites. The following discussion characterizes the general cultural history of the project vicinity beginning with the prehistoric period and proceeding to the ethnography and history of the region. A summary of previously prepared cultural resources survey reports is included as well.

In 2011 the Fort Bragg Native American Archaeological District (P-23-4991) was determined eligible under Criteria A and D and has 22 contributing archaeological sites. This district includes all 22 sites found within the Fort Bragg Coastal Trail property and two sites found in the Phase II area. This archaeological district reflects persistent and intensive Native American use of the headlands between the Noyo River and Pudding Creek from the Upper Archaic Period to present. It is the only oceanfront location on the Mendocino Coast

continuously occupied by Native Americans. The setting is a discrete portion of the local coast between two major watercourses with good access to intertidal resources, fish, and a rare coastal outcropping of Franciscan chert. This area may also be a Traditional Cultural Property for members of the Sherwood Valley Rancheria.

Native American Prehistory, Historic and Current Use of Site

The site lies near the northern boundary of Northern Pomo territory. The coastline around Fort Bragg was inhabited in pre-historic times by the Northern Pomo, one of seven tribes who spoke languages of the Pomoan linguistic family. Shared linguistic traits of these groups suggest the Pomo expanded west from an ancestral homeland in the Clear Lake region. The Northern Pomo generally lived in the interior country, but had favorite coastal temporary camps and food collecting areas. Pre-historic Northern Pomo territory extended from the west shore of Clear Lake to the Pacific Ocean, encompassing coastal lands from Cleone south to the Navarro River.

The Pomo divided their time between interior villages and temporary coastal camps, rather than living permanently on the coast. Conical bark slab houses were traditional and in more recent historic times the same form was made with milled boards. The Pomo also built large semi-subterranean assembly houses for communal and ceremonial use. Their cultural materials included a wide array of durable artifacts, as well as many perishable goods such as an elaborate basketry tradition. Implements were fashioned from a variety of local materials, especially stone, bone, antler, shell, and woven plant materials. Chert and obsidian were preferred for flaked stone implements such as projectile points, drills, and scrapers, while a variety of lithic materials were used for mortars, pestles, anvils, and hammer stones.

The site was also a major nexus of Native American interactions with colonists. The headquarters of the Mendocino Reservation, the Fort Bragg Army Post, was located next to the site and one of the earliest local mills was located partially within the site. The entire APE for the project was once within the boundaries of the Mendocino Indian Reservation, as the reservation was very large. Several regional tribes were interred in the Reservation and worked at the Noyo Mill and as agricultural laborers. The Mendocino Indian Reservation closed in 1865 due to massive corruption. The superintendent of Indian Affairs used Indian supplies and funds to pay mill workers. Many Indians left the reservation in 1857 to keep from starving. Many of the remaining Indians were forcibly moved to the Round Valley Reservation (the North Coast's own trail of tears). Between 1858 and 1878 the Yuki population fell from 3,000 to 500 people and the Pomo population fell from 3,600 to 1,800 people in the reservation area. Some contributing sites of the district were used during that period and embody those significant events and trends. (Cook, 1976)

Following reservation closure, non-native settlement of the local area rapidly expanded.

In 1904, Barret identified two inhabited Indian villages at either end of the GP Mill Site; they were known as Indian Grove and Noyo Beach Village. The Indian Grove Village was just south of the current Glass Beach Headlands Park and by 1904 most of the inhabitants had moved to the Noyo Beach Village. CR Johnson of Union Lumber Company traded a portion of the Noyo Beach Village land for the Indian Grove land. The ULCO established a golf course on the Indian Grove area. The golf course was later operated by the City of Fort Bragg and finally reacquired by the mill owners to provide space for finished lumber storage.

The Pomo families that live on Noyo Point Road are descendants of Pomo people that were forced to move to the Round Valley Reservation, but later returned to Fort Bragg on their own and settled on the Kaidu Village site (Noyo Beach Village).

In 1940 (70 years ago), the historic Kaidu village (P-23-4305/CA-MEN-3328H) was relocated from Noyo Beach up to the top of the coastal bluff. That transition to the bluff top extended over several years, but was largely permanent by the time World War II started. Following the war a dredge spoils area was built over the original village on Noyo Beach, effectively precluding further access. Four Pomo families (Sherwood Valley Rancheria tribal members) continue to reside on the bluff top at this site. The City of Fort Bragg replaced their homes in the 1990s with four new modular homes that were funded with a Community Development Block Grant. This site is the only ocean front Pomo residential neighborhood still in existence along the Mendocino coast. The property on which the Pomo residents live is owned by Georgia-Pacific Corporation and is not part of the project site.

Residents (and friends of residents) of the Noyo Point Road neighborhood and members of the Sherwood Valley Rancheria have accessed portions of the South Parkland parcel for cultural purposes in modern times and continue to do so today. Native use has in recent years included: fishing, diving for abalone and other marine resources, gathering botanical resources, collecting firewood, and walking and recreating on the site. There is no known current access or use of the North Parkland parcel for cultural purposes as there is no easy access to this site. There was use of the north parcel by native peoples in the historic period as this was the location of a native village in the Mendocino Indian Reservation.

History

Non-indigenous peoples explored the Mendocino coast for several centuries before any permanent settlement was initiated. International parties of exploration, particularly those sponsored by the Spanish government, viewed the coast of Mendocino starting in the early 1500s but probably did not land due to the dangerous, rocky near-shore environment. The likely first regular direct contacts between indigenous populations and European visitors were fur-trapping parties of the Russian American Company (RAC) who regularly occupied the coast after 1804. By 1812 the RAC established settlements at Fort Ross and Bodega Bay. The wreck and consequent salvage of the Russian vessel *Ilmen* near Point Arena in 1822 resulted in the first prolonged contact between Mendocino coast native groups and Euro-American colonists.

The first widespread American settlement of coastal Mendocino County was spurred by demand for lumber. The virgin forests of coastal California offered some of the most readily accessible timber in the state. A mill was established at the mouth of the Noyo River by the mid-1850s. In the following decades, the forests of the Mendocino Coast would prove to be a crucial commodity in the growth and development of California.

Settlement by American citizens disrupted indigenous subsistence regimes, and resulted in many deaths from introduced diseases and aggression by the new colonists. The Mendocino Indian Reservation was established in 1855 to control Indians who opposed white settlement. That reservation encompassed the project site, and its headquarters was located in the City limits about six blocks inland from the site. The reservation was established on 25,000 acres to concentrate the indigenous population in one area while allowing non-native settlement of the surrounding area. The company of soldiers stationed at Fort Bragg brought Indians to the reservation from near and distant locales, and also captured people who escaped from the reservation. Many Indians avoided capture or fled

from the Mendocino Indian Reservation due to exploitation, sexual abuse and dismal conditions (see discussion above).

In 1885 the Fort Bragg Lumber Company (formerly the Ten Mile River Lumber Company) moved its operations to the mill site on the coastal bluffs in Fort Bragg. The City was incorporated in 1889. In 1891 the Fort Bragg and Noyo Mills merged as the Union Lumber Company, which continued to operate and expand the Fort Bragg mill until 1969. The mill was then acquired by Georgia-Pacific and continued to operate under that owner until its closure in 2003.

A railroad was completed in 1917 up into the Ten Mile River watershed and eventually converted into a logging road in 1949. The Pudding Creek trestle, located immediately north of the Glass Beach Headlands, is a highly visible remnant of this transportation route and Glass Beach Drive follows that route.

The city grew rapidly with businesses established to support the thriving population. Farms developed in the surrounding area to supply food for the local population, although many goods were also imported via a thriving shipping industry. The main landings used for shipping and travel were located in Soldier Bay and at a location on the north side of Noyo Bay. The headlands were also used to dispose of refuse from the mill and its associated community. The Union Lumber Company paved the western extension of Elm Street in 1949 at the time it converted the Ten Mile Railroad to a truck haul road. It was at that time that dumping began in the area now commonly known as Glass Beach.

The land north of Elm Street and south of Pudding Creek remained largely vacant in subsequent decades until various development schemes were proposed in the 1990s. The eastern 26.53 acres of that larger property were subsequently developed with a mixture of residential and commercial uses, while the 38-acre ocean front property was eventually acquired by the California Department of Parks and Recreation (DPR). The property was added to MacKerricher State Park in 2003 following remediation of the hazardous wastes present in the Glass Beach dump. The City acquired oceanfront parcels that now comprise Phase I of the project from Georgia-Pacific Corporation with funding from the State Coastal Conservancy.

Previous Investigations within the APE

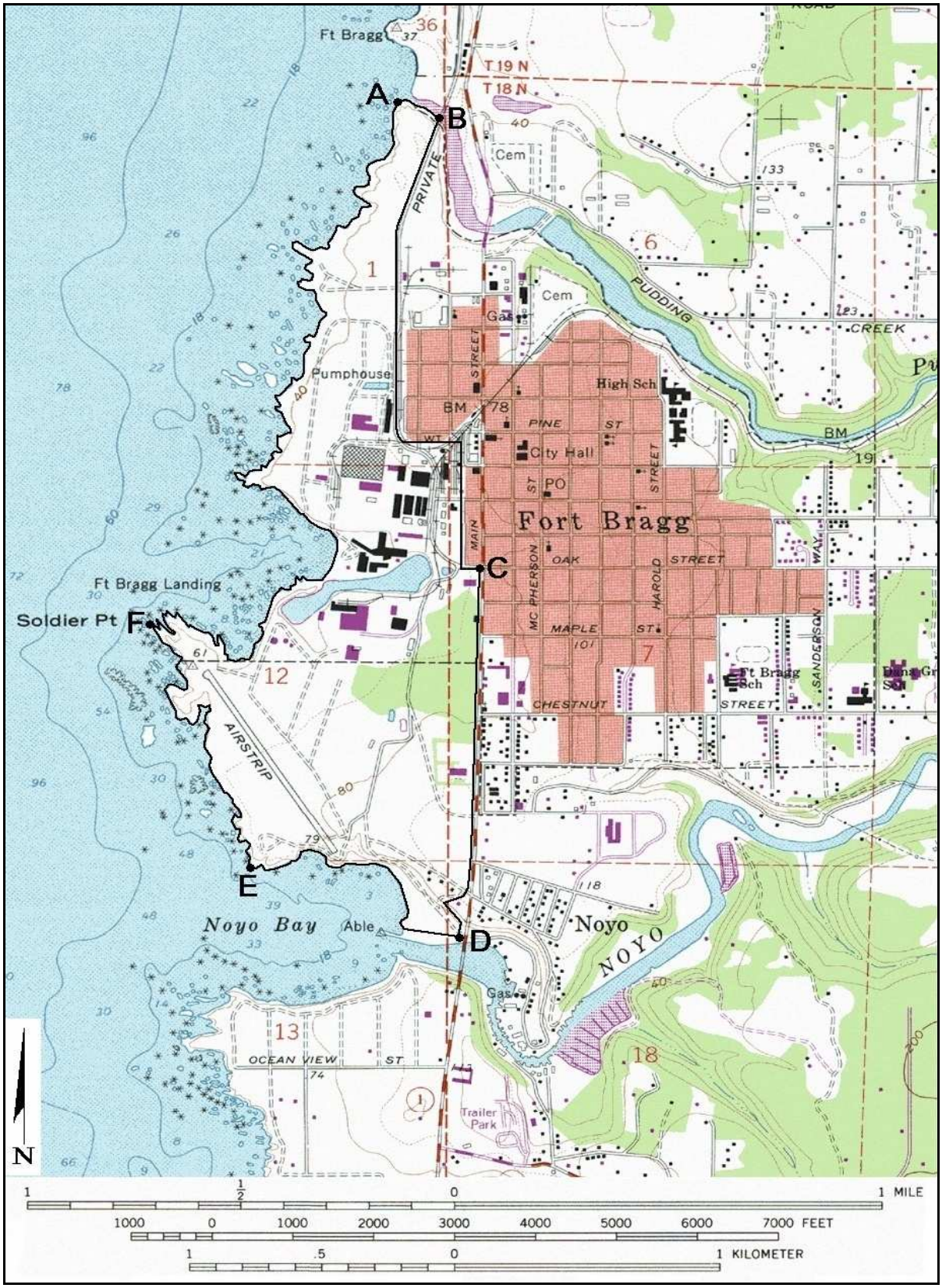
Prior studies within the APE are listed in Table 3-2. A large portion of the project site has been previously covered by intensive pedestrian archaeological surveys and/or extensive subsurface archaeological investigations.

Table 3-2. Previous Investigations within the Project Area

Author(s)	Date	Study Coverage	Description of Work
King	1974	In ADI (South Parkland)	Recorded Noyo Point Cemetery
Van Bueren	2002	In ADI (Glass Beach Headlands)	Glass Beach ASR/HRER for hazardous waste removal project
Parker and Drover	2003	In ADI (South Parkland)	Partial archaeological survey of Mill Site property (intensive survey of about 85 out of 415 ac)

Author(s)	Date	Study Coverage	Description of Work
Parker et al.	2003	Entire mill property	Mill Site property architectural survey
Van Bueren	2009	Outside of ADI at Noyo Beach	HPSR/FoE for dredging project
Van Bueren	2007a	In ADI (Glass Beach Headlands)	Intensive archaeological survey
Descantes et al.	2007	In ADI (North & South Parklands)	Test excavation at eight sites in ADI and monitoring five other hazardous waste removal areas
Van Bueren	2007b	In ADI (Glass Beach Drive right of way)	Intensive archaeological survey
Frank and Denardo	2010	Outside of ADI on mill property	Archaeological monitoring (2008 field season)
McCarthy-Reid and Denardo	2008	Entire mill property including North & South Parklands	Union Lumber Company History (architectural mitigation report for building demolitions)
Parker et al.	2006	Entire mill property including North & South Parklands	Archaeological evaluation, monitoring, a treatment plan
Collett and Nedoff	2009	In ADI (North & South Parklands)	Archaeological monitoring of hazardous waste removal
Reid and Denardo	2009	Outside of ADI on Mill property	Pipe removal monitoring
Texier and Denardo	2010	In ADI (Elm Street Extension) and Outside of ADI on northern Mill property	Phase I testing in northern mill property, mainly east of ADI; new sites found and tested.
Van Bueren and Carmack	2011	Entire ADI	HRER covering built environment and historic sites
Van Bueren	2011	Entire ADI	HPSR/FoE and Data Collection Plan for proposed project

Figure 5. Fort Bragg Native American Archaeological District Boundary



Built Environment Resources

There are no remaining historic buildings located within the Phase II site. The former Georgia-Pacific Lumber Mill property consisted of 32 extant buildings that date from approximately 1900 to 1963. A 2003 survey identified 50 extant buildings and structures on the property, of which 22 were found to be contributors to a historic district. Although that evaluation found the property eligible for listing in the NRHP as a historic district, there was no evidence that the report was submitted to the State Historic Preservation Office (SHPO) for concurrence. The remaining 28 non-contributing buildings were constructed between 1970 and 1990. Since the 2003 evaluation was completed, 21 of the 22 historic district contributors were demolished, leaving only 1 extant, ostensibly contributing building (Dry Shed #4). All of the Mill Site buildings were demolished in 2013, with the exception of Dry Shed #4, the guard shack at Cypress Street and the training center at Oak Street due to health and safety concerns: the site no longer has a fire suppression system and many of the buildings were starting to fall down. In light of the demolitions, the Georgia-Pacific Lumber Mill property is not eligible for listing in the NRHP or CRHR as a historic district. Only one of what once were 22 contributing resources remains, and the setting has been greatly altered by the demolition of the other, related buildings.

3.1.4.3 Environmental Consequences

Methodology

Consultation

Native American Consultation

The City engaged in consultation with the Sherwood Band of Pomo Indians in 2012, 2013 and 2014 regarding Phase I of the Coastal Trail project. That project was significantly redesigned in order to respond to tribal concerns and avoid impacts to cultural resources. The City has entered into an MOU regarding the consultation process with Sherwood Valley Band of Pomo Indians. This process includes a communication and request for comments protocol to follow for this project. The City has followed that protocol. Additionally the City and SVBP also entered into a Native American monitoring agreement with regard to this project which will be followed as part of the required mitigation measures. City staff met with the SVBP Tribal Council on November 12, 2014 to gain input into the project design.

An administrative draft of this Subsequent EIR was circulated to Sherwood Valley Rancheria for their review and comments.

Thresholds of Significance

To determine potential impacts to the cultural resources identified during the literature review and field investigations, the proposed areas of temporary and permanent native soil disturbance were placed on maps which showed the aerial extent and depths of the significant cultural resources. (These maps are available for review by qualified persons at the City Community Development Department). Staff compared the necessary depths of excavation to the depths of the resources and determined that disturbance of known subsurface resources would not occur.

Cultural resources, found on the site, are eligible for inclusion in the National Register of Historic Places. The SHPO concurred with the finding that cultural resources on the site are eligible for inclusion in the National Register of Historic Places.

After a complete analysis of the modified project it was determined that the project could have impacts on four archaeological sites, as detailed below.

11. One of those sites is off shore and therefore not within the area of disturbance by the project.

12. One site is covered in gravel and asphalt, and impacts to archaeological resources in this area will be minimized as the construction of the trail will involve removal of the asphalt surface but retention of the underlying gravel surface to protect the resources beneath. Additionally, the area will be covered with 12 inches of imported soil to provide a cultural resources cap to this area.

13. The trail alignment through the one site would consist of no treatment to the surface and the installation of habitat protective fencing which would prohibit people from accessing the sites other than via the designated trail (which would have no surface treatment). Shredded bark will be provided to surface the trail if necessary.

14. A bench is proposed for the final site. Installation of the bench could have impacts to cultural resources as a small concrete pad of four inches in thickness would be installed in order to mount the bench.

Additionally as the site is also considered a Traditional Cultural Property (TCP) by SVR, the project may have impacts to Culturally Significant Places which may have been used in the past and are currently used by members of the Native American community for spiritual purposes and/or resource gathering, and which are areas that may be important due to their intimate relationship with native oral tradition/oral history. To address potential impacts to the TCP component of the project APE, an ethnographic study was prepared to mitigate for impacts to Culturally Significant Places.

3.1.4.4 No Project Alternative

The No Project Alternative would not include any trail improvements. However, as the site will be open for public access, the no project alternative could result in impacts to cultural resources, especially as individuals may make trails throughout this area with un controlled access that could result in impacts to resources.

3.1.4.5 Alternative Trail Alignment

Alternative Trail Alignment will have minimal potential impacts on one site: the site which is covered in gravel and asphalt. Impacts to archaeological resources in this area will be minimized as the construction of the trail will involve removal of the asphalt surface but retention of the underlying gravel surface to protect the resources beneath. Additionally, the area will be covered with 12 inches of imported soil to provide a cultural resources cap to this area.

3.1.4.6 Avoidance, Minimization, and/or Mitigation Measures

Mitigation Measure 2: To protect cultural resources the City of Fort Bragg shall implement this Environmentally Sensitive Area (ESA) action plan prior to, during and after construction, as applicable. Including the following measures:

Prior to Construction

1) Prior to final design, an archaeologist and Tribal Monitor shall collaborate to complete a comprehensive survey of the Johnson Parcel/Solider Point, including shovel test pits, as the archaeological sites across this landscape are poorly understood. The work plan for this archaeological survey will be reviewed by both the City of Fort Bragg and Sherwood Valley Band of Pomo's Tribal Council and finalized prior to the commencement of this work. Based on this recognizance, the City shall work with the Sherwood Valley Band of Pomo Tribal Council to determine the exact placement of the trail spur and bench locations in order to minimize and/or eliminate impacts to cultural resources. Also, as the landscape is currently covered in vegetation, the area proposed for the main trail alignment and spurs shall be mowed prior to the archaeological survey to allow for a thorough investigation of this area. The City will work with the SVBP Tribal Council to develop a capping strategy for the trail and trail spurs if one is necessary to cover archaeological resources. The concrete pad for the bench shall be designed so that it can be placed on top of ground, without soil disturbance. Fill will be added around the concrete pad to meet grade.
2) Cultural resources sites will be noted in the construction drawings as Zone 1 areas. Ground disturbance will not be permitted in these areas during construction. The City will consult with SVR at the 90% design stage to ensure that this mitigation measure is carried out.
3) Tribal monitors shall attend relevant hand-off meetings with construction contractors to ensure that ESA commitments are addressed.
4) The importance of ESA action plans will be discussed with construction personnel and it will be stressed that no native soil disturbing construction activity should occur within the ESA. Additionally, construction personnel will be informed of historic preservation laws that protect archaeological sites against any disturbance or removal of artifacts.
5) The tribal monitors will be notified at least three weeks in advance of ground disturbing construction activities within ESA to ensure they will be available to monitor/review installation of ESA protection fencing.
6) One week prior to initiating any native soils disturbance in non-fill areas, SVR and Native American Monitors will be notified.

During Construction

7) Native American monitors will be required where ground disturbing activities occur in areas with undisturbed soils including the area adjacent to the crib wall, pond spill way and bluff top adjacent to the Wastewater Treatment Plant. Areas of extensive fill, such as the beach berm and filled former log pond area will not require monitoring.
8) The Community Development Director will notify the State Historic Preservation Officer within 48 hours of any ESA violation or unanticipated discovery to determine how it will be addressed. Consultation with Native Americans shall also be included.

After Construction

9) The Native American Monitor shall supervise removal of the temporary fencing after construction.
10) The project will be monitored on an annual basis for five years upon complete of construction to ensure that sites are not disturbed or impacted by visitors to the site or trail operations. Corrective measures shall be taken if any impacts are noted.

Mitigation Measure 3: The project will follow the "Post Review Discovery" agreement with SVBP if cultural materials or human remains are discovered during construction.

The City has completed an ethnographic study of the project site to mitigate for non-archaeological impacts of the project to cultural resources and places of cultural significance. No additional mitigation measure is required.

3.1.4.7 Cumulative Impacts

The destruction of archaeological resources has a significant cumulative impact as they are inherently important to the descendants of native peoples and make the study of prehistoric and historic life unavailable for study by scientists. Given the prevalence of cultural resource sites in Mendocino County and the number of construction activities that involve disturbance of archaeologically sensitive areas that are regulated by the Local Coastal Programs of both the City of Fort Bragg and Mendocino County, many (if not most) prehistoric and historic resources are identified and monitoring is required during construction where there are known resource sites.

For the proposed project, impacts to known cultural resources would be avoided through establishment of ESAs, ethnographic study, and monitoring. Based on implementation of these measures, potential cumulative impacts resulting from the proposed project would not be cumulatively considerable.

3.2 Physical Environment

3.2.1 Water Quality and Stormwater Runoff

This section considers water quality issues, with a focus on stormwater management and erosion and sedimentation related to construction activities. Potential significant impacts are identified and avoidance, minimization, and mitigation measures have been recommended.

3.2.1.1 Regulatory Setting

Section 401 of the Clean Water Act requires water quality certification from the State Water Resource Control Board (SWRCB) or a Regional Water Quality Control Board (RWQCB) when the project requires a Federal permit. Typically this means a Clean Water Act Section 404 permit to discharge dredge or fill into a water of the United States, or a permit from the Coast Guard to construct a bridge or causeway over a navigable water of the United States under the Rivers and Harbors Act.

Along with Clean Water Act Section 401, Section 402 establishes the National Pollutant Discharge Elimination System (NPDES) for the discharge of any pollutant into waters of the United States. The federal Environmental Protection Agency has delegated administration of the NPDES program to the SWRCB (State Water Resources Control Board) and the nine RWQCBs (Regional Water Quality Control Boards). To ensure compliance with Section 402, the SWRCB has developed and issued an NPDES Statewide Stormwater Permit. This same permit also allows stormwater and non-stormwater discharges into waters of the State pursuant to the Porter-Cologne Water Quality Act.

The City has an MS4 General Permit from the RWQCB; the permit covers the entire City of Fort Bragg Incorporated Area and the project is located entirely within the City's Incorporated Area. The Region 1 North Coastal Region of the RWQCB issued an NPDES Small MS4 permit to the City because it discharges into a sensitive water body (the Noyo River) and has high population density. The City's Stormwater Management Program (SWMP), required by the Small MS4, serves as the plan and guide for managing stormwater discharges and the reduction of pollutants within the permit boundary. The requirements of SWMP that have to do with pre and post development stormwater management have been incorporated into the City's Coastal Land Use and Development Code, which the project will have to comply with as a condition of the project's Coastal Development Permit from the City.

In September of 2011, the Fort Bragg Planning Commission approved a Coastal Development permit for this project. An amendment to this permit was approved in January of 2014.

City of Fort Bragg Coastal General Plan, Conservation, Open Space, Energy, & Parks Element

This element of the City's General Plan includes numerous policies related to stormwater and water quality. Refer to Table 3-1 of the Conservation, Open Space, Energy, & Parks section of this EIR for a complete list and consistency determination.

3.2.1.2 Affected Environment

Floodplain

The Project site is located in a 500 year floodplain, except for the beach berm and the beach which are subject to Flood Zone V, consisting of coastal flood with velocity hazard (wave action), which is typical for all areas along the Fort Bragg coast line. Mitigation measures are required to reduce impacts to a less than significant level:

Stormwater/Hydrology

A small portion of the site (~8 acres) is covered in asphalt and/or gravel, a portion of the site (50%) is covered with non-native fill of one to 30 feet in depth that is fully vegetated with non-native vegetation, with the remainder consisting of wetlands of various types. Stormwater from the southern Mill Site, Alder Creek and the City of Fort Bragg flows to the Mill Pond where it is collected and drains to Soldier Bay via the Mill Pond Spillway. Drainage infrastructure within the area also includes two culverts which outfall into the Fort Bragg Landing beach just west of Pond 6. A linear drainage ditch is located immediately east of the wastewater treatment plant adjacent to the dam access road. The ditch drains portions of the mill site and connects to the Mill Pond.

The project will not significantly alter stormwater flows on site. The paved trail will replace existing areas of pavement and compacted gravel on site and so will not result in net new impervious surface. Additionally the restoration activities will eliminate more than 5 acres of impervious surface.

Erosion

Erosional features are limited within the Phase II site. Access to this area is extremely limited, therefore it does not include areas which have been eroded by the public seeking access to trails or the beach. Once the site is open to the public with an established trail network and signage (warning people off of the bluff edge), additional use of the site is not anticipated to increase erosion. In the event that informal trails are established that result in erosion, the City will close such trails with natural barriers.

3.2.1.3 Environmental Consequences

Proposed improvements would be small in scope because net impervious surface will be reduced through the implementation of the project.

3.2.1.4 No Project Alternative

The No Project Alternative would not include the reduced impervious surface associated with the project. This alternative would not result in significant impacts over the long-term.

3.2.1.5 Alternative Trail Alignment

Alternative Trail Alignment would be similar in scope to Preferred Trail Alignment, but would result in slightly less removal of pavement and thus in similar beneficial impacts to the proposed project.

3.2.1.6 Avoidance, Minimization, and/or Mitigation Measures

Impacts will be reduced to less than significant through the implementation of the following mitigation measures:

> Mitigation Measure 4: The City shall install signage to warn people of high surf conditions during storm events along all improvements on the Beach Berm.
>
> Mitigation Measure 5: The City shall temporarily close the berm section of the trail and access to the beach in high surf conditions.

3.2.1.7 Cumulative Impacts

Due to the restoration proposed and the reduction of impervious surfaces within the project area, more stormwater will infiltrate onsite after project completion. In addition, proposed native habitat re-vegetation would allow for more natural treatment of stormwater. Because the proposed project would have beneficial impacts to stormwater, it would not contribute to any significant impacts. The draft land use plans for the redevelopment of the remainder of the Mill Site indicate that impervious surfaces would decrease even further as a result of the redevelopment.

3.2.2 Geology / Soils / Seismicity / Topography

This section summarizes the information and analyses in the *Engineering Geologic Reconnaissance Report (report)* (BACE Geotechnical 2004) and the Stability Assessment of the Mill Pond Dam (Arcadis, 2010). Both documents are available for review for interested persons at the City Community Development Department. Bluff retreat and seismic safety are addressed in this chapter; however, erosion related to construction activities, stormwater, and drainage conditions is considered in the Water Quality and Hydrology section.

3.2.2.1 Regulatory Setting

This section also discusses geology, soils, and seismic concerns as they relate to public safety and project design. Earthquakes are prime considerations in the design and retrofit of structures.

Uniform Building Code and California Building Code

The Uniform Building Code (UBC) and the California Building Code dictate seismic design parameters for structures in California. The UBC provides a standard for building laws. Published by the International Conference of Building Officials, the UBC is a widely adopted model building code in the United States. The 1997 UBC is considered the latest edition and is adopted and used by most cities and counties. The California Building Code incorporates by reference the UBC with necessary California amendments. The California Building Code is another name for the California Code of Regulations (CCR) Title 24 Part 2, which is a portion of the California Building Standards Code (CBSC 2001). Title 24 is assigned to the California Building Standards Commission, which, by law, is responsible for coordinating all building standards. Under state law, all building standards must be centralized in Title 24 or they are not enforceable. About one-third of the text within the California Building Code has been tailored for California earthquake conditions (CBSC 2001).

City of Fort Bragg Coastal General Plan, Safety Element

The Safety Element includes numerous policies related to geologic hazards, including seismic hazards, landform alteration, and bluff retreat/setback. Refer to Table 3-1 of the Land Use section for descriptions of relevant policies.

Division of Safety of Dams

The Mill Pond falls under the jurisdiction of the California Division of the Safety of Dams (DSOD). DSOD works closely with dam owners to identify and correct most potential problems before they become more serious. DSOD inspects dams and depending on the circumstances, may initiate or require a follow-up investigation. When unsafe conditions develop, DSOD works with owners and their consultants to address and remedy the condition in a timely manner. To minimize risk, DSOD may impose a reservoir restriction limiting the water surface to a level that is judged safe. DSOD may also direct the dam owner to implement their emergency action plan (EAP), or request that they develop one in coordination with local authorities. DSOD operates with the authority provided by the following regulations: CA Water Code, Division 3 (Statutes); CA Code of Regulations, Title 23 Waters (Regulations), and Current Practices (Supervision of Dams and Reservoirs).

3.2.2.2 Affected Environment

Geology

The bluff retreat report evaluates the geologic conditions along the ocean bluffs within the Mill Site including the project site. The information was intended to determine trail bluff setback and long-term (150 year) access easement width for the trail. The scope of work included: researching published geologic maps, studying aerial photographs, field reconnaissance, marine reconnaissance via ocean kayak, geologic analysis, and estimating bluff retreat rate(s). A Paleontological Resources Survey Report prepared for the project (SWCA 2009) described the general geologic conditions of the project site and vicinity. Based on a review of those reports there are three geologic conditions in the project site:

1. A large cove (Fort Bragg Landing aka Soldier Bay) divides the site. A large, sandy beach is at the east edge of the cove. There are many rocks and reefs offshore of the cove and bluffs. During the geologic reconnaissance, log retaining structures, partially covered by vegetation, were observed southwest of the Mill Pond spillway. Additionally old log structures from a long demolished pier were observed in the beach and ocean.

2. Lowland area, once a streambed carved into the blufftop by Alder Creek, has since been modified through the construction of a beach berm that is armored with rip rap and the importation of up to 15 feet of fill into the former streambed.

3. Bluffs to the north and south above the cove are approximately 40 ft. in vertical height. The bluffs are situated on a near-level, elevated, marine terrace that is bordered by steep ocean bluffs. The terrace was created when sea level fluctuations caused by glaciation created a series of steps or terraces cut into the coastal bedrock by wave erosion. The bluffs have an average slope gradient of approximately one-quarter horizontal to one vertical (1/4H:1V) with local areas that are near vertical. The bluffs are serrated with many small, generally northwest-trending inlets and peninsulas. Groundwater seeps from swales and from bedrock fractures in the lower bluffs.

Bedrock

Bedrock at the bluffs consists of sedimentary and igneous rocks of the Tertiary-Cretaceous Franciscan Complex coastal belt. In the project vicinity these rocks consist of dark gray to brown, sandstone, shale, and volcanic rocks that are generally little too closely fractured, moderately hard to hard, and little to moderately weathered. There is a consistent, northwest-trending strike where bedding is exposed within the Franciscan Complex rocks. This accounts for the northwest linear trend of most of the peninsulas and offshore rocks in the vicinity. Rock bedding orientation observed within the bluffs generally consists of a northwest trending strike with steep dips, approximately 67 to 90 degrees from horizontal, to the southwest and northeast. Much of the bedding is discontinuous and contorted. The bedrock is partially covered by as much as 30 ft. of Pleistocene terrace deposits at the site. The bedrock-terrace deposit contact is generally flat lying. The terrace deposits consist of silty fine sand, sandy silt, with clean (little or no clay or silt) sand and minor sandy clayey silt. The upper 2 to 4 ft. of the terrace deposits generally consists of dark colored sandy silt – silty sand topsoil.

Beach Deposits

The beach deposits are mostly unconsolidated sand and/or cobbles and boulders, although large concrete debris can be found at various beaches, especially at the major beach at Fort Bragg Landing (which is adjacent to the site).

Fill Deposits

Man-placed fills, consisting of soil with concrete, iron, and wood debris, have been placed in the lowland area. The fill deposits appear to be as much as 20 ft. in thickness. Rip rap (large rocks and/or broken concrete) has been placed by Georgia-Pacific for erosion protection along the beach berm and on the beach.

Landslides/Rockfall

No evidence of deep-seated, rotational landsliding was observed on the property bluffs. However, numerous areas of erosion were observed during the reconnaissance. The erosion is primarily occurring within the Pleistocene terrace or man-placed fill deposits. Erosion by ocean waves is occurring wherever terrace or man-placed fill deposits are at a low enough elevation to be reached during high tides or storms. The erosion within these weaker terrace and fill deposits results in near-vertical scarps that can extend to the full height of the bluff. Upper bluff scarps caused by surface-runoff are typically 10 to 15 ft. in vertical height.

Faulting

There is one inactive fault on the northern edge of the site where the beach berm connects to the blufftop (see map). The inactive fault consists of linear fractures or shear zones displaying evidence of offsets within the Franciscan bedrock, but not within the overlying terrace deposits. No active faults were observed at the site and neither of the published references that were reviewed show faults on, or trending towards the property. The active San Andreas Fault is located offshore, approximately 6 miles to the southwest.

Bluff Retreat

The bluff retreat rates were calculated based upon aerial photograph studies, site field and marine reconnaissance, and other Mendocino County coastal sites. A qualified engineering geologist compared accurate, scaled (1 in = 20 ft.) topographic maps showing the bluff edge at Point Cabrillo Light Station in 1907 and 2002 (95 years apart). Retreat rates at various locations on the property bluffs are as follows:

- Hard rock areas of the bluffs are retreating at an average rate of approximately 1.5 to 2 in per year.
- Bluffs containing large fill deposits are eroding at an average rate of approximately 2.5 to 3 in per year.
- "Erosion areas" above bedrock are retreating at an average rate of approximately 3.5 to 6 in per year.

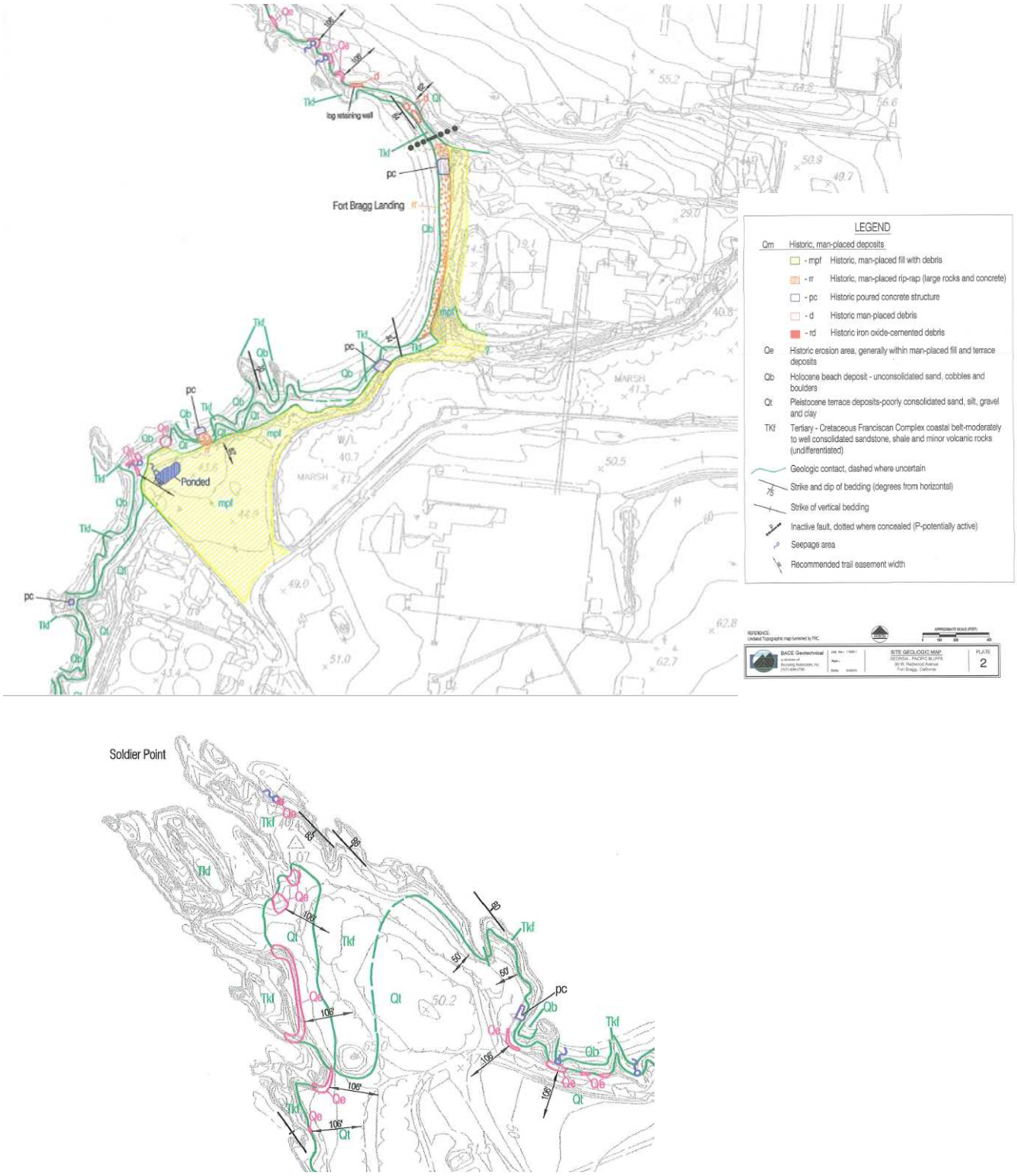


Figure 6: Geotechnical Maps of Phase II Site.

3.2.2.3 Environmental Consequences

Methodology

Geology & Bluff Retreat

The assessment of potential impacts included a review of the Engineering Geologic Report. Information in the report was then used to determine if the proposed construction activities could cause impact to these resources or would result in increased potential for exposure to geological hazards in the project area. Types of geologic hazards considered include risk of loss, injury, or death involving earthquake rupture, strong seismic ground shaking, seismic related ground failure including liquefaction, and landslides, bluff retreat/erosion, and expansive soils. When completing the analysis, it was assumed that construction and design of the proposed project would be built in compliance with current construction and seismic codes and standards.

Because of the limited development associated with the proposed project in general, and the lack of habitable and/or permanent structures proposed, the evaluation of environmental consequences considers geologic hazards at a qualitative level, with one exception. The potential consequences of bluff retreat are discussed quantitatively as they directly relate to the life of the project. Soil erosion as it relates to construction and operation of the project are discussed in the Water Quality and Hydrology section.

Mill Pond Stability

The Mill Pond Stability Assessment (2010) indicated that the dam is under the jurisdiction of DSOD and in 2010, DSOD requested improvements to the dam to address stability issues. In 2012, Georgia-Pacific obtained a Coastal Development permit and implemented interim stabilizing measures for the Mill Pond including: filling a large void in a timber supported portion of the dam; patching the damaged base to the spillway structure, removing tule growth along the toe of the dam and clearing brush that obstructs the spillway entrance, embankment groins and abutments. The Mill Pond stability has been approved but additional measures are required. The Mill Pond has an overall capacity of 72 acre feet and height of 33 feet, and overall area of 7.5 acres. The dam is 200 feet long and located on the western edge of the pond.

The study concluded that the sand in the embankment and its foundation has the potential to liquefy during the maximum credible earthquake (MCE) of 8.0 on the nearby (ten miles away) San Andreas fault. The report notes that along portion of the damn with significant rock face, soil will fall of the rock onto the beach below. Additionally, the soils and sands in the berm that are prone to liquefaction (soils located between 8 and 16 feet below surface) will likely flow and large portion of the berm would fall onto the beach. There is a risk that an MCE would result in dam failure and the release of water from the dam and possibly sediment into Soldier Bay.

The report notes that there is currently a very low potential for downstream property damage and the dam failure would not place people in peril or require evacuations under current operating conditions.

Impacts

Geologic/Soils Hazards

The proposed project would include limited topographic alteration. Cut and fill slopes would generally be no greater than a few feet, with maximum slopes of 2H:1V or flatter. The

restoration activities would include importing fill to create soil for revegetation efforts while protecting cultural resources.

Improvements include the construction of multi-use trails, pedestrian trails, cable stairs to the beach, and drainage improvements. No structures are proposed. Due to the type and limited scale of the improvements proposed and relatively shallow depth to bedrock, geologic and seismic hazards can be avoided in areas away from the Mill Pond by employing sound engineering practice in the final design and construction.

In order to avoid seismic hazards associated with the unstable Mill Pond, mitigation measures will be required.

Bluff Retreat & Trail Location

The City's local coastal program policy is to provide 100-year protection from bluff retreat and the City requires estimates to reflect potential increased bluff retreat rates that may result from sea level rise. The Geologic report recommendations for setbacks that would allow for safe use and maintenance of a blufftop trail for up to 150 years, assuming bluff retreat continues at current rates. The extra 50 years of setback more than compensates for the fact that the implications of sea level rise due to climate change were not considered in the Geologic Report.

The recommended setback ranged from 29 ft. to a maximum of 109 ft. Refer to the Geologic report for more information. Because retreat rates, and therefore the recommended setbacks, vary considerably throughout the Mill Site, this analysis assumes the "default" setback should be 106 ft. That setback would reflect approximately 150 years of retreat at the fastest retreat rates, which results in a very conservative analysis. A 100-year setback would be approximately 70 ft.

The bluff retreat rates were considered during development of the proposed trail alignment, along with other constraints, including drainage conditions, biological, cultural, and the limited width of the parcel over the beach berm. The alignment was also guided by the fact that the project goal is to provide trail users with views of the aesthetic resources of the site and access to the beach in a safe manner. As a result, it was infeasible to strictly adhere to the recommended setback for trail Alignment A and access to the beach via the beach stairs. The multi-use trail will have a useful life of 30 years, and so does not need a 100 year setback. The City's Local Coastal Program policies regarding bluff setback apply to structures not the trail itself. The proposed project does not include any structures. Trail Alignment A may eventually become unusable due to beach berm erosion. The City's LCP policy SF-1.9 allows the construction of trails, stairs to the beach and similar structures to be placed within the 100-year bluff setback area.

Trail Alignment B is located a considerable distance from the bluff edge and bluff erosion would be unlikely to impact it within the next 100 years.

3.2.2.4 No Project Alternative

The No Project Alternative would not include any improvements within the Mill Site and therefore no significant impacts would occur there. In regard to bluff retreat, erosion of the bluff would occur at rates similar to the present on the Mill Site.

3.2.2.5 Avoidance, Minimization, and/or Mitigation Measures

No significant impacts associated with geologic bluff retreat have been identified and no measures are required. Significant seismic impacts could result from a seismic event on the Mill Pond dam and crib wall; accordingly, Mitigation Measure 6 is required to reduce the impact to a less than significant level.

> Mitigation Measure 6: Construction of the Preferred Trail Alignment may proceed prior to the stabilization of the Mill Pond Dam and crib wall. Construction of Alternative Trail Alignment may be undertaken after the seismic risk of the dam is reduced to the satisfaction of the appropriate regulatory authority.

There are no significant geotechnical hazards associated with development of the limited improvements on Johnson Point.

3.2.2.6 Cumulative Impacts

Potential impacts related to geologic, soils, and seismic hazards are site-specific, and measures are applied to individual projects to minimize the potential for significant impacts. All development projects are required to comply with State and local regulations regarding grading and construction; therefore, the proposed project would not contribute to cumulative impacts.

3.2.3 Hazardous Waste/Materials

This section discusses the potential for ground contamination resulting from the discharge of hazardous materials to significantly impact the proposed project and/or the public. Existing and past land use activities are used as potential indicators of hazardous material storage and use at individual sites. For example, many industrial sites, historic and current, are known or suspected to have soil or groundwater contamination by hazardous substances. This is the case with the Mill Site.

The primary concerns motivating identification of potential environmental contamination are worker health and safety and public exposure to hazardous materials during construction and waste handling.

3.2.3.1 Regulatory Setting

Hazardous materials and hazardous wastes are regulated by many state and federal laws. These include not only specific statutes governing hazardous waste, but also a variety of laws regulating air and water quality, human health and land use. The primary federal laws regulating hazardous wastes/materials are the Resource Conservation and Recovery Act of 1976 (RCRA) and the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA). The purpose of CERCLA, often referred to as Superfund, is to clean up contaminated sites so that public health and welfare are not compromised. RCRA provides for “cradle to grave” regulation of hazardous wastes. Other federal laws include Community Environmental Response Facilitation Act (CERFA) of 1992, Clean Water Act (CWA), Clean Air Act, Occupational Safety and Health Act (OSHA), among others.

In addition to the acts listed above, Executive Order 12088, Federal Compliance with Pollution Control, mandates that necessary actions be taken to prevent and control environmental pollution when federal activities or federal facilities are involved.

Hazardous waste in California is regulated primarily under the authority of the federal Resource Conservation and Recovery Act of 1976, and the California Health and Safety Code. Other California laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup and emergency planning. Worker health and safety and public safety are key issues when dealing with hazardous materials that may affect human health and the environment. Proper disposal of hazardous material is vital if it is disturbed during project construction.

The Department of Toxic Substances Control (DTSC) regulates and interprets hazardous waste laws in California. DTSC generally considers excavated or transported materials that exhibit “hazardous waste” characteristics to be a waste requiring proper management, treatment, and disposal. The site was under a clean-up order from DTSC. The site was remediated in 2009 and DTSC has submitted a letter to the City of Fort Bragg confirming that all required remediation tasks have been completed for the site (see Appendix F).

City of Fort Bragg Coastal General Plan, Safety Element

The Safety Element includes policies to protect the public health from the hazards associated with the transportation, storage, and disposal of hazardous wastes (TSD Facilities). Refer to Table 3-1 of the Land Use section for descriptions of relevant policies.

3.2.3.2 Existing Conditions

Phase II Area – aka Operable Unit E

The information that follows is based on information from the Final Remedial Investigation Report Operable Unit E prepared by Arcadis in 2013 for the Department of Toxic Substances Control (DTSC 2008) for the remediation of the Operable Unit E which includes the Phase II project area.

There are five Areas of Concern (AOC) within the project area which are illustrated in Figure 7 below.

Figure 7: Areas of Concern

Extensive environmental sampling has uncovered a number of contaminants of concern including:

- Pond 8 (Mill Pond) – metals, PAHs and dioxins/furans
- Pond 6 & 7 and North Pond – minimal TPH, PCB, VOC.
- Pond 6 & 7 - Dioxins/furans and PAHs above human health screening levels
- Terrestrial AOIs – minimal TPH, PCB and VOC. At various locations; lead, PAHs and dioxins/furans found in soil in low lying areas north of the mill pond and southwest of the former powerhouse.

3.2.3.3 Environmental Consequences

Methodology

The assessment of potential impacts included reviewing technical reports prepared in support of the Mill Site remediation activities. Historical uses, existing conditions, and recent activities were clearly described in a series of environmental assessments prepared by qualified consultants and reviewed by relevant agencies, including the DTSC. Potential impacts considered include exposure to hazardous materials through transport of materials, or during soil disturbance, or use of hazardous materials during construction. When identified, impacts are classified as either short-term construction or longer-term operational.

Impacts

Georgia-Pacific is currently preparing a Remedial Action Plan (RAP) which will outline a variety of remediation strategies for addressing the various types and locations of contamination. The RAP must be prepared and implemented to the satisfaction of the DTSC and the City of Fort Bragg City Council. DTSC is the lead Agency for the RAP and will prepare a CEQA document for the project. The City will have the authority to issue a Coastal Development Permit with special conditions for the project. Upon implementation of the RAP the site will be remediated to a level that will have a less than significant impact on ecological communities and human users of the site per the CEQA document prepared by DTSC. The RAP may include a variety of strategies for remediation including: removal, treatment in place, natural attenuation, and institution of land use controls among other measures. Once remediation has been completed the site will not pose a threat to human health or ecological communities. Further a Soil Management Plan may be prepared for the project site to reduce the potential impacts due to residual contamination of the site to a less than significant level.

Hazardous materials may be handled during fueling and servicing of construction equipment on-site. These activities would be short-term or one-time events and would be subject to federal, state, and local health and safety requirements; consequently, no adverse impacts would result. Further, the proposed project does not include use of potentially hazardous materials and would therefore not expose trail users to hazardous materials.

3.2.3.4 No Project Alternative

This alternative would not include construction within the Mill Site (previously or currently contaminated areas) nor would it require the use of hazardous materials. No adverse impacts would result.

3.2.3.5 Alternative Trail Alignment

This alternative is located within the same project area, and therefore the remediation and clearance discussed for the proposed project would also apply to this alternative.

3.2.3.6 Avoidance, Minimization, and/or Mitigation Measures

Mitigation measure to reduce impacts to a less than significant level include the following:

Impact 1: The proposed project has the potential to expose visitors to hazardous substances that pose a risk to human health if the project is completed and put into use prior to implementation of the RAP.

Mitigation Measure 7: The components of the proposed project that are located within the Mill Pond Complex area shall be constructed after implementation of the Remedial Action Plan for Operable Unit E in order to ensure that the site is remediated to a level that reduces risks to human health to a less than significant level for passive recreation users and construction works.

Impact 2: The proposed project has the potential to impact human health for construction workers unless the Soil Management Plan for the site is followed.

Mitigation Measure 8: DTSC may require, through its CEQA document for the RAP for Operable Unit E, that construction projects which include grading must comply with a Soil Management Plan (SMP) prepared for the site. Compliance with the SMP will also be a condition of approval for the grading permit for the site.

3.2.3.7 Cumulative Impacts

Cumulative hazardous materials impacts would occur when a population or resource is exposed to the cumulative impacts of hazardous materials released by the proposed project and one or more related projects. The geographic scope of the area affected by potential cumulative hazardous materials impacts would depend on the migration characteristics of the hazardous materials as they are released into the soil, air, or groundwater.

Remediation activities will be ongoing at the Mill Site in future years, however the remediation activities will be analyzed in CEQA documents for that project and remediation is always designed to reduce human health and ecological health effects to a less than significant level.

3.2.4 Air Quality

The project area is not in non-attainment for local air quality, therefore the following information is excerpted from the EIR for informational purposes only. The following section describes the existing air quality setting in Mendocino County and the potential short-term construction emissions resulting from development of the proposed project. The proposed project would not necessarily generate new trips, but would instead divert trips that would have otherwise been made to another recreational or open space location in the County and or result in longer stays at the Fort Bragg Coastal trail project. Long-term operational emissions resulting from auto trips are not considered significant and are not discussed further.

3.2.4.1 Regulatory Setting

The Federal Clean Air Act (FCAA) as amended in 1990 is the federal law that governs air quality. The California Clean Air Act of 1988 is its companion state law. These laws, and related regulations by the U.S. Environmental Protection Agency (U.S. EPA) and California Air Resources Board (ARB), set standards for the quantity of pollutants that can be in the air. At the federal level, these standards are called National Ambient Air Quality Standards (NAAQS). NAAQS and State ambient air quality standards have been established for six transportation-related criteria pollutants that have been linked to potential health concerns. The criteria pollutants are: carbon monoxide (CO), nitrogen dioxide (NO_2), ozone (O_3), particulate matter (PM, broken down for regulatory purposes into particles of 10 micrometers or smaller – PM_{10} and particles of 2.5 micrometers and smaller – $PM_{2.5}$), lead (Pb), and sulfur dioxide (SO_2). In addition, State standards exist for visibility reducing particles, sulfates, hydrogen sulfide (H2S), and vinyl chloride. The NAAQS and State standards are set at a level that protects public health with a margin of safety, and are subject to periodic review and revision. Both State and Federal regulatory schemes also cover toxic air contaminants (air toxics); some criteria pollutants are also air toxics or may include certain air toxics with their general definition.

Mendocino County Air Quality Management District

The proposed project site is located in Mendocino County within the North Coast Air Basin (NCAB). The project site is under the jurisdiction of the Mendocino County Air Quality Management District (MCAQMD) which is managed by a five member Board of local elected officials (currently the Board consists of the Mendocino County Board of Supervisors). The MCAQMD has established quantitative thresholds of significance to be used in environmental documentation (refer to Table 3-3). These thresholds are consistent with those developed by the Bay Area Air Quality Management District.

Mendocino County is non-attainment for the local PM-10 standard (particulate matter less than 10 microns in size). The primary manmade sources of PM-10 pollution in the area are wood combustion (woodstoves, fireplaces and outdoor burning), fugitive dust, automobile traffic and industry. The MCAQMD maintains full time monitoring equipment in the city.

City of Fort Bragg Coastal General Plan, Conservation, Open Space, Energy, and Parks Element

This Element of the General Plan includes polices that require the City to improve air quality and seek to comply with State and Federal standards for air quality.

3.2.4.2 Existing Conditions

The proposed project is located in the "North Coast area" as defined by the MCAQMD. This area consists of the urbanized area of Fort Bragg/Caspar/Mendocino which is an urbanized strip along Highway 1, roughly 15 mi in length. Development in this area is typically low to moderate density, visitor serving commercial. Traffic congestion can be extreme during summer weekends, especially when special events are held. Highway 1 is the primary transportation corridor in the area with Highway 20 providing a link to Willits and Highway 101 and Highway 128 (along the Navarro River) providing a link to Boonville, Ukiah and Sonoma County. Few alternatives exist so traffic generated in one area can have an impact on the entire length of Highway 1 in this area.

The Phase II Coastal Trail project would be located adjacent to the City's wastewater treatment plant, which can produce odors. During field visits odors were present within approximately 200 ft. of the facility.

3.2.4.3 Environmental Consequences

Methodology

The URBEMIS air quality modeling program was used to quantify potential construction emissions. Potential earthwork and a reasonable worst case scenario construction were developed so that the modeling could be performed. Operational emissions were not quantified as the proposed project is a trail system and is considerably smaller than a recreational project that would typically exceed operational emissions thresholds established by the MCAQMD. While it may attract some new users, because the proposed project is a connection of existing recreational facilities, it is not expected to generate significant new vehicle trips that would not otherwise be made to another recreational facility in the region (refer to Transportation section for more information).

Potential impacts considered in this analysis include violations of air quality standards (short-term emissions); exposure of sensitive receptors to substantial pollutant concentrations; creation of objectionable odors affecting a substantial number of people.

Impacts

Short-term Construction Emissions

During construction, short-term degradation of air quality may occur due to the release of particulate emissions (airborne dust) generated by excavation, grading, hauling, and various other activities. Emissions from construction equipment also are anticipated and would include carbon monoxide (CO), nitrogen oxides (NOx), volatile organic compounds (VOCs), directly emitted particulate matter (PM-10 and PM-2.5), and toxic air contaminants such as diesel exhaust particulate matter. Ozone is a regional pollutant that is derived from NOx and VOCs in the presence of sunlight and heat.

Site preparation and roadway construction would involve clearing, fill activities, grading, removing or improving of existing roadways, and paving the multi-use trail. Construction related effects on air quality from projects of this type would be greatest during the site preparation phase because most engine emissions are associated with the excavation, handling, and transport of soils to and from the site. If not properly controlled, these activities would temporarily generate PM-10, PM-2.5, and CO, SO2, NOx, and VOCs. Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying

uncovered loads of soil. Unless properly controlled, vehicles leaving the site would deposit mud on local streets, which could be an additional source of airborne dust after it dries.

Topographic alteration is limited due to the flat nature of the site and type of project. The import and export of material is the construction activity most likely to generate significant short-term emissions. To avoid the rainy season, the bulk of the construction would occur during an approximately five month period during one year. Restoration would include the application of additional seed, weeding and other adaptive management techniques in the second year of the project and will not include soil movement. Because the fill material could be sourced from the adjacent Noyo Harbor dredge spoils and/or other local site, the haul distances would be short, approximately 3 miles round trip.

To quantify potential emissions, the URBEMIS modeling program was used to identify emissions that could result from the earthwork during the construction year. The results of the modeling are shown in Table 3-3. The construction characteristics are shown in Table 3-4.

Table 3-3. Short-term Construction Emissions

Pollutant	Emission Estimates (lbs/day)	MCAQMD Thresholds	Federal Standard	Exceedance?
ROG	1.3	54	NA	No
NOx	10.37	54	53	No
PM-10 (exhaust)	0.55	82	152	No
PM-2.5 (exhaust)	0.66	54	35	No
Fugitive Dust (PM 10 and 2.5)	12.11	BMPs	NA	NA

Table 3-4. Earthwork Estimates

Activity	Cubic Yards
Earthwork	10,560
Soil Import	5,000
Soil Export	0
Soil Hauling	3 mile round trip

The results indicate that the proposed project would not exceed emissions thresholds established by the MCAQMD or the Federal EPA.

Odors

The proposed project would not generate odors, but trail users may be subjected to odors due to the proximity of the City's wastewater treatment plant to the trail. These odors would intermittently affect a small area of the proposed project and would only affect trail users for short periods while they were in close proximity to the facility and when the temperature and wind conditions result in odors coming onto the trail property. This limited exposure would not adversely affect trail users.

Long-term Emissions

The proposed project may result in beneficial effects to long-term, or "operational," emissions as it would improve the alternative transportation network in the City, potentially reducing the number of trips made by automobile. No significant impacts from long-term operational emissions would result from the proposed project.

3.2.4.4 No Project Alternative

The No Project Alternative would not include any construction activities and therefore would not result in any adverse effects to air quality.

3.2.4.5 Alternative Trail Alignment

Alternative Trail Alignment would require less construction; however it would still include the majority of the earthwork and soil hauling described previously for the proposed project for the restoration component of the project. Impacts and mitigation measures would be similar to the proposed project.

3.2.4.6 Avoidance, Minimization, and/or Mitigation Measures

Construction staging for the proposed project will be on the runway to a large degree. This may reduce PM10 emissions related to activity within staging areas (i.e. equipment storage and maintenance, stockpiling, employee parking, etc.). Nevertheless, the following measure will minimize PM10.

Mitigation Measure 9: The project contractor, on behalf of the project applicant, shall prepare a dust control plan for construction activities at the project site pursuant to the requirements of the MCAQMD. The project contractor shall be responsible for ensuring that all adequate dust control measures are implemented in a timely manner during all phases of construction and maintenance activities at the project site. The dust control plan shall include, at minimum, the following measures:

a. Water shall be applied by means of truck(s), hoses, and/or sprinklers as needed prior to any land clearing or earth movement to minimize dust emissions.

b. All material excavated, stockpiled, or graded shall be sufficiently watered to prevent fugitive dust from leaving the property boundaries or causing a public nuisance of an ambient air standard. Watering should occur at least twice daily, however frequency of watering shall be based on the type of operation, soil, and wind exposure.

c. All on-site vehicle traffic shall be limited to a speed of 15 miles per hour (mph) on unpaved roads.

d. All trucks hauling soil, sand, or other loose materials on public roads will be covered or required to maintain at least 2 ft. of freeboard.

e. Excavation and grading activities shall be suspended when sustained winds exceed 25 mph, instantaneous gusts exceed 35 mph, or dust from construction might obscure driver visibility on public roads.

f. All inactive portions of the construction site, including soil stockpiles, shall be covered, seeded, or watered until a suitable cover is established.

g. Paved areas adjacent to construction sites (e.g. the abandoned runway) shall be swept or washed as required to remove excess accumulations of silt and/or mud, which may have resulted from grading and construction activities at the project site.

h. The applicant shall re-establish ground cover on all disturbed portions of the project site through seeding and watering in accordance with the City of Fort Bragg Grading Ordinance and Local Coastal Program, which requires the application of native seed or terminal seed.

i. A publicly visible sign shall be posted with the telephone number and person to contact regarding dust complaints. This person shall respond and take corrective action within 24-hours. The telephone number of the MCAQMD shall also be visible to ensure compliance with the Fugitive Dust Emissions requirements.

j. Construction workers shall park in designated parking area(s) to help reduce dust emissions.

3.2.4.7 Cumulative Impacts

The construction-related air quality impacts of the project are anticipated to be limited to the immediate environs of the Project site. Because no other construction emissions impacts are anticipated to occur in the vicinity of the Project during Project construction, the Project is not anticipated to contribute, along with other projects, to a cumulative temporary construction emissions impact. The mitigation measures that have been previously identified for project-specific impacts would apply cumulatively as well.

3.2.5 Biological Environment

The Biological Environment section provides a description of the existing biological resources of the project area and determines to what extent the project may impact sensitive habitats, potential jurisdictional waters, and special-status species. The evaluation is based on a number of biological studies prepared for the project, which are listed in the bibliography for this study. The section focuses on state sensitive species and habitats as the site does not include any Federal listed species.

In this section, the terms Biological Study Area (BSA) and Area of Direct Impact (ADI) are often used. The BSA is defined as the area (land and water) that may be directly, indirectly, temporarily, or permanently impacted by construction and construction-related activities. The ADI is defined as the area that is directly temporarily or permanently impacted by construction and construction-related activities.

Impacts to habitats and jurisdictional areas within the project BSA have been quantified based on areas of permanent and temporary disturbance resulting from implementation of the proposed project. Impact areas are represented as the ADI, which was overlain with maps of habitats, jurisdictional areas, and sensitive species to quantify impacts.

Permanent areas of disturbance include trails, benches, stairs, signs, and drainage improvements. Temporary areas of disturbance include those areas beyond the physical improvements that may be disturbed during project construction, but would be considered "natural" or in native condition after project implementation, *including areas to be restored.* Additionally, the restoration activities will result in a permanent beneficial impact to the area to restore native habitat that is currently covered with asphalt.

Impacts to biological resources in the BSA were evaluated by determining the sensitivity, significance, or rarity of each resource that would be adversely affected by the proposed project. Where potential project-related impacts to sensitive resources were identified, measures for avoiding or minimizing impacts to these resources were recommended.

3.2.5.1 Regulatory Setting

Federal Policies and Regulations

Section 404 of the Clean Water Act

The USACE is responsible for the issuance of permits for the placement of dredged or fill material into "Waters of the U.S." pursuant to Section 404 of the CWA. As defined by USACE at 33 CFR 328.3(a) (parts 1-6), the following summarizes "Waters of the U.S." as: "Those waters that are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; tributaries and impoundments to such waters; all interstate waters including interstate wetlands; and territorial seas."

Under federal regulations, wetlands are "waters of the U.S." that are identified as: "Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas."

Project activities will not result in impacts to “Waters of the U.S.” (wetlands or non-wetland other waters); the project is exempt from regulatory requirements under Section 404 of the CWA based on review by the USACE.

Section 401 of the Clean Water Act

Section 401 of the CWA ensures that federally permitted activities comply with the federal CWA and state water quality laws. Section 401 is implemented through California’s RWQCB (Regional Water Quality Control Board) and is triggered by the Section 404 permitting process. The RWQCB issues a Water Quality Certification via the 401 process that a project complies with applicable effluent limitations, water quality standards, and other conditions of California law. Evaluating the effects of the project on both water quality and quantity (runoff) falls under the jurisdiction of the RWQCB. The project will not require a Section 401 Water Quality Certification because it will have no impacts on state wetlands.

Federal Endangered Species Act

The Federal Endangered Species Act (FESA) of 1973 provides legal protection for plant and animal taxa (taxonomic groups) that are in danger of extinction and classified as either threatened or endangered. Section 7 of the FESA requires federal agencies to make a finding on all federal actions as to the potential to jeopardize the continued existence of any listed species potentially affected by the action, including the approval by an agency of a public or private action, such as FHWA funding.

Section 9 of FESA protects federally listed plant and animal species from unlawful “take.” “Take” is defined by FESA as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” The USFWS (US Fish and Wildlife Service) and National Oceanic and Atmospheric Administration (NOAA Fisheries) regulate activities that may result in take of federally endangered or threatened species, or candidate species. USFWS typically exerts jurisdiction over freshwater and terrestrial species, and NOAA Fisheries typically exerts jurisdiction over marine species and anadromous fish (such as salmon and steelhead). Project-related activities that could result in impacts, such as take, to listed species would require any involved federal agencies to consult with the USFWS and/or NOAA Fisheries to determine the extent of impacts to listed species.

Marine Mammal Protection Act

All marine mammals are protected under the Marine Mammal Protection Act (MMPA) of 1972. The MMPA prohibits, with certain exceptions, the "take" of marine mammals in U.S. waters and by U.S. citizens on the high seas, and the importation of marine mammals and marine mammal products into the U.S. The MMPA was amended substantially in 1994 to provide for certain exceptions to the take prohibitions, such as: Alaska Native subsistence, and permits and authorizations for scientific research; a program to authorize and control the taking of marine mammals incidental to commercial fishing operations; preparation of stock assessments for all marine mammal stocks in waters under U.S. jurisdiction; and studies of pinniped-fishery interactions. Authority to manage the MMPA is divided between the U.S. Fish and Wildlife Service (Service) and the National Oceanic and Atmospheric Administration (NOAA). The Marine Mammal Commission (MMC), reviews existing policies and makes recommendations to the Service and the NOAA to better implement the MMPA. Coordination between these three Federal agencies is necessary in order to provide the best management practices for marine mammals.

The MMPA defines harassment as "...an act of pursuit, torment or annoyance which has the potential to injure, or disturb by causing disruption of behavioral patterns, to a marine mammal or marine mammal stock in the wild." The MMPA defines two levels of harassment:

- Level A Harassment means any act of pursuit, torment, or annoyance which has the potential to injure a marine mammal or marine mammal stock in the wild.

- Level B Harassment means any act of pursuit, torment, or annoyance which has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering but which does not have the potential to injure a marine mammal or marine mammal stock in the wild.

Federal Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA) protects all migratory birds, including their eggs, nests, and feathers. The MBTA was originally drafted to end the commercial trade in bird feathers popular in the latter part of the 1800s. The MBTA is enforced by the USFWS, and potential constraints to species protected under this law may be evaluated by the USFWS during the consultation process.

If any removal of vegetation that could support nesting bird species is scheduled to occur during the typical nesting season (March 1 to July 31), pre-activity nest surveys will be required to determine if birds are actively nesting within the project area. Work-related disturbance near active bird nests would need to be avoided until the young have left the nest.

State Policies and Regulations

California Endangered Species Act

California has a parallel mandate to FESA, which is embodied in the California Endangered Species Act (CESA) of 1984 and separately under the Native Plant Protection Act (NPPA) of 1977. CESA ensures legal protection for plants listed as rare or endangered, and wildlife listed as threatened or endangered. The California Department of Fish and Wildlife (CDFW) regulates activities that may result in the “take” of such species. CESA has a much less inclusive definition of "take" (limited to direct takes such as hunting, shooting, capturing, etc.) that does not include the broad "harm" and "harassment" definitions in federal law. The CDFW also maintains a list of California Species of Special Concern (SSC) based on limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational, or educational value. Under state law, the CDFW is empowered to review projects for their potential to affect state-listed species and SSC species, and their habitats.

In addition, certain plants are listed as rare or endangered by the California Native Plant Society (CNPS), but have no designated status. Unlisted plant species on the California Rare Plant Rank (CRPR) Lists 1A, 1B, and 2 are typically considered under CEQA.

Take of state-listed plant or wildlife species would require a Section 2081 Incidental Take Permit from the CDFW. This process requires submittal of a sensitive species study and permit application package, and is similar to the FESA Section 10 process, except that the CDFW is the regulatory and decision-making agency.

California Fish and Wildlife Code

Section 1602

Section 1602 of the State of California Fish and Wildlife Code requires any person, state or local government agency, or public utility proposing a project that may affect a river, stream, or lake to notify the CDFW before beginning the project. If activities will result in the diversion or obstruction of the natural flow of a stream; substantially alter its bed, channel, or bank; impact riparian vegetation; or, adversely affect existing fish and wildlife resources, a Streambed Alteration Agreement is required. A Section 1602 Streambed Alteration Agreement will not be required for the project.

Other Fish and Wildlife Code Sections

California Fish and Wildlife Code Section 3503 includes provisions to protect the nests and eggs of birds. Sections 3511, 4700, 5050, and 5515 include provisions to protect Fully Protected species, such as: 1) prohibiting take or possession "at any time" of the species listed in the statute, with few exceptions, 2) stating that "no provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to "take" the species, and 3) stating that no previously issued permits or licenses for take of the species "shall have any force or effect" for authorizing take or possession.

California Coastal Act

The California Coastal Act (CCA) of 1976 established a comprehensive plan to protect resources and regulate development along California's coast. The CCA requires every city and county located partly or wholly within the designated Coastal Zone to prepare a Local Coastal Program (LCP) which is reviewed and certified by the California Coastal Commission (CCC). The CCA defines an LCP as “a local government’s (a) land use plans, (b) zoning ordinances, (c) zoning district maps, and (d) within sensitive coastal resource areas, other implementing actions, which, when taken together, meet the requirements of, and implement the provisions and policies of this division at the local level” (Public Resources Code [PRC] Section 30108.6). The LCP zoning ordinance, district maps, and other implementing actions must be found to conform with and be adequate to carry out the LCP Land Use Plan.

The CCA places the highest priority on the preservation and protection of natural resources, including ESHAs (e.g., wetlands and dunes), and prime agricultural lands. Only uses that are dependent on such resources, such as trails, are allowed within habitat areas.

Local Policies and Regulations

City of Fort Bragg Coastal General Plan

The City Coastal General Plan establishes the Land Use Plan portion of the City LCP, and was prepared in accordance with the CCA. The Land Use Plan is defined as “the relevant portion of a local government’s general plan, or local coastal element which are sufficiently detailed to indicate the kinds, location, and intensity of land uses, the applicable resource protection and development policies, and where necessary, a listing of implementing actions” (PRC Section 30108.5). The policies contained in the portion of the Coastal General Plan that constitute the LCP govern the use of land and water in the Coastal Zone within the City. Relevant policies and a consistency analysis are provided in the Land Use section of this EIR.

3.2.5.2 Natural Communities

Affected Environment

This section of the document discusses natural communities of concern. This section also includes information on wildlife corridors and habitat fragmentation. Wildlife corridors are areas of habitat used by wildlife for seasonal or daily migration. Habitat fragmentation involves the potential for dividing sensitive habitat and thereby lessening its biological value. There is no critical habitat under the Federal Endangered Species Act on site. Wetlands and other waters are discussed in this section.

The botanical and wetland information found in this subsequent EIR are from a botanical study and wetland delineation completed in 2013 and 2014. Six natural communities were mapped within the Study Area, including five considered ESHA. WRA utilized natural community maps developed from previous surveys conducted within the Study Area, but changed boundaries and community classifications to be consistent across the Study Area (between North Parkland and South Parkland), to reflect the most recent literature (i.e., Sawyer et al. 2009, CDFW 2010), and to more clearly identify the locations and acreages of ESHA and non-ESHA. Disturbed communities that may provide restoration and mitigation opportunities were also mapped in the field. Both ESHA and non-ESHA natural communities are listed in Table 3-12, illustrated in Figure 3-9 and Figure 3-11, and detailed below.

Mill Pond Area: The field surveys resulted in the observation of 111 plant species, of which 41 are considered native to California. Twenty-five individuals of one special-status plant, Blasdale's bentgrass (*Agrostis blasdalei*, CNPS Rank 1B), are located in the southwestern portion of the Study Area.

Johnson Point Area: The field survey identified six separate populations of *Agrostis blasdalei* (Rank 1B), one population of Mendocino paintbrush (*Castilleja mendocinensis,* Rank 1B) and 11 populations of short-leaved evax (*Hesperevax sparsiflora* var. *brevifolia*, Rank 1B).

Natural Communities

Seven natural communities were observed within the Study Area, of which four are considered ESHA. These communities are illustrated in the following figures and described below.

Vancouver Rye Stands (ESHA): Vancouver rye stands are not specifically a named vegetation community within Holland (1986), but are similar to the Valley Rye Grassland described therein, and Creeping Rye Grass Turfs described in Sawyer et al. (2009). Within the Study Area, these stands are dominated by Vancouver rye (*Elymus* x *vancouverensis*), a sterile hybrid between American dune grass (*E. mollis*) and creeping ryegrass (*E. triticoides*). These areas are considered potential ESHA as they are dominated by a native grass species; however, they do not support the floristic diversity of other coastal grasslands and herbaceous communities.

Freshwater Swales (ESHA): These communities are wetlands situated in man-made drainages that exhibit one or more wetland parameters (i.e. vegetation, soils, hydrology). They are not specifically described in Holland (1986) or Sawyer et al. (2009), but can contain elements of other wetland communities described therein. Within the Study Area,

one freshwater swale is situated in the southwestern portion as a roadside ditch (Attachment A). This swale is dominated by hydrophytes including Pacific rush (*Juncus effusus*), field horsetail (*Equisetum arvense*), tall flat-sedge (*Cyperus eragrostis*), and rough hedgenettle (*Stachys rigida*). This swale is wetland ESHA under the CCA/LCP as it meets one or more wetland parameters.

Freshwater seep communities are wetlands found on steep bluff slopes and beaches in the Study Area. These wetlands receive perennial or semi-perennial hydrological input as a result of surface and subsurface water flow. The freshwater seeps are generally dominated by silverweed (*Potentilla anserina* ssp. *pacifica*), watercress (*Nasturtium officinale*), field horsetail (*Equisetum arvensis*), common monkeyflower (*Mimulus guttatus*), panicled bulrush (*Scirpus microcarpus*), bog rush (*Juncus effusus*), and Brewer's rush (*J. breweri*). Some freshwater seeps in the Study Area support scattered dune willows (*Salix hookeriana*) or are disturbed by invasive species including Cape ivy (*Delairea odorata*), iceplant (*Carpobrotus edulis, C. chilensis*), velvet grass (*Holcus lanatus*), and wild radish (*Raphanus sativus*). Freshwater seeps may be considered jurisdictional wetlands by the Corps and wetland ESHA under the CCA/LCP (WRA 2007).

North Coast Riparian Scrub (ESHA): This community is described in Holland (1986) and is composed of vegetation alliances, Wax Myrtle Thicket (*Morella californica* Shrubland Alliance) (Sawyer et al. 2009, CDFG 2010). Within the Study Area, two patches of NCRS are located in the northeastern portion (Attachment A). These scrubs are dominated by wax myrtle (*Morella californica*), with a sparse understory of hydrophytic and mesic herbs. These scrubs are wetland ESHA under the CCA/LCP because they meet one or more wetland parameters.

Beach and Rocky Bluffs (ESHA): The western portion of the Study Area includes extensive rocky bluffs and intertidal beaches largely lacking vegetation (Attachment A). No significant dune habitat or dune vegetation is present at these low elevations, although the rocky and sandy beaches support scattered sea rocket (*Cakile maritima*) and iceplant (*Carpobrotus hilensis, C.edulis*). Rocky bluffs support patches of iceplant or scattered native herbs typical of rocky coastal bluffs such as Henderson's angelica (*Angelica hendersonii*), cow parsnip (*Heracleum maximum*), and sea pink (*Armeria maritima*).

Developed: Developed areas are not described in the vegetation literature (Holland 1986, Sawyer et al. 2009, CDFG 2010), but these areas often contain vegetative patches distinct from surrounding native or naturalized habitats. The terrace portions of the Study Area have been paved or graveled, and support a disturbed community of non-native species and several native coastal bluff species that are typically supported by rocky, exposed conditions (Attachment A). These paved areas support sparse or patchy vegetation generally dominated by bird's foot trefoil (*Lotus corniculatus*), rattail fescue (*Festuca myuros*), English plantain (*Plantago lanceolata*), rough cat's-ear (*Hypochaeris radicata*); however, these areas have also been colonized by native species, predominantly Oregon gumplant (*Grindelia stricta* var. *platyphylla*), seaside fleabane (*Erigeron glaucus*), and Bolander's goldenaster (*Heterotheca sessiliflora* ssp. *bolanderi*).

Figure 8: Special Status Plant Species and Natural Communities in Mill Pond Area

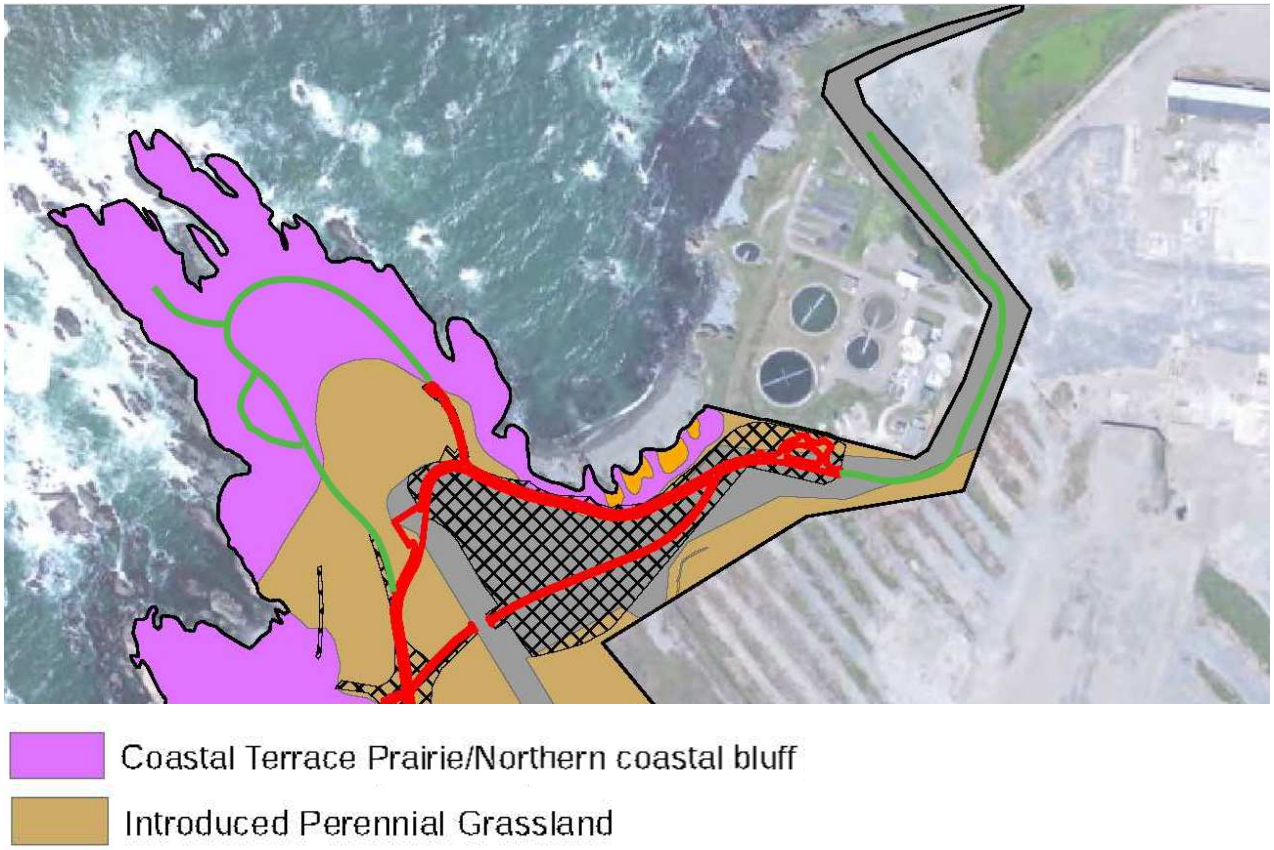


Figure 9: Special Status Communities at Johnson Point (Proposed trail Alignment Shown in Green)

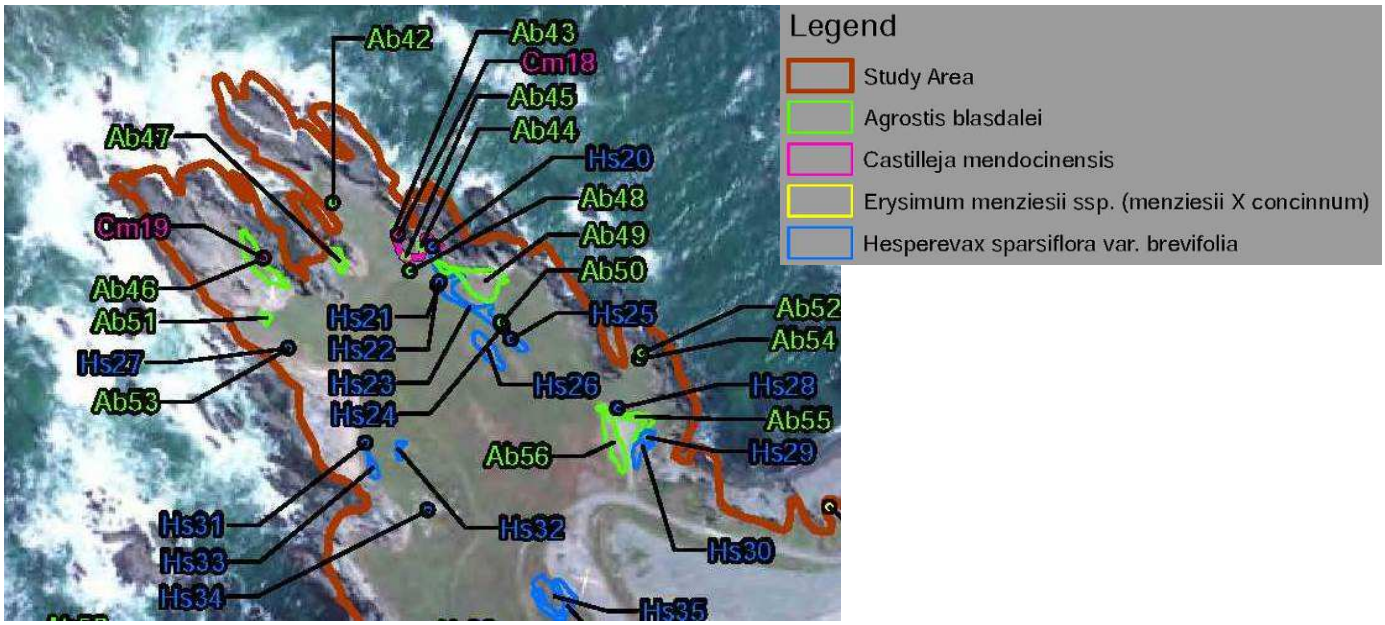


Figure 10: Special Status Plant Populations at Johnson Point

Coastal Terrace Prairie (CTP): CTP is a named vegetation community within Holland (1986), and may be composed of several vegetation alliances (Sawyer et al 2009, CDFG 2010). Within the Study Area, meadow barley patches (*Hordeum brachyantherum* Herbaceous Alliance), blue wild rye patches (*Elymus glaucus* Herbaceous Alliance), and California oatgrass prairie (*Danthonia californica* Herbaceous Alliance) comprise the CTP within the Study Area (Sawyer et al. 2009).

CTP is dominated by native perennial grasses with native perennial forbs maintaining a characteristic position within this habitat, and is generally located on similar topographic position as NCBS but with more well-developed sandy loam soils. Throughout the Study Area, NCBS and CTP form a complex mosaic, and were therefore mapped as singular habitat type. Historically, CTP within the Study Area has been much reduced by conversion to non-native perennial grassland or developed, and therefore is only a minor proportion of the Study Area. The native grasses composing CTP within the Study Area include meadow barley (*Hordeum brachyantherum*), California brome (*Bromus carinatus*), ocean bluff bluegrass (*Poa unilateralis*), coastline bluegrass (*P. confinis*), blue wild rye (*Elymus glaucus*), and California oatgrass (*Danthonia californica* var. *californica*). Characteristic perennial forbs include common yarrow (*Achillea millefolium*), Douglas iris (*Iris douglasiana*), blue-eyed grass (*Sisyrinchium bellum*), California poppy (*Eschscholzia californica*), dwarf checkerbloom (*Sidalcea malviflora* ssp. *malviflora*), and footsteps of spring (*Sanicula arctopoides*), mugwort (*Artemisia douglasiana*), and pearly everlasting (*Anaphalis margaritacea*).

Iceplant Mats (Non-ESHA): This community is not described in Holland (1986), but is recognized by Sawyer et al. (2009) and CDFG (2010) as Iceplant Mats (*Carpobrotus edulis* Semi-Natural Herbaceous Stands). These mats are frequently situated on sand dunes, coastal bluffs, and marine terraces throughout coastal California (Sawyer et al. 2009, Baldwin et al. 2012). Within the Study Area, Iceplant Mats are situated on the coastal bluff edge and disturbed terrace areas in the western portion (Attachment A). They are dominated by iceplants (*Carpobrotus chilensis, C. edulis*), with few individual herbs emerging through the mats, such as Henderson's angelica (*Angelica hendersonii*), rip-gut brome (*Bromus diandrus*), and wild radish (*Raphanus sativus*).

Introduced Grassland (Non-ESHA): This community is described as non-native grassland in Holland (1986) and is composed of Common Velvet Grass-Sweet Vernal Grass Meadows (*Holcus lanatus-Anthoxanthum odoratum* Semi-Natural Herbaceous Stands), Rip-gut Brome Stands (*Bromus diandrus* Semi-Natural Herbaceous Stands), and Bermuda Grass Mats (*Cynodon dactylon* Semi-Natural Herbaceous Stands) (Sawyer et al. 2009). Within the Study Area, patches of Introduced Grasslands are situated in the central and northern portion (Attachment A). Dominant species include common velvet grass (*Holcus lanatus*), sweet vernal grass (*Anthoxanthum odoratum*), Bermuda grass (*Cynodon dactylon*), rip-gut brome (*Bromus diandrus*), soft chess (*B. hordeaceus*), colonial bentgrass (*Agrostis capillaris*), big quaking-grass (*Briza maxima*), black mustard (*Brassica nigra*), and wild radish (*Raphanus sativus*).

Table 5. Summary of Habitats in the BSA

Community Type	Jurisdiction (federal in bold)	Acreage/SF
Freshwater Swale	ESHA (CCC/LCP wetland)	1,044 SF
Beach and rocky bluffs	ESHA, **USACE waters** (tidal areas)	2 ac
North Coast Riparian Scrub	none	4,300 SF
Vancouver Rye (Leymus) stands	ESHA	1,300 SF
Freshwater Seep	ESHA (CCC/LCP wetland)	100 SF
Ice Plant	none	1.5 ac
Introduced Perennial Grassland	none	5 ac
Developed/disturbed	none	20 ac
TOTALS		**≈26 ac**

Environmental Consequences

ESHA Natural Communities Temporary Impacts and Mitigations

The proposed project could result in approximately 0.1 acre of temporary impacts to ESHA natural communities, specifically to Vancouver rye stands, North Coast Riparian Scrub and Coastal Terrace Prairie. Temporarily impacted include those areas outside of permanent physical installations (e.g. trails, roads), as well as proposed restoration areas. Restoration areas should confer benefits to ESHA natural communities through the removal/reduction of invasive plant species and revegetation with native species. Mitigation measures below have been developed to address temporary impacts to ESHA natural communities.

Impact 1: ESHA natural communities could be temporarily impacted during construction and restoration activities.

Mitigation Measure 10: During construction, permanent and temporary impacts to ESHA natural communities shall be avoided/minimized to the extent feasible. The ESHA natural communities which have the potential to be disturbed by the project shall be shown on site plans. Areas in which grading or other disturbance is to occur shall be defined on-site by readily identifiable barriers that will protect the surrounding native habitat areas. Construction equipment and other vehicles shall be prevented from entering ESHA natural communities to be avoided through the use of exclusion zones or other barriers.

Mitigation Measure 11: The trail alignment through Johnson point shall be installed to avoid rare plants. Prior to mowing for the trail and installation of the habitat protection fencing, which will define the trail alignment, a botanical survey will be completed and the trail alignment and benches will be placed in areas that avoid rare plants.

Mitigation Measure 12: During and following construction, drainage control methods shall be incorporated into the project in a manner that minimizes erosion, sedimentation, and the discharge of harmful substances into aquatic habitats during and after construction.

Mitigation Measure 13: Prior to construction, the applicant will prepare a Hazardous Materials Response Plan or equivalent to allow for a prompt and effective response to any accidental spills. All workers will be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur. All project-related hazardous materials spills within the project site will be cleaned up immediately by the contractor. Spill prevention and cleanup materials will be on-site at all times during construction.

Mitigation Measure 14: During construction, to control erosion during and after project implementation, the applicant and contractors will implement standard Best Management Practices (BMPs), such as installation of siltation fencing, straw wattles and other temporary erosion control measures.

Mitigation Measure 15: During construction, the cleaning and refueling of equipment will occur only within a designated staging area and at least 65 ft. from wetlands, other waters, or other aquatic areas. This staging area will conform to BMPs applicable to attaining zero discharge of stormwater runoff. At a minimum, all equipment and vehicles will be checked and maintained on a daily basis to ensure proper operation and avoid potential leaks or spills.

Mitigation Measure 16: During construction, trash will be contained, removed from the work site, and disposed of regularly by the contractor. Following construction, all trash and construction debris will be removed from work areas.

The proposed restoration of approximately five acres of native habitat, the majority of which would qualify as ESHA natural communities along with implementation of the above measures, would reduce potential temporary ESHA impacts to a less than significant level. No additional mitigation measures are required.

BR Impact 2: Restoration and Trail activities have the potential to permanently impact ESHAs.

Mitigation Measure 17: To limit unauthorized access into ESHA communities, prior to and after construction, the City of Fort Bragg shall incorporate an ESHA protection fencing plan in the final Design and Bid Packet. The fencing plan shall focus on

those areas of the project where ESHA communities would most likely be subject to unauthorized access.

No Project Alternative

Biological resources would not be directly affected by the No Project Alternative. Unlike the proposed project, this alternative would not include any restoration, and therefore would not result in beneficial effects to biological resources.

Alternative Trail Alignment

The Alignment A would include the beneficial effects of the proposed project, such as increasing habitat. Impacts would be greater than the preferred alternative because this alignment is adjacent to Vancouver Rye Stands and so would impact those populations during construction. However, implementation of the mitigation measures described above would reduce impacts to less than significant.

Cumulative Impacts

The proposed project would have no permanent impacts on ESHA and will have temporary impacts on a very small amount of ESHA. The proposed restoration would result in the creation of approximately five plus acres of habitat, most of which would be considered ESHA (coastal scrub or terrace prairie). As a result, the project would result in a net increase of ESHA. Because the proposed project would result in a net increase of ESHA, it would not contribute to cumulative impacts to ESHA.

3.2.5.3 Jurisdictional Wetlands, Other Waters, and Riparian Areas

Affected Environment

Wetlands are transitional areas between open water and uplands, functioning to improve water quality, detain stormwater runoff, recharge groundwater, and provide wildlife habitats. Some wetlands remain perennially inundated and others may only be seasonally inundated. The technical definition of wetlands may differ by regulatory agency jurisdiction. Regulatory jurisdictions may overlap, depending on the definitions by which the various regulatory agencies delineate their respective jurisdictional boundaries. Potential USACE three-parameter jurisdictional wetlands (features associated with waters of the U.S. with dominant hydrophytic vegetation, hydric soils, and wetland hydrology), drainages, and riparian areas under CDFG jurisdiction, and CCC/LCP single parameter wetlands were identified in the BSA.

Potential USACE jurisdictional wetlands, other waters, and riparian areas in the BSA have been delineated in **Figure 11**.

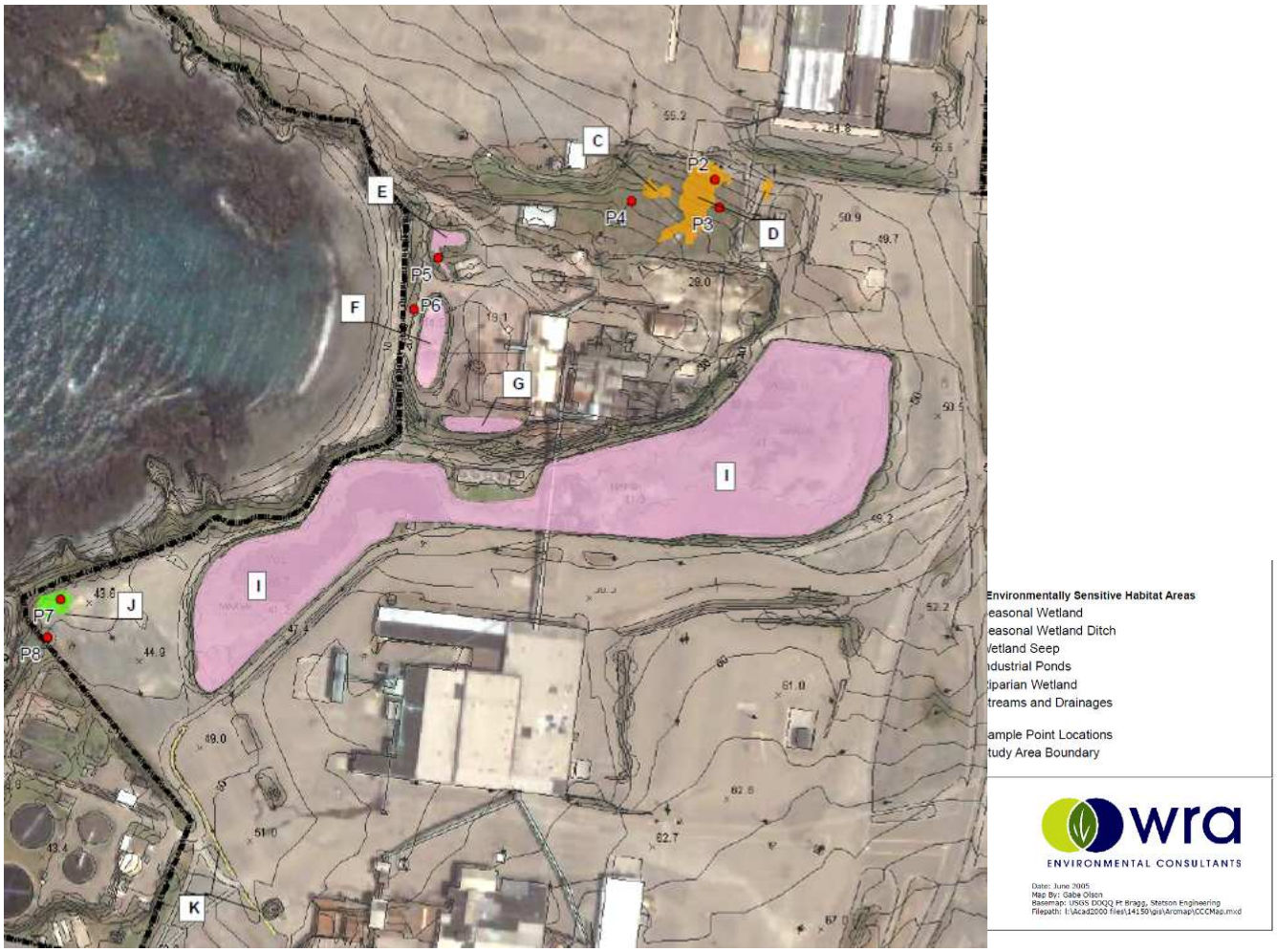


Figure 11: Jurisdictional Wetlands in the Study Area

Wetlands

Approximately 9 acres of potential CCC wetlands were found in the Study Area. These wetlands can be divided into four categories: seasonal wetlands, seasonal wetland ditch, wetland seep, and industrial pond. Potential CCC wetlands in the Study Area typically exhibited hydrophytic vegetation, hydric soils, and hydrology indicators. Only one wetland (Wetland J), did not contain all three wetland indicators. Descriptions of each wetland category are provided below.

Seasonal Wetlands

One seasonal wetland was found within the Study Area (Wetlands J). Wetland J is on the edge of a large paved area close to the coastal bluffs west of the Log Pond. This wetland was a small area ponded to a depth of 2 inches dominated by hydrophytic plant species, but had only 2 inches or so of soil overlying a paved surface. It appeared to be either an unmaintained low lying area in the pavement where water has collected, or an area where cracked pavement allowed water to seep to the surface. This wetland will be avoided by the project.

Seasonal Wetland Ditches

One seasonal wetland ditch was delineated within the Study Area (Wetlands K). Vegetation in the seasonal wetland ditch was composed of species such as bird's foot trefoil, purple velvetgrass, Bermuda grass (*Holcus lanatus*; FAC), tall flatsedge, cattail, and soft rush. Soils in these wetlands ditches were black (10YR 2/1) rocky loam with no redoximorphic features. Hydrology indicators in seasonal wetland ditches included ponded water or saturated soils, algal mats, drainage patterns, and the FAC-neutral test.

Wetland Seep

Two wetland seeps were identified within the Study Area (Wetlands C and D). Wetlands C and D are located on a slope north of the former power plant and appear to be naturally occurring features. Dominant vegetation in these areas included panicled bulrush, seep monkey flower (*Mimulus guttatus*; OBL), soft rush, and common horsetail. Soils in these wetlands were black (10YR 2/1) with no redoximorphic features. All of these wetlands were either saturated to the surface or saturated within 12 inches of the ground surface.

Industrial Ponds

Industrial ponds within the Study Area include Wetlands E, F, G & I. Wetland E (Sample Point 5) is the De-Barker Pond, Wetland F is the Collection Pond, Wetland G is Settling Pond 1, Wetland I is the Log Pond (Pond 8). These features were ponded to a minimum depth of 6 inches during the site visit, most were ponded to 12 inches or more, and some contained emergent FACW and OBL wetland plant species such as cattail, parrot's feather, water cress (*Rorippa nasturtium-aquaticum*; OBL), and soft rush. Some of the industrial ponds contained little to no emergent hydrophytic vegetation. These ponds were classified as wetlands because they contained wetland hydrology and wetland soils. Soils data taken in Wetland E showed black (10YR 2/1) color with no redoximorphic features. Soils in the remainder of the industrial pond wetlands were assumed to be hydric based on a history of ponded water.

The Study Area has seven wetlands and two areas of riparian habitat. In total, there are eight acres of potential ESHA wetlands in the Study Area. The total area of each of the wetlands present is summarized in Table 6 below.

Table 6 - ESHA Wetlands within the Study Area.

ESHA Type	ESHA Label	Size (Acres)
Freshwater Seep	C	0.03
Freshwater Seep	D	0.27
Industrial Pond	E	0.06
Industrial Pond	F	0.17
Industrial Pond	G	0.10
Industrial Pond/Mill Pond	I	7.29
Seasonal Wetland	J	0.06
Seasonal Wetland Ditch	K	0.02

Environmental Consequences

Project implementation would include ground disturbance, vegetation displacement, and/or fill activities. However none of these activities would directly impact Coastal Act or USACE wetlands as the project has been designed to avoid all wetlands.

No Project Alternative

The No Project alternative would have no significant impacts to jurisdictional areas.

Alternative Trail Alignment

Effects to jurisdictional areas would be similar to the proposed project.

Avoidance, Minimization, and/or Mitigation Measures

> **Mitigation Measure 18:** After construction, the area located between the trail and adjacent wetlands within the property owned by the City of Fort Bragg shall be restored with appropriate native California habitat.

Cumulative Impacts

It has been estimated that California has lost approximately 90% of its historic wetlands and riparian resources to alternative land use. Regulatory agencies have sought to offset the additional loss of riparian areas and wetlands with restoration and revegetation requirements for projects within their respective jurisdictions.

The Mill Site has been subjected to varying degrees of disturbance over the years. Much of the site is paved with asphalt or compressed gravel and impacted by large areas of artificial fill materials of 2 to 30 ft. in depth, areas of compacted gravel and dirt roads, as well as extensive areas of non-native and invasive plants (e.g., velvet grass, wild radish, ice plant).

The implementation of the proposed project is not expected to introduce impacts to jurisdictional wetlands, other waters, or riparian areas, as the project will include a restoration component that will result in net beneficial impacts to natural communities/habitats within the BSA. Further, the redevelopment of the Mill Site would result in a further restoration and enhancement of jurisdictional features. The proposed project would not contribute to cumulative impacts to jurisdictional features. No cumulative impact mitigation measures are required.

3.2.5.4 Sensitive Plant Species

The proposed project would potentially impact two sensitive plant species, although neither is considered threatened or endangered. Based on review of the project by qualified biologists and consultation with regulatory agencies, the proposed project would have less than significant impacts to these species. Further, it would likely have beneficial impacts to these species as they are included in the candidate species list and will be planted as part of restoration efforts on the North and South Parkland.

Due to the historic development at the Mill Site, beyond the bluff edge, there is currently very little habitat onsite for sensitive plant species. The proposed project would not contribute to potential cumulative adverse impacts.

Affected Environment

The CNDDB (2009 and 2010) documents numerous special-status (federally listed, state listed, and/or California Rare Plant Rank (CRPR) List 1B or 2) plant taxa as occurring within the USGS Fort Bragg quadrangle and the surrounding quadrangles. In addition, several other species were also included for evaluation of occurrence potential based on the USFWS federal species list for Mendocino County accessed online (USFWS 2011) and the knowledge and experience of local botanists and results of previous survey conducted in the BSA.

A total of 66 special-status plant taxa have been considered for this EIR. Several floristic botanical surveys have previously been completed for the Coastal Trail. Two special-status plant species were observed within the Study Area during the 2014 survey. Plants were identified to the appropriate taxonomic level to identify or rule out any special-status species. The species are detailed below including their habitat requirements, associated plant species, and specific on-site distribution and populations. Distributions of each of the subpopulations are illustrated in **Figure 10** and **Figure 8** above and summarized in **Table 7**.

Table 7. Summary of special-status plant species observed within the Project Area

Scientific name	Common name	Status	Sub-populations
Agrostis blasdalei	Blasdale's bentgrass	Rank 1B	7
Castilleja mendocinensis	Mendocino paintbrush	Rank 1B	1
Hesperevax sparsiflora var. *brevifolia*	short-leaved evax	Rank 1B	11

Blasdale's bentgrass (*Agrostis blasdalei).* CNPS Rank 1B: Blasdale's bentgrass is a perennial graminoid in the grass family (Poaceae) that blooms from May to July. It typically occurs in bare or sparsely vegetated areas in coastal dune, coastal bluff scrub, and coastal prairie habitat at elevations ranging from 15 to 490 feet (CDFW 2013, CNPS 2013). Soil survey data at known locations suggest that this species is typically located on moderately strongly acid (pH 5.0) to slightly acid (pH 6.5) sandy loams and sands derived from sedimentary rock (CDFW 2013, CSRL 2013). Observed associated species include sweet vernal grass (*Anthoxanthum odoratum*), velvet grass (*Holcus lanatus*), tree lupine (*Lupinus arboreus*), many-colored lupine (*L. variicolor*), bracken fern (*Pteridium aquilinum*), seaside fleabane (Erigeron glaucus), sea lettuce (*Dudleya farinosa*), sea pink (*Armeria maritima ssp. pacifica*), and common yarrow (*Achillea millefolium*) (CDFW 2013, personal observation 2009, 2013).

Within the Study Area, Blasdale's bentgrass was observed at Johnson Point and the Mill Pond Area and was typically located in areas with low to very low vegetation cover on bluff faces or flats very near the bluff face. Counts totaled seven distinct subpopulations, one population adjacent to the WWTF and six populations on Johnson Point.

Mendocino paintbrush (*Castilleja mendocinensis*). CNPS Rank 1B: Mendocino paintbrush is a perennial hemiparasitic forb in the broomrape family (Orobanchaceae) that blooms from

April to August. It typically occurs on coastal bluff faces and near bluff edges within coastal bluff scrub, closed-cone coniferous forest, coastal dune, coastal prairie, and coastal scrub habitat at elevations ranging from 0 to 520 feet (CDFW 2013, CNPS 2013). Observed associated species include shore pine (*Pinus contorta* ssp. *contorta*), Bishop pine (*P. muricata*), coyote brush (*Baccharis pilularis*), blue blossom (*Ceanothus thyrsiflorus* var. *thyrsiflorus*), sticky monkey (*Mimulus aurantiacus*), poison oak (*Toxicodendron diversilobum*), common yarrow (*Achillea millefolium*), coast angelica (*Angelica hendersonii*), varied lupine (*Lupinus variicolor*), sea lettuce (*Dudleya farinosa*), sea pink (*Armeria maritima* ssp. *californica*), coastal buckwheat (*Eriogonum latifolium*), Blasdale's bentgrass (*Agrostis blasdalei*), coast onion (*Allium dichlamydeum*), beach knotweed (*Polygonum paronychia*), seaside daisy (*Erigeron glaucus*), beach strawberry (*Fragaria chiloensis*), and common woolly sunflower (*Eriophyllum lanatum* var. *arachnoideum*) (CDFW 2013, personal observation 2009, 2010, 2012, 2013). Within the Study Area, Mendocino paintbrush was observed in one location on Johnson Point.

Short-leaved evax (*Hesperevax sparsiflora* var. *brevifolia*). CNPS Rank 1B: Short-leaved evax is an annual forb in the sunflower family (Asteraceae) that germinates and leafs-out in late winter, blooms from March to June, and senesces in late summer. It typically occurs on sandy substrate on bluffs and flats in coastal bluff scrub and coastal dune habitat at elevations ranging from 0 to 700 feet (CNPS 2013, CDFW 2013). Observed associated species include round-head Chinese houses (*Collinsia corymbosa*), beach suncup (*Camissoniopsis cheiranthifolia*), North Coast phacelia (*Phacelia insularis* var. *continentis*), seacoast angelica (*Angelica lucida*), beach sage (*Artemisia pycnocephala*), Howell's spineflower (*Chorizanthe howellii*), Mendocino paintbrush (*Castilleja mendocinensis*), seaside buckwheat (*Eriogonum latifolium*), and seaside daisy (*Erigeron glaucus*) (CDFW 2013, personal observation 2009, 2010, 2013).

Within the Study Area, short-leaved evax was observed on Johnson Point, and was typically located in areas with very low vegetation cover on flats very near the bluff face, and on shelves of the bluff face. Counts totaled 11 distinct subpopulations.

Environmental Consequences

The Preliminary Plans prepared for the project considered known populations of sensitive species and the improvements were designed to avoid these resources. No individuals will be impacted by the Phase II project.

Other Special-status Plant Species Avoidance, Minimization, and/or Mitigation Measures

Blasdale's bentgrass, Mendocino paintbrush, and short-leaved evax are located in some limited areas within the project area. Blasdale's bentgrass subpopulations are located outside of the projected temporary impacts; therefore, with pre-construction surveys, flagging of special-status species, and delineation of work areas during construction, total impacts to Blasdale's bentgrass will be avoided.

No Mendocino paintbrush plants will be impacted by associated project activities. One population is located within the Study Area far from any proposed construction activities, and therefore, the pre-construction surveys, flagging, and delineation of work areas would avoid impacts to the Mendocino paintbrush.

Short-leaved evax populations are located adjacent to project impact areas on Johnson Point. Impacts to short-leaved evax would be largely discountable, as this species is locally common and located in areas of disturbance and substantial bare ground.

The following measures are recommended below to address impacts to non-listed, special-status plant species. It is anticipated that these measure would be incorporated into the proposed restoration plans for the North and South Parklands, as applicable.

Implementation of the proposed project could indirectly significantly impact non-listed, special-status plant species Blasdale's bentgrass, Mendocino paintbrush, and short-leaved evax.

> **Mitigation Measure 19:** Prior to construction, the applicant shall implement planning to avoid impacts to special-status plant species to the extent feasible. Specific areas with special-status plant species to be avoided shall be mapped and marked with fencing, flagging, or exclusion zones to minimize the potential for unnecessarily impacting plants.
>
> **Mitigation Measure 20:** Prior to construction, if special-status plants cannot be avoided and must be impacted, seed of special-status plants onsite shall be gathered from areas to be impacted for eventual reseeding after ground disturbance has been completed. If feasible, special-status plants in areas proposed for ground disturbance may be salvaged by digging up individual plants (including roots/rhizomes) for immediate transplanting and/or planting in containers for eventual replanting. Revegetation success criteria/goals for special-status plants shall be at a minimum 2:1 ratio (i.e., two plants established for each plant lost or two acres of absolute cover established for each acre of absolute cover lost) or a ratio negotiated between the City and permitting agencies based on City proposals.
>
> **Mitigation Measure 21:** Prior to and during construction, a component including special-status plants and conservation shall be integrated into an environmental training session for construction personnel working on the project, to be conducted by a qualified biologist. Topics covered shall include site-specific environmental issues and sensitive natural resources, avoidance of disturbance, relevant environmental regulations, and standard BMPs identified for the project. All construction personnel shall be required to attend the environmental training session for sensitive biological resources and sign an attendance sheet indicating their agreement to comply with all applicable environmental regulations.
>
> **Mitigation Measure 22:** After construction, mitigation for impacts to special-status plant taxa and/or the restoration component of the proposed project shall be accompanied by a monitoring program. Monitoring shall be conducted at least twice a year (once in the spring and once in the summer) for a minimum of four years.

With the implementation of these mitigation measures any possible impacts to Special Status plants, which will be avoided by the project, will be mitigated to a less than significant level.

No Project Alternative

Sensitive plant species would not be directly impacted by the No Project Alternative. Bluff retreat would also reduce the remnant habitats which exist on the extreme western edges of the North and South Parkland. Unlike the proposed project, this alternative would not

include any restoration, and therefore would not result in beneficial effects to sensitive plant species.

Alternative Trail Alignment

The Alternative Trail Alignment would include the beneficial effects of the proposed project, such as increasing habitat for sensitive plant species.

Cumulative Impacts

Encroachment of development and public access along the California coast has presented cumulative effects to special-status plant species through reduction of available undisturbed habitat and increases in human disturbance

3.2.5.5 Sensitive Wildlife Species

Affected Environment

The CNDDB documents numerous special-status animal species (federally listed, state-listed, California Fully Protected, California Species of Special Concern, CDFW Special Animals, birds protected by the MBTA, and California Fish and Wildlife Code) as occurring within the Fort Bragg quadrangle and surrounding quadrangles. Several other species were also included for evaluation of occurrence potential based on the USFWS federal species list for Mendocino County accessed online on November 7, 2011 (see USFWS correspondence in Chapter 3 for the complete species list database query), the Audubon Society and the knowledge and experience of local biologists and previous survey results.

A total of 50 special-status animal taxa (including the categories of other nesting birds and other marine mammal categories) have been considered for this EIR. The following animal taxa were determined to have potentially suitable habitat within the BSA (other than simply foraging habitat).

Environmental Consequences

Ten Mile Shoulderband Snail

No Ten Mile shoulderband snails (*Noyo intersessa*) have been reported during surveys in or near the BSA to date. These snails contained features similar to Helminthoglypta spp. of shoulderband snails common along the California coast. It is unknown if these snails are the same snails that have been previously identified as *Noyo intersessa*. No snails were found in the Phase II project area.

Northern Red-legged Frog

Northern red-legged frog (NRLF) (*Rana aurora*) has been documented to occur within the Mill Pond. DNA analysis of red-legged frogs in wetlands sampled at the Georgia-Pacific Mill Pond 8 indicates these frogs are northern red-legged frogs and **not** the federally threatened California red-legged frog (*Rana draytonii*) (Biosearch Associates 2010).

Other seasonal wetland habitat within the BSA could provide very marginal habitat for NRLF. Significant impacts to NRLF could potentially include injury or mortality in freshwater marsh or other moist uplands used as dispersal habitat, resulting from access and use of equipment, worker foot-traffic, and implementation of project components; however measures have been included in this EIR so that potential significant impacts would be avoided.

Double-crested Cormorant and Black Oystercatcher

The discussions of double-crested cormorant (*Phalacrocorax auritus*) and black oystercatcher (*Haematopus bachmani*) have been combined because these species have similar habitat requirements, impacts, and avoidance/minimization measures. No active double-crested cormorant or black oystercatcher nests were observed during 2009 surveys of the BSA. A foraging oystercatcher was observed in a rocky shore area in October 2009 and has been observed off shore of the site since that time.

The proposed construction of cable stairways to the beach at Fort Bragg Landing will impact some coastal bluff habitat, but these are not known cormorant or black oystercatcher nesting locations and no nesting has been observed at these locations.

Significant impacts could result from noise and disturbance associated with construction equipment and personnel, which could alter nesting as well as roosting and foraging behaviors. Additional indirect impacts from increased user access along the proposed trail could also result; however, birds nesting along these coastal cliff areas have presumably become at least somewhat acclimated to occasional human disturbances associated with trail use or activities at the Mill Site. In addition, the project includes interpretive signage warning people to stay off the coastal monuments and to refrain from disturbing birds.

Northern Harrier, Bryant's Savannah Sparrow, White-tailed Kite, and other Nesting Birds

The northern harrier (*Circus cyaneus*) and Bryant's savannah sparrow (*Passerculus sandwichensis alaudinus*) are considered SSC by the CDFW. The white-tailed kite (*Elanus leucurus*) is considered a "Fully Protected Species" by the State of California. The numerous other bird species protected by the MBTA and California Fish and Wildlife Code have also been addressed as a group in this section as they would be subjected to similar potential project-related impacts and would benefit from similar avoidance and minimization measures.

Construction during the northern harrier nesting season in grassland and freshwater marsh habitats could impact nesting northern harriers and Bryant's savannah sparrows. Construction during the white-tailed kite nesting season could impact nesting birds.

Implementation of the proposed project would also produce beneficial effects by creating five acres of new potential habitat.

Numerous mitigation measures which address impacts to these sensitive wildlife species are recommended and included below. With implementation of these measures, no significant impacts to other sensitive wildlife species would result.

Burrowing Owl

Phase I and II protocol winter season surveys for burrowing owl were completed for all areas of the BSA. Suitable habitat was found within the BSA; however, large contiguous tracts of the project site were deemed unsuitable for burrowing owls. This was due largely to the extensive asphalt surfaces, lack of perching spots and some wet areas (Stephens 2010). No known active burrows or owls have been found in the Phase II project area.

Western Snowy Plover

No western snowy plovers (*Charadrius alexandrinus nivosus*) have been observed during surveys of the BSA. There is no potential nesting habitat in the Phase II area; as high tides inundate the entire beach space of this site and therefore preclude nesting. As a result, the proposed project would not result in significant impacts to Western Snowy Plover. No mitigation measures are required. No Snowy Plover critical habitat occurs within the BSA.

Marine Mammals

Marine mammals such as the harbor seal (*Phoca vitulina*) and California sea lion (*Zalophus californianus*) are commonly observed on the shore within MacKerricher State Park and in surrounding areas (Warner et al. 2008). Harbor seals use nearby rocky areas along the coast as pupping/nursing habitat; other rocky and sandy beach areas are used as haul-outs by harbor seal and California sea lion. The Stellar (northern) sea lion (*Eumetopias jubatus*), which is much less likely to use this area, has the potential to use rocky islands for the same purpose, although this is expected to be highly unlikely as this species is locally very rare and suitable haul-out areas for this species are located outside of the BSA. One possible rookery exists in the inlet south of Noyo Headland Preserve (although only one known documented marine mammal birth has occurred here). Additionally, Marine Mammal Center volunteers have observed and/or rescued marine mammals that have hauled out near the BSA (Warner et al. 2008).

As designed, the proposed project would not adversely affect any known haul-out locations for marine mammals. Additionally, it is possible that some form of Level B Harassment (previously discussed) of marine mammals manifested in indirect effects of noise impacts could result from implementation of the proposed project; however this is anticipated to be minimal, as marine mammals in the area are at least somewhat acclimated to the ongoing human disturbances in and near coastal settings in the region, project activities would be mainly restricted to bluff areas and areas inward, and construction methods would largely involve hand-work. Mitigation measures have been included for the proposed project that would reduce impacts to less than significant.

No Project Alternative

Public access to the site must be permitted, as the Coastal Conservancy funds to acquire the property mandate public access. Public access with no constructed project would likely result in long-term disturbances to wildlife at the bluff edge and rocky shorelines of the Mill Site. Impacts would potentially be greater than the proposed project as access would not be directed and controlled by the location of the trail improvements, signage, and resource fencing. Unlike the proposed project, this alternative would not include any restoration, and therefore would not result in beneficial impacts to biological resources.

Alternative Trail Alighnment

This alternative would marginally reduce impacts to wildlife species because this alternative would include the beneficial effects to wildlife since it would increase habitat.

Avoidance, Minimization, and/or Mitigation Measures

Construction of the Fort Bragg Coastal Trail has the potential to impact shoulderband snails, and Northern Red Legged Frogs (NRLF)

> **Mitigation Measure 23**: If any native shoulderband snails are observed during ground disturbance activities in suitable habitat, such snails shall be relocated by a

qualified biologist to suitable habitat outside of the area of disturbance to avoid/minimize injury or mortality.

Construction during the double-crested cormorant and black oyster catcher nesting seasons could impact nesting birds.

Mitigation Measure 24: Prior to construction, nest surveys for double-crested cormorant and oyster catchers shall be conducted by a qualified biologist in areas where construction is proposed to occur within 200 ft. of tidal and bluff habitats.

Mitigation Measure 25: Prior to and during construction, if active double-crested cormorant nests are observed, a minimum 200-ft (61-m) buffer/exclusion zone delineated by highly visible flagging/stakes shall be established by a qualified biologist around each active nest until all young have fledged; a 100-ft (30.5-m) exclusion zone is required for active black oystercatcher nests. During construction within 200 ft. of tidal and bluff habitats, a qualified biologist shall conduct weekly monitoring visits to assess the present status of double-crested cormorant breeding activity and establish exclusion zones as needed (these monitoring visits must be conducted for construction within 100 ft. of tidal and bluff habitats for black oystercatcher).

Construction of the proposed project could impact protected bird species such as the northern harrier, Bryant's savannah sparrow, white-tailed kite, and other migratory birds which utilize the project site.

Mitigation Measure 26: Prior to and during construction, if project activities cannot feasibly avoid the typical nesting bird season (defined as occurring from March 15 to July 31 for most bird species), weekly bird surveys of the project areas that will be under construction shall be conducted by a qualified biologist with experience in conducting breeding bird surveys, beginning 30 days prior to the disturbance of suitable nesting habitat. If a protected native bird nest is found, clearance/construction will not occur within an appropriate buffer/exclusion zone (determined by a qualified biologist) delineated by highly visible flagging/stakes until August 1, or until any active nests are vacated and there is no evidence of a second attempt at nesting.

Mitigation Measure 27: Prior to and during construction, if active northern harrier nests are observed, a minimum 300-ft buffer/exclusion zone delineated by highly visible flagging/stakes shall be established by a qualified biologist around each active nest until all young have fledged. During construction within 300 ft. of grassland and freshwater marsh habitats during the northern harrier breeding season, a qualified biologist shall conduct weekly monitoring visits to assess the present status of breeding activity and establish exclusion zones as needed.

Mitigation Measure 28: Prior to and during construction, if active white-tailed kite nests are observed, a minimum 300-ft buffer/exclusion zone delineated by highly visible flagging/stakes shall be established by a qualified biologist around each active nest until all young have fledged.

Mitigation Measure 29: Prior to and during construction, a training component regarding general nesting bird protection and conservation shall be integrated into an environmental training session for construction personnel working on the project, to be conducted by a qualified biologist. Topics covered shall include site specific environmental issues and sensitive natural resources, avoidance of disturbance, relevant environmental regulations, and BMPs identified for the project. All

construction personnel shall be required to attend the environmental training session for sensitive biological resources and sign an attendance sheet indicating their agreement to comply with all applicable environmental regulations.

Construction of the proposed project has the potential to disrupt/disturb a sensitive marine mammal species during pupping season.

Mitigation Measure 30: Prior to construction, a component including general marine mammal protection and conservation shall be integrated into an environmental training session for construction personnel working on the project, to be conducted by a qualified biologist. Topics covered shall include site specific environmental issues and sensitive natural resources, avoidance of disturbance, relevant environmental regulations, and BMPs identified for the project. All construction personnel shall be required to attend the environmental training session for sensitive biological resources and sign an attendance sheet indicating their agreement to comply with all applicable environmental regulations.

Mitigation Measure 31: Prior to construction, a qualified biologist shall conduct surveys to identify potential marine mammal haul-out sites in the vicinity of the BSA. Binoculars or a spotting scope shall be used for surveying potential haul-out locations, with implementation of exclusion zones as appropriate by a qualified biologist. If project activities will occur within designated exclusion zones, the qualified biologist shall survey potentially affected beach areas for presence of marine mammals. The surveys shall occur the day before work activities are scheduled to commence, with both a morning and afternoon count. If a marine mammal is found to be hauled out within a defined exclusion zone, project construction utilizing heavy equipment shall not occur within that exclusion zone until the marine mammal has departed. The condition of any marine mammal observed shall be noted. Marine Mammal Center personnel shall be contacted if the animal appears to be injured or in distress.

Mitigation Measure 32: During construction, monitoring by a qualified biologist shall occur every morning work with heavy equipment is scheduled to occur for the proposed project within designated exclusion zones. The qualified biologist shall have the authority to halt work if it is determined that project activities are impacting marine mammals.

Cumulative Impacts

Encroachment of development and public access along the California coast has presented cumulative effects to native snail species, NRLF, bird species, and marine mammals, and other coastal species through reduction of available undisturbed habitat and increases in human disturbance. Burrowing owls for example have been impacted historically by the spread of iceplant at the Glass Beach Headlands.

Based on the discussions above, construction-related impacts to sensitive wildlife species and their habitat are anticipated to be minimal. Preconstruction surveys and relocation (if necessary) would reduce impacts to a less than significant level. Construction-related effects to nesting birds related to the proposed project can be avoided or minimized with preconstruction surveys and establishment of exclusion zones.

The proposed trail would facilitate public access to coastal habitats within the BSA but restrict access to specific areas. In addition, the impacts of human disturbance can be further avoided or minimized through education via interpretive/safety signage and by

ensuring placement of beach access points away from potential habitat, including bird nesting areas.

Due to the historic uses of the Mill Site, there is limited habitat for wildlife species, particularly sensitive wildlife other than at the bluff edge (where the proposed project is located).

It should be noted that the proposed project would ultimately allow for substantially greater public access to the bluff edge on the Mill Site, and to the beaches below – places where recent activity has been limited to decommissioning and remediation activities. Therefore, the proposed project would potentially result in indirect human disturbance of birds and other species which utilize the bluff edge and beaches. However, given the fencing, interpretive signage, and other measures proposed to reduce impacts, such as the boardwalks and dedicated viewing areas, these potential cumulative effects would not be adverse.

Chapter 4 –
Alternatives Analysis

4.1 Introduction

The California Environmental Quality Act (CEQA), §15126.6(a), requires an Environmental Impact Report (EIR) to "describe a reasonable range of alternatives to a project, or to the location of a project, which could feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project." The CEQA Guidelines provide direction for the discussion of alternatives to the proposed project. This section also requires:

- A setting forth of alternatives that "...shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project." [15126.6(f)]

- Discussion of the "No Project" alternative, and "...If the environmentally superior alternative is the "no project" alternative, the EIR shall also identify an environmentally superior Alternative Trail Alignmentmong the other alternatives." [15126.6(e)(2)]

- Discussion and analysis of alternative locations "…that would avoid or substantially lessen any of the significant effects of the project" only these need to be considered for inclusion in the EIR. [15126.6(f)(2)(A)]

- "Prior to approval of the proposed subsequent project, the lead agency shall incorporate all feasible mitigation measures or feasible alternatives appropriate to the project as set forth in the Master EIR and provide notice in the manner required by §15087." [15177 (d)]

Given the CEQA mandates listed above, this section (1) describes the range of reasonable alternatives to the project; (2) examines and evaluates resource issue areas where significant adverse environmental effects have been identified and compares the impacts of the alternatives to those of the proposed project; and, (3) identifies the Environmentally Superior Alternative.

4.2 Alternatives Selection

In defining feasibility of alternatives the CEQA Guidelines state: "Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site." Through the scoping process, if an alternative was found to be infeasible, as defined above, then it was dropped from further consideration. In addition, CEQA states that alternatives should "…attain most of the basic objectives of the project..."

Significant Impacts Resulting from the Proposed Project

Generally, the alternatives analysis considers alternatives that would avoid or reduce, to the maximum extent feasible, the identified unavoidable impacts. However it was determined that the proposed project would not result in any unavoidable impacts. Therefore the alternatives considered focused on avoiding or reducing the significant impacts which require the most intensive mitigation measures. They include:

1. Biological Resources. Impacts to ESHA, jurisdictional features, sensitive plant species, and sensitive wildlife.

4.3 Alternatives Considered

Potential alternatives to the proposed project are limited due to the relatively narrow corridor available for development and the type of project proposed (i.e., coastal trail). Criteria used to develop potential alternatives included the potential of the project to avoid impacts to sensitive resources and the human environment, whether or not it could generally meet the project objectives, and costs. Specific consideration was given to potential alternatives that appeared to avoid or minimize impacts to ESHAs, cultural resources, and drainage.

At an early stage in the development of alternatives, various "inland realignment" alternatives, which would move the components of the project farther east onto the Mill Site, were considered in an effort to avoid cultural resource impacts and the effects of bluff erosion. However, the heavy distribution of cultural resources which exists at the North and South Parkland are found throughout much of the Mill Site as well; therefore no substantial reduction in cultural resources potential impacts would be achieved. In addition, the Mill Site includes a number of other constraints, including soil contamination and ongoing remediation activities that are expected to continue through at least 2015. An inland alignment would require a more intensive stormwater management system, due to the conditions at the Mill Site. Further, because the project is a coastal trail, trail users would have a high expectation that the trail would provide coastal access; therefore an inland realignment would only invite users to develop a network of unauthorized volunteer trails to the bluff edge and beach, as has happened at the Glass Beach Headlands, thereby directly or indirectly impacting sensitive biological and cultural resources.

Ultimately, only two feasible alternatives, the No Project (No Action) Alternative, Alternative Trail Alignment, appeared to meet the criteria. The Alternative Trail Alignment shares many of the design features of the proposed project, but is scaled down. Both alternatives are described in more detail below.

4.3.1 No Project Alternative

The No Project Alternative would include none of the components of the proposed project. If the project site were not developed, stormwater erosion and bluff retreat would continue as it does currently, resulting in additional asphalt and other construction materials entering the ocean. Expansion of nonnative invasive species across the Mill Site Parkland areas would continue. Because the Mill Site is nearly completely decommissioned, trespass may increase, and the development of volunteer trails and beach access points would increase.

4.3.2 Alternative Trail Alignment A

The Alternative would reduce the length of the trail development at the Mill Pond area from 0.8 miles to 0.5 miles. As a result, there would be a reduction in signage and benches necessary. The proposed cable stairs to the beach would remain.

4.3.2.1 Johnson Point

For the Alternative Trail Alignment A, the proposed soft trails and improvements on Johnson Point would remain as proposed.

4.3.2.2 Earthwork and Areas of Disturbance

The earthwork required to construct the Reduced Project is less than the proposed project, however the reductions are relatively limited. The largest reductions in earthwork would be associated with not building the Trail around the Mill Pond. The areas of permanent disturbance would be reduced compared to the proposed project.

4.4 Alternatives Impacts Analysis

4.4.1 No Project Alternative

Aesthetic/Visual Resources

Under the No Build Alternative, no physical improvements would occur, including restoration actions. This alternative would not result in adverse impacts; however it would also not result in the beneficial impacts which include increased access to scenic vistas and enhancement of the onsite aesthetic resources.

Air Quality

The No Project Alternative would not include any construction activities and therefore would not result in any adverse effects to air quality.

Biological Resources

Biological resources would not be directly impacted by the No Project Alternative. Access to the site must be permitted, as the Coastal Conservancy funds to acquire the property mandate public access. Public access with no constructed project would likely result in long-term disturbances to wildlife species found at the bluff edge and rocky shorelines. Impacts would potentially be greater than the proposed project as access would not be directed and controlled by the location of the trail improvements, signage, and resource fencing. Unlike the proposed project, this alternative would not include any restoration, and therefore would not result in beneficial impacts to biological resources.

Climate Change

The No Project Alternative would not result in significant greenhouse gas emissions or require substantial amounts of energy as nothing would be constructed.

Cultural Resources

Similar to the project, the No Project Alternative would not result in direct or indirect impacts to cultural resources.

Geology and Soils

The No Project Alternative would not include any improvements within the Mill Site and therefore no adverse impacts would occur there. Erosion of the bluff would occur at rates similar to the present rates.

Hazards and Hazardous Materials

This alternative would not require the use of hazardous materials. No significant impacts would result. Access would not be permitted until the remediation of the Mill Pond is completed and therefore no impacts to human health are likely to occur due to the no project alternative.

Hydrology and Water Quality

The No Project Alternative would not change hydrology or water quality.

Land Use

The No Project Alternative would not include any changes to community connectivity. It would not change land use designations or types, and therefore would not conflict with any applicable policies. No impact to land use would result.

Transportation and Circulation

This alternative would not include construction activities, and therefore would not include short-term impacts. The No Build Alternative would not change existing traffic volumes or distribution. No adverse impacts would result. It would also not include the beneficial impacts associated with the expansion of the alternative transportation network in Fort Bragg.

4.4.2 Alternative Trail Alignment A

Aesthetic/Visual Resources

From a visual resources perspective, this alternative would result in similar impacts as the proposed project. This alternative would result in beneficial impacts similar to the proposed project as it would restore native habitat.

Air Quality

The Alternative would require less construction; however it would still include the majority of the earthwork and soil hauling described previously for the proposed project. Impacts and mitigation measures would be similar to the proposed project.

Biological Resources

This alternative might reduce direct impacts to biological resources as it would have a smaller area of permanent disturbance. The Alternative would include the beneficial impacts of the proposed project, such as increasing habitat.

Climate Change

Similar to the proposed project, the Alternative would have less than significant climate change impacts. The production of greenhouse gases (GHG) would occur primarily during construction, and be short-term. The trail system would provide an alternative to using the automobile to get from north of Pudding Creek and the City of Fort Bragg, potentially reducing automobile use to some degree.

Cultural Resources

The Alternative would also have no direct permanent impacts to cultural resources.

Geology and Soils

The Alternative Trail Alignment would have impacts similar to the proposed project except in regard to bluff erosion.

Hazards and Hazardous Materials

This alternative is located within the same project area, and therefore the remediation clearance discussed for the proposed project would also apply to this Alternative Trail Alignments would the soil management plan. No adverse impacts would result.

Hydrology and Water Quality

In total, the Alternative Trail Alignment, because of the significant restoration proposed would have similar beneficial impacts to the proposed project.

Land Use

The Alternative Trail Alignment would exist within the same land use designations and include the same land use (i.e., recreation). Similar to the proposed project, this alternative would potentially connect portions of the community, not divide them, and is generally consistent with applicable policy.

Transportation and Circulation

The Alternative would include the restoration components of the proposed project and therefore the total number of truck trips would be similar. Because this alternative would not include as much trail construction, it may result in marginally fewer employee trips and construction activity. The reduced trail component would potentially attract fewer users, especially handicapped individual, as compared to the proposed project, because a portion of this alignment would not be ADA accessible.

This alternative would include the same number of parking spaces as the proposed project. No adverse impacts would result.

4.5 Environmentally Superior Alternative

CEQA requires the alternatives section of an EIR to describe a reasonable range of alternatives to the project that avoid or substantially lessen any of the significant effects identified in the EIR analysis while still attaining most of the basic project objectives. The alternative that most effectively reduces impacts while meeting project objectives should be considered the "environmentally superior alternative." In the event that the No Project Alternative is considered the environmentally superior alternative, the EIR should identify an environmentally superior Alternative Trail Alignmentmong the other alternatives.

In this EIR the No Project Alternative results in marginally fewer environmental impacts than the proposed project or the project alternatives, although it does not meet any of the project objectives, nor does it produce any of the beneficial impacts of the proposed project, such as habitat restoration and public access.

Neither the proposed project nor either alternative results in significant, unavoidable impacts. Despite the smaller scale of Alternative Trail Alignment it only marginally reduces the intensity of impacts. Mitigation for biological resources would still be required.

Based strictly on an analysis of the relative environmental impacts, neither the proposed project, the Alternative Trail Alignment, nor the No Project Alternative is clearly an environmentally superior alternative. The proposed project, by default, would more effectively meet all of the project objectives and two of them in particular:

1(c). "Establishment of a designated trail system that maximizes the user's contact with the coastline and ocean views while avoiding or minimizing impacts to sensitive natural and cultural resources; and

3. "Incorporate the trail design and comments from the three-day trails workshop held by the City of Fort Bragg in September 2006 and three follow-up meetings with the City Council."

As a result, the proposed project is considered the Environmentally Superior Alternative.

Chapter 5 – Mitigation Monitoring Program

5.1 Statutory Requirement

When a Lead Agency makes findings on significant environmental effects identified in an Environmental Impact Report (EIR), the agency must also adopt a "reporting or monitoring program for the changes to the project which it has adopted or made a condition of approval in order to mitigate or avoid significant effects on the environment" (Public Resources Code §21081.6(a) and California Environmental Quality Act [CEQA] Guidelines §15091(d) and §15097). The Mitigation Monitoring Program (MMP) is implemented to ensure that the mitigation measures and project revisions identified in the EIR are implemented. Therefore, the MMP must include all changes in the proposed project either adopted by the project proponent or made conditions of approval by the Lead or Responsible Agency.

5.2 Administration of the Mitigation Monitoring Program

The City of Fort Bragg (City) is the Lead Agency responsible for the adoption of the MMP. Until mitigation measures have been completed, the Lead Agency remains responsible for ensuring that the implementation of the measure occurs in accordance with the program. The City will retain responsibility for implementation of all mitigation measures for the City's portion of the project.

5.3 Mitigation Measures and Monitoring Program

Table 5-1 on the following pages is structured to enable quick reference to mitigation measures and the associated monitoring program based on the environmental resource. The numbering of mitigation measures correlates with numbering of measures found in the analysis chapter of this Subsequent EIR (refer to Chapter 3).

In some cases mitigation measures recommended in the Subsequent EIR are relevant only to particular components of the project. Efforts have been made in Table 5-1 to identify any measures that are only applicable to an individual component.

The Alternative Trail Alignment reduces the scope of the proposed project; however, it does not result in any new impacts. Therefore, the measures below would be applicable to the Alternative Trail Alignments well.

Description of Impact	Mitigation Measure Summary	Applicant Responsibilities	Party Responsible for Verification	Method of Verification	Verification Timing
Land Use					
The construction of the project may limit the adjacent property owner access to the Mill Pond dam for maintenance purposes	**Mitigation Measure 1:** Prior to approval of the Building Permit, the applicant shall record an access easement providing access for on-going maintenance of the Mill Pond Dam, for as long as the dam is in operation.	Complete easement description	Community Development Department	Deeded Easement	Prior to Construction
Cultural Resources					
The construction project could have impacts to unknown cultural resources.	**Mitigation Measure 2:** To protect cultural resources the City of Fort Bragg shall implement this Environmentally Sensitive Area (ESA) action plan prior to, during and after construction, as applicable. Including the following measures: **Prior to Construction** 1) Prior to final design, an archaeologist and Tribal Monitor shall collaborate to complete a comprehensive survey of the Johnson Parcel/Solider Point, including shovel test pits, as the archaeological sites across this landscape are poorly understood. The work plan for this archaeological survey will be reviewed by both the City of Fort Bragg and Sherwood Valley Band of Pomo's Tribal Council and finalized prior to the commencement of this work. Based on this recognizance, the City shall work with the Sherwood Valley Band of Pomo Tribal Council to determine the exact placement of the trail spur and bench locations in order to minimize and/or eliminate impacts to cultural resources. Also, as the landscape is currently covered in vegetation, the area proposed for the main trail alignment and	Prepare and implement ESA Action Plan in consultation with SVR.	City of Fort Bragg Community Development Department	Plan	Prior to and during construction

	spurs shall be mowed prior to the archaeological survey to allow for a thorough investigation of this area. The City will work with the SVBP Tribal Council to develop a capping strategy for the trail and trail spurs if one is necessary to cover archaeological resources. The concrete pad for the bench shall be designed so that it can be placed on top of ground, without soil disturbance. Fill will be added around the concrete pad to meet grade. 2) Cultural resources sites will be noted in the construction drawings as Zone 1 areas. Ground disturbance will not be permitted in these areas during construction. The City will consult with SVR at the 90% design stage to ensure that this mitigation measure is carried out. 3) Tribal monitors shall attend relevant hand-off meetings with construction contractors to ensure that ESA commitments are addressed. 4) The importance of ESA action plans will be discussed with construction personnel and it will be stressed that no native soil disturbing construction activity should occur within the ESA. Additionally, construction personnel will be informed of historic preservation laws that protect archaeological sites against any disturbance or removal of artifacts. 5) The tribal monitors will be notified at least three weeks in advance of ground disturbing construction activities within ESA to ensure they will be available to monitor/review installation of ESA protection fencing. 6) One week prior to initiating any native soils disturbance in non-fill areas, SVR and Native American Monitors will be notified. **During Construction** 7) Native American monitors will be required where ground disturbing activities occur in areas with undisturbed soils. Areas of extensive fill, such as the beach berm, former log pond area will not require monitoring.				

	8) The Community Development Director will notify the State Historic Preservation Officer within 48 hours of any ESA violation or unanticipated discovery to determine how it will be addressed. Consultation with Native Americans shall also be included. **After Construction** 9) The Native American Monitor shall supervise removal of the temporary fencing after construction. 10) The project will be monitored on an annual basis for five years upon complete of construction to ensure that sites are not disturbed or impacted by visitors to the site or trail operations. Corrective measures shall be taken if any impacts are noted.				
Project construction and restoration activities have the potential to impact unknown cultural resources.	**Mitigation Measure 3:** The project will follow the "Post Review Discovery" agreement with SVBP if cultural materials or human remains are discovered during construction.	Follow Post discovery Review Agreement	City of Fort Bragg Community Development Department	Native American Monitoring	Prior to and during construction
Physical Environment: Water Quality and Storm Water Runoff					
The proposed project has the potential to impact human health of visitors during high surf conditions.	**Mitigation Measure 4:** The City shall install signage to warn people of high surf conditions during storm events along all improvements on the Beach Berm.	Install Signage	Public Works Department	Bid Packet	Prior to and during construction
	Mitigation Measure 5: The City shall temporarily close the berm section of the trail and access to the beach in high surf conditions.	Install barriers	Public Works Department	Visual	After Construction
The proposed project has the potential to impact human health of visitors during a seismic event.	**Mitigation Measure 6:** Construction of the Preferred Trail Alignment may proceed prior to the stabilization of the Mill Pond Dam and crib wall. Construction of Alternative Trail Alignment may be undertaken after the seismic risk of the dam is reduced to the satisfaction of the appropriate regulatory authority.	Delay construction of Alternative Trail Alignment until after seismic dangers from	Public Works Department	Bid Packet	Prior to construction

		Mill Pond are eliminated			
Hazardous Materials					
The proposed project has the potential to impact human health of visitors if construction proceeds prior to environmental remediation of the site (operable Unit E)	**Mitigation Measure 7:** The components of the proposed project that are located within the Mill Pond Complex area shall be constructed after implementation of the Remedial Action Plan for Operable Unit E in order to ensure that the site is remediated to a level that reduces risks to human health to a less than significant level for passive recreation users and construction works.	Schedule construction activities after remediation is complete	Public Works Department	Bid Packet	Prior to construction
The proposed project has the potential to impact human health of construction workers.	**Mitigation Measure 8:** DTSC may require, through its CEQA document for the RAP for Operable Unite E, that construction projects which include grading must comply with a Soil Management Plan (SMP) prepared for the site. Compliance with the SMP will also be a condition of approval for the grading permit for the site.	Include SMP, if required, in Bid Packet	Department of Toxics & Substance Control	Inspection & Bid Packet	During Construction
Air Quality					
The proposed project has the potential to impact air quality compliance with regard to PM-10.	**Mitigation Measure 9:** The project contractor, on behalf of the project applicant, shall prepare a dust control plan for construction activities at the project site pursuant to the requirements of the MCAQMD. The project contractor shall be responsible for ensuring that all adequate dust control measures are implemented in a timely manner during all phases of construction and maintenance activities at the project site.	Prepare and implement a dust control plan for construction activities	City of Fort Bragg	Review plan and onsite monitoring	Prior to and during construction
Biological Resources					

ESHA natural communities could be temporarily impacted during construction and restoration activities.	**Mitigation Measure 10:** During construction, permanent and temporary impacts to ESHA natural communities shall be avoided/minimized to the extent feasible. The ESHA natural communities which have the potential to be disturbed by the project shall be shown on site plans. Areas in which grading or other disturbance is to occur shall be defined on-site by readily identifiable barriers that will protect the surrounding native habitat areas. Construction equipment and other vehicles shall be prevented from entering ESHA natural communities to be avoided through the use of exclusion zones or other barriers.	Avoid/minimize permanent and temporary ESHA impacts.	City of Fort Bragg	Review project plans, inspect installation for accuracy	Prior to and during construction
	Mitigation Measure 11: The trail alignment through Johnson point shall be installed to avoid rare plants. Prior to mowing for the trail and installation of the habitat protection fencing, which will define the trail alignment, a botanical survey will be completed and the trail alignment and benches will be placed in areas that avoid rare plants.	Avoid/minimize permanent and temporary ESHA impacts.	City of Fort Bragg	Review project plans, inspect installation for accuracy	Prior to and during construction
	Mitigation Measure 12: During and following construction, drainage control methods shall be incorporated into the project in a manner that minimizes erosion, sedimentation, and the discharge of harmful substances into aquatic habitats during and after construction.	Avoid/minimize permanent and temporary stormwater impacts.	City of Fort Bragg	Review project plans, inspect installation for accuracy	Prior to and during construction
	Mitigation Measure 13: Prior to construction, the applicant will prepare a Hazardous Materials Response Plan or equivalent to allow for a prompt and effective response to any accidental spills. All workers will be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur. All project-related hazardous materials spills within the project site will be cleaned up immediately by the contractor. Spill prevention and cleanup materials will be on-site at all times during construction.	Avoid/minimize permanent and temporary hazardous contamination impacts.	City of Fort Bragg	Review project plans, inspect installation for accuracy	Prior to and during construction
	Mitigation Measure 14: During construction, to control erosion during and after project implementation, the applicant and contractors will implement standard Best Management Practices (BMPs).	Avoid/minimize permanent and temporary stormwater impacts.	City of Fort Bragg	Review project plans, inspect installation	Prior to and during construction

				for accuracy	
	Mitigation Measure 15: During construction, the cleaning and refueling of equipment will occur only within a designated staging area and at least 65 ft. from wetlands, other waters, or other aquatic areas. This staging area will conform to BMPs applicable to attaining zero discharge of stormwater runoff. At a minimum, all equipment and vehicles will be checked and maintained on a daily basis to ensure proper operation and avoid potential leaks or spills.	Avoid/minimize permanent and temporary hazardous contamination impacts.	City of Fort Bragg	Review project plans, inspect installation for accuracy	Prior to and during construction
	Mitigation Measure 16: During construction, trash will be contained, removed from the work site, and disposed of regularly by the contractor. Following construction, all trash and construction debris will be removed from work areas.	Avoid/minimize permanent and temporary stormwater impacts.	City of Fort Bragg	Review project plans, inspect installation for accuracy	Prior to and during construction
Construction of trails could permanently impact ESHA.	**Mitigation Measure 17:** To limit unauthorized access into ESHA communities, prior to and after construction, the City of Fort Bragg shall incorporate an ESHA protection fencing plan in the final Design and Bid Packet. The fencing plan shall focus on those areas of the project where ESHA communities would most likely be subject to unauthorized access.	Avoid/minimize permanent and temporary impacts to ESHA.	City of Fort Bragg	Review project plans, inspect installation for accuracy	Prior to and during construction
Construction of the trail along could result in temporary impacts to wetlands.	**Mitigation Measure 18:** After construction the area located between the trail and adjacent wetlands within the property owned by the City of Fort Bragg shall be restored with appropriate native California habitat.	Avoid impacts to wetlands	City of Fort Bragg	Review project plans, inspect installation for accuracy	After construction
Implementation of the proposed project could directly and/or indirectly	**Mitigation Measure 19:** Prior to construction, the applicant shall implement planning to avoid impacts to special-status plant species to the extent feasible. Specific areas with special-status plant species to be avoided shall be mapped and marked with fencing, flagging, or exclusion zones to minimize the potential	Avoid/minimize permanent and temporary impacts to ESHA and	City of Fort Bragg	Review project plans, inspection	Prior to and during construction

significantly impact non-listed, special-status plant species Blasdale's bentgrass, Mendocino paintbrush, and short-leaved evax.	for unnecessarily impacting plants.	special status plants.			
	Mitigation Measure 20: Prior to construction, if special-status plants cannot be avoided and must be impacted, seed of special-status plants onsite shall be gathered from areas to be impacted for eventual reseeding after ground disturbance has been completed. If feasible, special-status plants in areas proposed for ground disturbance may be salvaged by digging up individual plants (including roots/rhizomes) for immediate transplanting and/or planting in containers for eventual replanting. Revegetation success criteria/goals for special-status plants shall be at a minimum 2:1 ratio (i.e., two plants established for each plant lost or two acres of absolute cover established for each acre of absolute cover lost) or a ratio negotiated between the City and permitting agencies based on City proposals.	Avoid/minimize permanent and temporary impacts to ESHA and special status plants.	City of Fort Bragg	Review project plans, inspection	Prior to and during construction
	Mitigation Measure 21: Prior to and during construction, a component including special-status plants and conservation shall be integrated into an environmental training session for construction personnel working on the project, to be conducted by a qualified biologist. Topics covered shall include site-specific environmental issues and sensitive natural resources, avoidance of disturbance, relevant environmental regulations, and standard BMPs identified for the project. All construction personnel shall be required to attend the environmental training session for sensitive biological resources and sign an attendance sheet indicating their agreement to comply with all applicable environmental regulations.	Avoid/minimize permanent and temporary impacts to ESHA and special status plants.	City of Fort Bragg	Review project plans, inspection	Prior to and during construction
	Mitigation Measure 22: After construction, mitigation for impacts to special-status plant taxa and/or the restoration component of the proposed project shall be accompanied by a monitoring program. Monitoring shall be conducted at least twice a year (once in the spring and once in the summer) for a minimum of four years.	Avoid/minimize permanent and temporary impacts to ESHA and special status plants.	City of Fort Bragg	Monitoring	After construction

Construction of the proposed project has the potential to impact shoulderband snails.	**Mitigation Measure 23:** If any native shoulderband snails are observed during ground disturbance activities in suitable habitat, such snails shall be relocated by a qualified biologist to suitable habitat outside of the area of disturbance to avoid/minimize injury or mortality.	Avoid/minimize permanent and temporary impacts to special status animals.	City of Fort Bragg	Inspection	Prior to and during construction
Construction during the double-crested cormorant and black oyster catcher nesting seasons could impact nesting birds.	**Mitigation Measure 24:** Prior to construction, nest surveys for double-crested cormorant and oyster catchers shall be conducted by a qualified biologist in areas where construction is proposed to occur within 200 ft. of tidal and bluff habitats.	Avoid/minimize permanent and temporary impacts to special status birds.	City of Fort Bragg	Review project plans, inspection	Prior to and during construction
	Mitigation Measure 25: Prior to and during construction, if active double-crested cormorant nests are observed, a minimum 200-ft (61-m) buffer/exclusion zone delineated by highly visible flagging/stakes shall be established by a qualified biologist around each active nest until all young have fledged; a 100-ft (30.5-m) exclusion zone is required for active black oystercatcher nests. During construction within 200 ft. of tidal and bluff habitats, a qualified biologist shall conduct weekly monitoring visits to assess the present status of double-crested cormorant breeding activity and establish exclusion zones as needed (these monitoring visits must be conducted for construction within 100 ft. of tidal and bluff habitats for black oystercatcher).	Avoid/minimize permanent and temporary impacts to special status birds.	City of Fort Bragg	Review project plans, inspection	Prior to and during construction
Construction of the proposed project could impact protected bird species such as the northern harrier, Bryant's savannah sparrow, white-tailed kite, and other migratory birds which utilize the project site.	**Mitigation Measure 26:** Prior to and during construction, if project activities cannot feasibly avoid the typical nesting bird season (defined as occurring from March 15 to July 31 for most bird species), weekly bird surveys of the project areas that will be under construction shall be conducted by a qualified biologist with experience in conducting breeding bird surveys, beginning 30 days prior to the disturbance of suitable nesting habitat. If a protected native bird nest is found, clearance/construction will not occur within an appropriate buffer/exclusion zone (determined by a qualified biologist) delineated by highly visible flagging/stakes until August 1, or until any active nests are vacated and there is no evidence of a second attempt at nesting.	Avoid/minimize permanent and temporary impacts to special status birds.	City of Fort Bragg	Field Survey	Prior to and during construction

Mitigation Measure 27: Prior to and during construction, if active northern harrier nests are observed, a minimum 300-ft buffer/exclusion zone delineated by highly visible flagging/stakes shall be established by a qualified biologist around each active nest until all young have fledged. During construction within 300 ft. of grassland and freshwater marsh habitats during the northern harrier breeding season, a qualified biologist shall conduct weekly monitoring visits to assess the present status of breeding activity and establish exclusion zones as needed.	Avoid/minimize permanent and temporary impacts to special status birds.	City of Fort Bragg	Field Survey	Prior to and during construction
Mitigation Measure 28: Prior to and during construction, if active white-tailed kite nests are observed, a minimum 300-ft buffer/exclusion zone delineated by highly visible flagging/stakes shall be established by a qualified biologist around each active nest until all young have fledged.	Avoid/minimize permanent and temporary impacts to special status birds.	City of Fort Bragg	Field Survey	Prior to and during construction
Mitigation Measure 29: Prior to and during construction, a training component regarding general nesting bird protection and conservation shall be integrated into an environmental training session for construction personnel working on the project, to be conducted by a qualified biologist. Topics covered shall include site specific environmental issues and sensitive natural resources, avoidance of disturbance, relevant environmental regulations, and BMPs identified for the project. All construction personnel shall be required to attend the environmental training session for sensitive biological resources and sign an attendance sheet indicating their agreement to comply with all applicable environmental regulations.	Avoid/minimize permanent and temporary impacts to special status birds.	City of Fort Bragg	Training Completed	Prior to and during construction

Construction of the proposed project has the potential to disrupt/disturb a sensitive marine mammal species during pupping season.	**Mitigation Measure 30:** Prior to construction, a component including general marine mammal protection and conservation shall be integrated into an environmental training session for construction personnel working on the project, to be conducted by a qualified biologist. Topics covered shall include site specific environmental issues and sensitive natural resources, avoidance of disturbance, relevant environmental regulations, and BMPs identified for the project. All construction personnel shall be required to attend the environmental training session for sensitive biological resources and sign an attendance sheet indicating their agreement to comply with all applicable environmental regulations.	Avoid/minimize permanent and temporary impacts to marine mammals.	City of Fort Bragg	Training Completed	Prior to construction
	Mitigation Measure 31: Prior to construction, a qualified biologist shall conduct surveys to identify potential marine mammal haul-out sites in the vicinity of the BSA. Binoculars or a spotting scope shall be used for surveying potential haul-out locations, with implementation of exclusion zones as appropriate by a qualified biologist. If project activities will occur within designated exclusion zones, the qualified biologist shall survey potentially affected beach areas for presence of marine mammals. The surveys shall occur the day before work activities are scheduled to commence, with both a morning and afternoon count. If a marine mammal is found to be hauled out within a defined exclusion zone, project construction utilizing heavy equipment shall not occur within that exclusion zone until the marine mammal has departed. The condition of any marine mammal observed shall be noted. Marine Mammal Center personnel shall be contacted if the animal appears to be injured or in distress.	Avoid/minimize permanent and temporary impacts to Marine Mamals.	City of Fort Bragg	Monitoring	Prior to and during construction
	Mitigation Measure 32: During construction, monitoring by a qualified biologist shall occur every morning work with heavy equipment is scheduled to occur for the proposed project within designated exclusion zones. The qualified biologist shall have the authority to halt work if it is determined that project activities are impacting marine mammals.	Avoid/minimize permanent and temporary impacts to Marine Mamals.	City of Fort Bragg	Monitoring	During construction

Chapter 6 – Comments and Coordination

6.1 Introduction

Early and continuing coordination with the general public and appropriate public agencies is an essential part of the environmental process to determine the scope of environmental documentation, the level of analysis, potential impacts and avoidance, minimization, and/or compensation measures and related environmental requirements. Agency consultation and public participation for this project have been accomplished through a variety of formal and informal methods, including: project development team meetings, interagency coordination meetings, public scoping meetings, City Council workshops and more.

This chapter summarizes the results of the City's efforts to fully identify, address, and resolve project-related issues through early and continuing coordination.

6.2 Project Development/Public Participation

Since 2006, the City has engaged the community in a wide variety of planning activities with regard to the proposed project. Outreach for the project included, but was not limited to the following:

- Three walking workshops in January and February 2010, which had 314 participants.
- A 2010 survey of neighbors within 0.5 mile of the project site and participants in the walking workshop. Fifty-four neighbors and 38 walking workshop participants completed the survey.
- A three-day design charrette in September 2006. A second design charrette in February 2010.
- Seven City Council workshops during which design alternatives and refinements were presented to City Council for City Council direction.
- Two years of consultation meetings with Sherwood valley Rancheria Tribal Council to modify the design in order to minimize impacts to cultural resources.
- Additional meetings with City Council to finalize the revised design based on negotiations with SVR.

6.3 CEQA/NEPA Scoping Process

In compliance with CEQA Guidelines, the City has taken steps to maximize opportunities to participate in the environmental process. Federal, state, regional, tribal and local governmental agencies and other interested parties were contacted to solicit comments and inform the public of the proposed project. The Notice of Preparation (NOP) and the Initial Study (IS) for the Subsequent EIR was distributed on October 3, 2014. The proposed project was described, the scope of the environmental review was identified, and agencies and the public were invited to review and comment on the NOP. A public scoping session

was held for the project on October 16, 2014, which was well attended with twenty plus participants. The close of the NOP review period was November 3, 2014. The Draft Subsequent EIR was circulated on November 14, 2014.

Agencies, organizations, and interested parties not contacted or who did not respond to the request for comments about the project during the preparation of the Draft EIR had the opportunity to comment during a 45-day public review period on the Draft EIR.

Chapter 7 – List of Preparers

This Subsequent EIR has been prepared by Marie Jones, Community Development Director of the City of Fort Bragg with assistance from SWCA Environmental Consultants (SWCA).The following is a list of individuals responsible for preparation of the EIR.

Responsibilities	EIR Preparer
Proposed Project	Marie Jones, City of Fort Bragg
Traffic and Transportation Visual / Aesthetics Water Quality and Stormwater Runoff Geology / Soils / Seismic / Topography Hazardous Waste / Materials Air Quality	Marie Jones, City of Fort Bragg
Cultural Resources	Marie Jones, City of Fort Bragg
Land Use	Marie Jones, City of Fort Bragg
Biological Environment	Matt Richmond, WRA Marie Jones, City of Fort Bragg
Document Graphics	Marie Jones, City of Fort Bragg
Technical Editing	June Lemos, City of Fort Bragg

This page intentionally left blank.

Chapter 8 – Distribution List

State of California Departments

☒ Resources
☒ Caltrans District 1
☒ Fish and Wildlife
☒ Parks and Recreation
☒ Office of Historic Preservation
☒ Sherwood Valley Rancheria
☒ Coastal Commission
☒ Air Resources Board
☒ RWQCB: Region # 1

Federal Departments

☒ Bureau of Land Management
☒ U.S Fish and Wildlife

Chapter 9 – References

9.1 References

Association of Environmental Professionals (AEP). 2010. California Environmental Quality Act 2010 Statute and Guidelines.

City of Fort Bragg. 2008. Local Coastal Program and Coastal General Plan. Online: http://city.fortbragg.com/cdd/Local%20Coastal%20Program.html. Site visited throughout 2008, 2009, and 2010.

9.1.1 Air Quality

Mendocino County Air Quality Management District (MCAQMD). 2005. PM Attainment Plan.

Bay Area Air Quality Management District (BAAQMD). 2010. CEQA Guidelines. June 2010.

9.1.2 Biological Resources

Acton Mickelson Environmental (AME). 2006. Rocky Intertidal Environmentally Sensitive Habitat Engineering and Biological Assessment for Appeal No. A-1-FTB-05-053. Prepared for Georgia-Pacific. February 2006.

Baicich, P.J. and C.J.O. Harrison. 1997. A Guide to the Nests, Eggs, and Nestlings of North American Birds. Second Edition. Academic Press: San Diego, California. 347 pp.

BioConsultant. 2010a. Burrowing Owl (*Athene cunicularia*) Winter Survey, South Parkland Parcel. Prepared for Marie Jones, Community Development Director, City of Fort Bragg. February 2010.

_____. 2010b. Burrowing Owl (*Athene cunicularia*) Breeding Survey, South Parkland Parcel. Prepared for Marie Jones, Community Development Director, City of Fort Bragg. June 2010.

Biosearch Associates. 2010. Red-legged Frog Species Identification, Georgia-Pacific Fort Bragg Facility, Mendocino County, California, ARCADIS Project #B0066116-00007. Submitted to ARCADIS U.S. Inc. September 1, 2010.

California Burrowing Owl Consortium. 1993. Burrowing owl survey protocol and mitigation guidelines. April 1993.

California Coastal Commission (CCC). 2006. Definition and delineation of Wetlands in the Coastal Zone. Background Informational Handout. November 16, 2006, Workshop.

California Department of Fish and Game (CDFG). 1995. Staff report on burrowing owl mitigation. October 17, 1995.

_____. 2000. Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened, and Endangered Plants and Natural Communities. Online: http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/guideplt.pdf. Site visited in 2009.

_____. 2003. The Vegetation Classification and Mapping Program List of California Terrestrial Natural Communities Recognized by The California Natural Diversity Database. September 2003 Edition. Online: http://www.dfg.ca.gov/biogeodata/vegcamp/pdfs/natcomlist.pdf. Site visited December 7, 2009.

_____. 2009a. CNDDB Special Animals List. July 2009 update. Online: http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/SPAnimals.pdf. Site visited September 2009.

_____. 2009b. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities. Online: http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/Protocols_for_Surveying_and_Evaluating_Impacts.pdf. Site visited in 2010.

California Department of Transportation (Caltrans). 2000. Environmental Handbook Volume 3. Biological Resources. Environmental Program, Biological Studies Branch.

California Invasive Plant Council (Cal-IPC). 2006. California Invasive Plant Inventory. Online: http://www.cal-ipc.org/ip/inventory/pdf/Inventory2006.pdf. Site visited November 2009.

_____. 2007. California Invasive Plant Inventory 2007 Update. Online: http://www.cal-ipc.org/ip/inventory/pdf/WebUpdate2007.pdf. Site visited November 2009.

California Native Plant Society (CNPS). 2001. CNPS botanical survey guidelines. Revised June 2, 2001.

_____. 2009 and 2010. California Native Plant Society online inventory of rare and endangered plants. Online: http://cnps.web.aplus.net/cgi-bin/inv/inventory.cgi. Site visited August 2009 to September 2010.

California Natural Diversity Data Base (CNDDB). 2009 and 2010. Rarefind data output for the Fort Bragg USGS 7.5-minute quadrangle and surrounding quadrangles. Biogeographic Data Branch. Department of Fish and Game. Date: January 2, 2010 (Commercial Version 3.1.0).

Call, M. W. 1978. Nesting habits and survey techniques for common western raptors. U.S. Department of the Interior, Bureau of Land Management, Portland, Oregon. Technical Note No. 316.

Circuit Rider Productions. 2005. Conceptual Revegetation Plan, Former Georgia-Pacific Wood Products Manufacturing Facility. Developed for AME. September 22, 2005.

City of Fort Bragg. 2008. Local Coastal Program and Coastal General Plan. Online: http://city.fortbragg.com/cdd/Local%20Coastal%20Program.html. Site visited throughout 2009 and 2010.

City of Fort Bragg, State Department of Parks & Recreation; National Park Service Rivers, Trails and Conservation Assistance Program; Mendocino Land Trust; State Coastal

Conservancy, and Georgia-Pacific Corporation. 2008. Draft North Fort Bragg Coastal Trail Master Plan; North Mill Site and Glass Beach Headlands. August 8, 2008.

Cowardin, Lewis M., V. Carter, F.C. Golet, and E. T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Fish and Wildlife Service. Washington, D.C.

Cylinder, P.D., K.M. Bogdan, A.I. Zohn, and J.B. Butterworth. 2004. Wetlands, streams, and other waters. Solano Press Books. Point Arena, CA.

Harrison, C. 1978. A field guide to the nests, eggs and nestlings of North American birds. W. Collins Sons and Co., Cleveland, Ohio.

Hickman, J. (Ed.). 1993. The Jepson Manual: Higher Plants of California. University of California Press. Berkeley, California.

Holland, R.F. 1986. Preliminary Description of Terrestrial Natural Communities of California. State of California, The Resources Agency, Department of Fish and Game.

Jennings, M.R., and M.P. Hayes. 1994. Amphibian and reptile species of special concern in California. California Department of Fish and Game, Rancho Cordova, California.

Jensen, D. 2010. Mendocino Coast Audubon Society Chapter President. Personal communication via phone call with Geoff Hoetker (SWCA). January 5, 2010.

Jones, M. 2010. Personal communication via email with Keith Miller (SWCA) and Richard Macedo (CDFG). October 12, 2010.

Leppig, G. 2010. CDFG Staff Environmental Scientist. Personal communication via phone call with Geoff Hoetker (SWCA). June 9, 2010.

Macedo, R. 2009. CDFG Biologist. Comments during agency teleconference to discuss the North Fort Bragg Coastal Restoration and Trail Project. December 2, 2009.

_____. 2010. CDFG Biologist. Personal communication via phone call with Geoff Hoetker (SWCA). January 5, 2010.

MacWhirter, R.B., and Bildstein, K.L. 1996. Northern Harrier (*Circus cyaneus*), in The Birds of North America (A. Poole and F. Gill, eds.), no. 210. Academy of Natural Sciences, Philadelphia.

Merrill, B. 2009. California Coastal Commission District Manager. Comments made during teleconference to discuss the North Fort Bragg Coastal Restoration and Trail Project. December 2, 2009.

Nelson, J.R. 1987. Rare Plant Surveys: Techniques for Impact Assessment. From Proceedings of a California Conference on the Conservation and Management of Rare and Endangered Plants, Sacramento, California, November 1986. California Native Plant Society Publication.

National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NOAA Fisheries). 2008. Essential Fish Habitat for the Pacific Council. Online: http://www.nmfs.noaa.gov/habitat/habitatprotection/profile/pacificcouncil.htm#efhinfo. Site visited February, 2008.

Redwood Coast Associates and WRA Environmental Consultants. 2007. Wetland Delineation Subject to Section 404 and Section 401 of the Clean Water Act, Porter-Cologne Water Quality Control Act, Section 1602 of the California Fish and Game Code, & The California Coastal Act; Glass Beach, MacKerricher State Park, Fort Bragg, Mendocino County, California. Prepared for Mendocino Land Trust. June 2007.

Rich, T. 1984. Monitoring burrowing owl populations: implications of burrow re-use. Wildlife Society Bulletin 12:178–180.

Ridge to River. 2008. Glass Beach Drive Spring/Summer 2008 Botanical Survey. March to June 2008.

Sawyer, J.O., and T. Keeler-Wolf. 1995. A Manual of California Vegetation. California Native Plant Society. Sacramento, California.

Shaffer, H.B., G.M. Fellers, S.R. Voss, J.C. Olive, and G.B. Pauly. 2004. Species boundaries, phylogeography and conservation genetics of the red-legged frog (*Rana aurora/draytonii*) complex. Molecular Ecology 13(9): 2667-2677).

Sholars, T. 2005a. Botanical field survey of some of the bluff areas at the Georgia-Pacific Mills Site. March and May 2005.

_____. 2005b. Late season botanical survey for the Georgia-Pacific Mill site bluffs. August 16, 2005.

_____. 2005c. Conceptual Glass Beach 3 Mitigation and Monitoring Plan. September 22, 2005.

_____. 2007. Botanical field survey -- Glass Beach. August 15, 2007.

Shuford, W.D., and T. Gardali, (eds.). 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.

Stebbins, R.C. 1972. California reptiles and amphibians. University of California Press: Berkeley, London, and Los Angeles. 152 pp.

_____. 2003. A field guide to western reptiles and amphibians. 3rd ed., revised. Houghton Mifflin Company, Boston. 533 pp.

Stein, E. 1999. Function-Based Performance Standards for Evaluating the Success of Riparian and Depressional/Emergent Marsh Systems. USACE, Los Angeles District.

Stephens, M. 2010. 2010 Burrowing Owl (*Athene cunicularia*) Surveys, Glass Beach Area and North Mill Site Properties, Fort Bragg, CA. Prepared for SWCA Environmental Consultants and City of Fort Bragg. Prepared by Mike Stephens Wildlife Consulting. July 2010.

Stetson Engineers. 2006. Technical Study for the Mill Pond Improvement Project, Georgia-Pacific's Former Sawmill Facility, Fort Bragg, Mendocino County, California. January 2006.

Tibor, D.P. 2001. California Native Plant Society's Inventory of rare and endangered plants of California. August 2001 / Sixth edition. 387 pp.

Tobkin, D. 2010. Resident birder and Audubon Society member. Personal communication via phone call with Geoff Hoetker (SWCA). January 5, 2010.

TRC. 2003. Jurisdictional Determination and Habitat Assessment, Georgia-Pacific Fort Bragg Sawmill Facility, Mendocino County, California. Prepared for Georgia-Pacific. August 2003.

_____. 2004. Jurisdictional Waters and Wetlands Delineation of the Nursery Area and Log Pond at the Georgia-Pacific Fort Bragg Sawmill Facility, Mendocino County, California. Prepared for Georgia-Pacific. August 2004.

U.S. Army Corps of Engineers (USACE) Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1, US Army Engineer Waterways Experiment Station, Vicksburg, MS.

_____. 2008. Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region, ed. J.S. Wakeley, R.W. Lichvar, and C.V. Noble. ERDC/EL TR-08-13. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS). 2001. Soil Survey of Mendocino County, California, Western Part. Online: http://soildatamart.nrcs.usda.gov/Manuscripts/CA694/0/MendocinoWP_CA.pdf.

U.S. Fish and Wildlife Service (USFWS). 1996. Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Plants. Online: www.fws.gov/sacramento/es/documents/listed_plant_survey_guidelines.htm. Site visited August 2009.

_____. 1998. Seven Coastal Plants and the Myrtle's Silverspot Butterfly Recovery Plan. Portland, Oregon. 141 pp.

_____. 2001. Endangered and threatened wildlife and plants; final determinations of critical habitat for the California red-legged frog; final rule. Department of the Interior. 50 CFR Part 17. Federal Register 66:14625-14674.

_____. 2005. Endangered and threatened wildlife and plants; designation of critical habitat for the Pacific coast population of the western snowy plover; final rule50 CFR Part 17. Federal Register 70: 56970-57119.

_____. 2006. Endangered and threatened wildlife and plants; designation of critical habitat for the California red-legged frog, and special rule exemption associated with final listing for existing routine ranching activities; final rule. Department of the Interior. 50 CFR Part 17. Federal Register 71:19244-19292.

_____. 2007. International Snowy Plover Survey Protocol Discrete Site Survey Methodologies Final - April 27, 2007.

_____, 2008a. Endangered and Threatened Wildlife and Plants; Revised Critical Habitat for the California Red-Legged Frog (*Rana aurora draytonii*); Proposed Rule. 50 CFR Part 17. Federal Register Vol. 73, No. 180:53492-53680.

_____. 2008b. Menzies' Wallflower (*Erysimum menziesii*); 5-Year Review: Summary and Evaluation. U.S. Fish and Wildlife Service Arcata Field Office; Arcata, California. June 2008.

_____. 2009a. Listed/Proposed Threatened and Endangered Species for Mendocino County (Candidates Included). Online: http://www.fws.gov/arcata/specieslist/search.asp. Site visited December 10, 2009.

_____. 2009b. Western snowy plover (*Charadrius alexandrinus nivosus*) species account. Online: http://www.fws.gov/arcata/es/birds/WSP/plover.html. Site visited September 15, 2009.

USFWS and NOAA Fisheries. 1998. Endangered Species Act consultation handbook: procedures for conducting Section 7 consultations and conferences. March 1998.

Warner, P., A. Liebenberg, and D. Shaw. 2008. Draft Glass Beach Trail Environmental Section IV. Biological Resources prepared for a proposed Draft Mitigated Negative Declaration Glass Beach Trail Project, California State Parks Mendocino District. March 2008.

WRA. 2005. Delineation of Potential Section 404 Jurisdictional Wetlands and Waters; Former Georgia-Pacific Fort Bragg Sawmill; Fort Bragg, Mendocino County, California. Prepared by Georgia-Pacific. December 2005.

_____. 2009. Fort Bragg Coastal Trail Botanical Study; Glass Beach and Georgia-Pacific Mill, Fort Bragg, Mendocino County, California. Prepared for SWCA Environmental Consultants. December 2009.

_____. 2010. South Fort Bragg Coastal Trail and Noyo Center Botanical Study and California Coastal Act Wetland Delineation; Southern Section of the Georgia-Pacific Mill, Fort Bragg, Mendocino County, California. Prepared for City of Fort Bragg. August 2010.

_____. 2014. Botanical and Natural Communities ESHA Survey, Fort Bragg Coastal Trail, Georgia-Pacific Mill Site

Zeiner, D.C., W.F. Laudenslayer, Jr., K.E. Mayer, and M. White (eds.). 1990. California's Wildlife. Volumes I (amphibians and reptiles), II (birds), and III (mammals). California

Statewide Wildlife Habitat Relationships System. The Resources Agency, California Department of Fish and Game. November, 1990.

9.1.3 Climate Change

AEP. 2007. Recommendations by the Association of Environmental Professionals on How to Analyze GHG Emissions and Global Climate change in CEQA Documents. March 5, 2007.

California Natural Resources Agency. 2009. California Climate Adaptation Strategy.

United Nations Intergovernmental Panel on Climate Change (UNIPCC). 2007. R.B. Alley, et al. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Summary for Policymakers. www.ipcc.ch/WG1_SPM_17Apr07.pdf

U.S. Environmental Protection Agency (EPA). Climate Change Science on the EPA website. http://www.epa.gov/climatechange/science/index.html. Site visited 2008.

9.1.4 Cultural Resources

Garcia and Associates. 2007. Archaeological Monitoring and Limited Testing – Field Year 2007.

Garcia and Associates. 2008. Archaeological Monitoring and Limited Testing – Field Year 2008

Garcia and Associates. 2007. Final Arch Testing and Monitoring for GP Corp Fort Bragg Wood Products Manufacturing facility building demolition project.

Parker, Greig, and Christopher Drover (TRC). 2003. Archaeological Survey of the Georgia Pacific Lumber Mill, Fort Bragg, California.

Van Bueren, T.M. and S. Carmack. 2011. Historical Resources Evaluation Report for the Fort Bragg Coastal Restoration and Trail Project, City of Fort Bragg, Mendocino County, California.

Van Bueren, T.M. 2011. Draft Historic Property Treatment Plan for the Fort Bragg Coastal Trail Project in the City of Fort Bragg, California.

9.1.5 Geology and Soils

ARCADIS. 2010. Stability Assessment of the Mill Pond Dam. Former Georgia-Pacific Wood Products Facility.

BACE Geotechnical. 2004. Engineering Geologic Reconnaissance Report Planned Blufftop Access Trail Georgia-Pacific Property, Fort Bragg, CA.

SWCA Environmental Consultants (SWCA). 2009. Paleontological Resources Assessment Report for the North Fort Bragg Coastal Restoration and Trail Project, City of Fort Bragg, Mendocino County, California.

9.1.6 Hazards and Hazardous Materials

Department of Toxic Substances Control (DTSC). 2008. Mitigated Negative Declaration OU-A RAP and IARAP Georgia Pacific Wood Products Facility.

_____. 2009. Approval of Operable Unit A Completion Report and Partial Certification of Remedial Action, Former Georgia Pacific Wood Products Facility, Fort Bragg, California." December 2009.

9.1.7 Paleontological Resources

SWCA. 2009. Paleontological Resources Assessment Report for the North Fort Bragg Coastal Restoration and Trail Project, City of Fort Bragg, Mendocino County, California.

9.1.8 Transportation and Circulation

RRM. 2008. Draft Mill Site Specific Plan Baseline Conditions Report.

Mendocino Land Trust. 2008. Glass Beach Headlands Visitation Survey.

9.1.9 Water Quality and Stormwater Runoff

Rau Engineering. 2010. Site Drainage Analysis, North Fort Bragg Trail. January 2010.

SWCA. 2010. Draft Wetland Assessment for the Fort Bragg Restoration and Trail Project. September 2010.

Tetra-Tech. 2010. Technical Memo Site Drainage for North Fort Bragg Coastal Trail. August 2010.